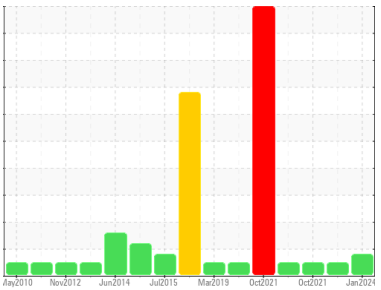
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

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

DIAGNOSIS

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.

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

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

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	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
Oil Changed		Client Info		**N/A**	N/A	Not Changd
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.075	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
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
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	<1

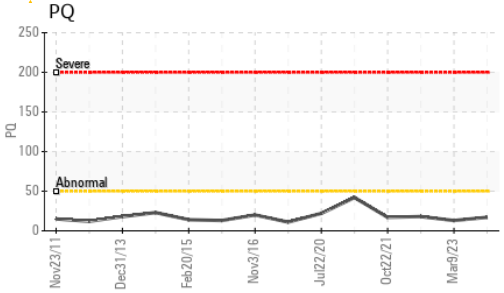
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**76**	224	264
Barium	ppm	ASTM D5185m		**0**	0	<1
Molybdenum	ppm	ASTM D5185m		**61**	198	234
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**291**	701	775
Calcium	ppm	ASTM D5185m		**3547**	1550	1585
Phosphorus	ppm	ASTM D5185m		**1264**	825	960
Zinc	ppm	ASTM D5185m		**1449**	1023	1033
Sulfur	ppm	ASTM D5185m		**4900**	3572	2798

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>31	**12**	7	7
Sodium	ppm	ASTM D5185m	>21	**0**	1	2
Potassium	ppm	ASTM D5185m	>20	**3**	1	2

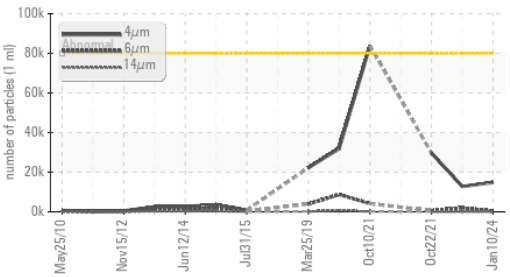
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	**14809**	12779	---
Particles >6µm		ASTM D7647	>20000	**334**	1936	---
Particles >14µm		ASTM D7647	>640	**7**	103	---
Particles >21µm		ASTM D7647	>160	**2**	26	---
Particles >38µm		ASTM D7647	>40	**0**	0	---
Particles >71µm		ASTM D7647	>10	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	**21/16/10**	21/18/14	---

OIL ANALYSIS REPORT

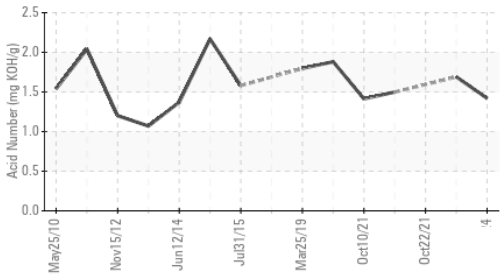
PQ



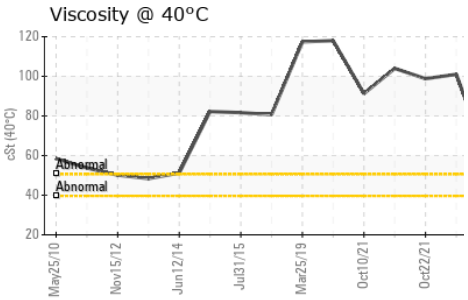
Particle Trend



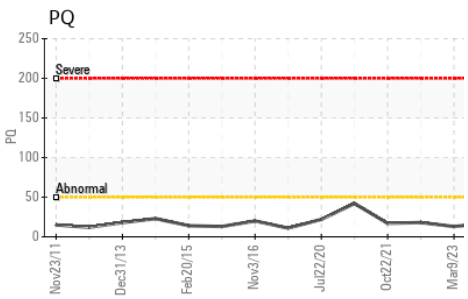
Acid Number



Viscosity @ 40°C



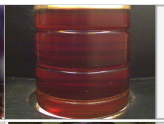
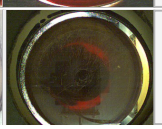
PQ



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.42**	1.69	---

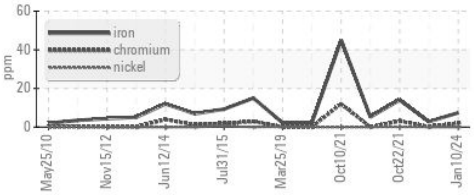
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**58.7**	101	98.8

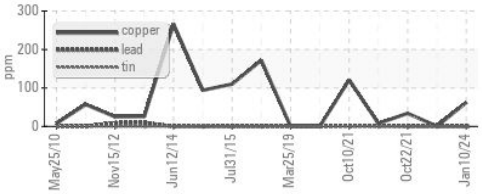
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

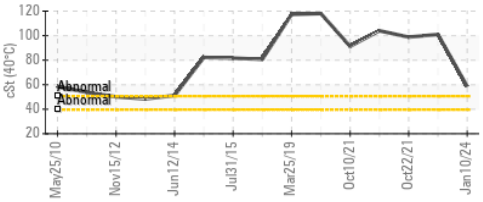
Ferrous Alloys



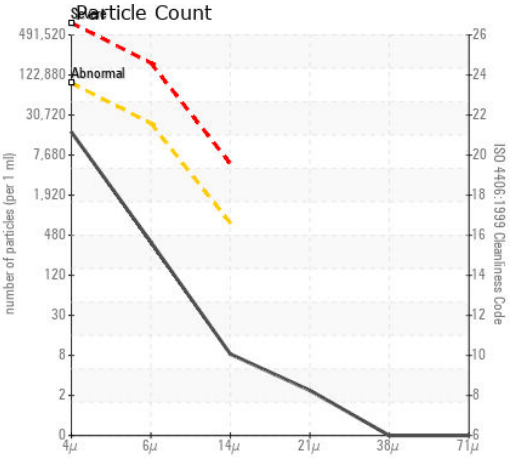
Non-ferrous Metals



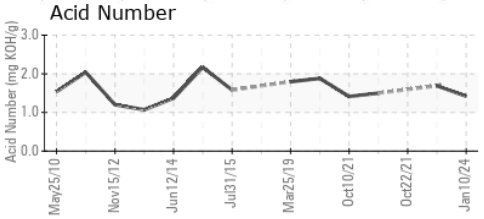
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

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