



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 524 P 1DW524PAEMLT12993

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0198578	JR0178176	JR0162570
Sample Date		Client Info		17 Jan 2024	18 Sep 2023	11 Apr 2023
Machine Age	hrs	Client Info		2471	2037	1446
Oil Age	hrs	Client Info		1397	1554	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	N/A
Filter Changed		Client Info		Not Chngd	Not Chngd	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	0	6	<1
Chromium	ppm	ASTM D5185m	>10	4	4	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	2	3	0
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

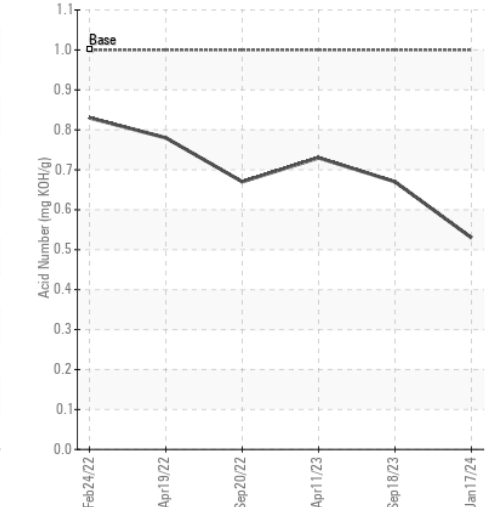
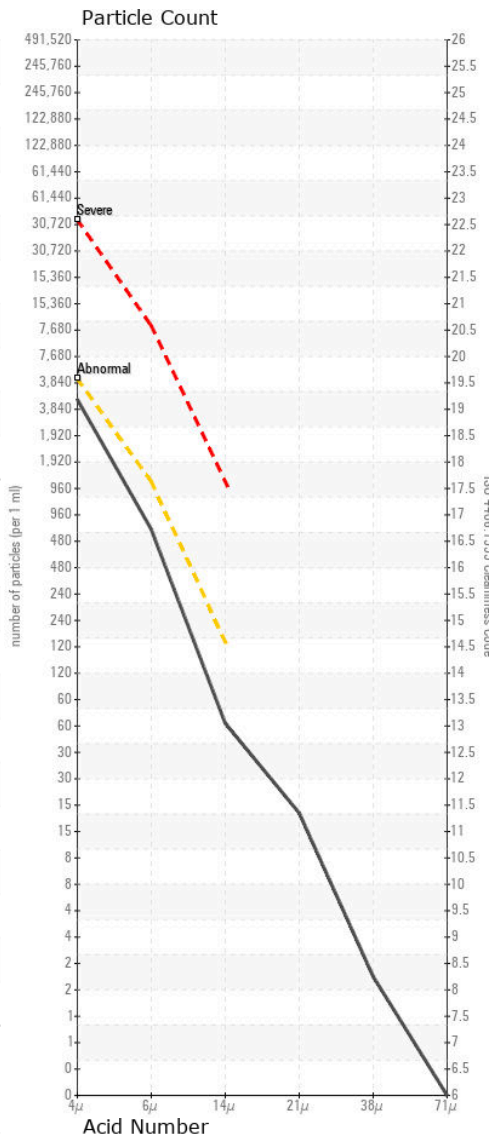
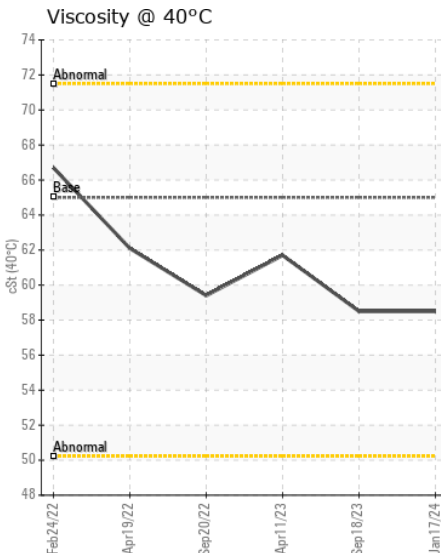
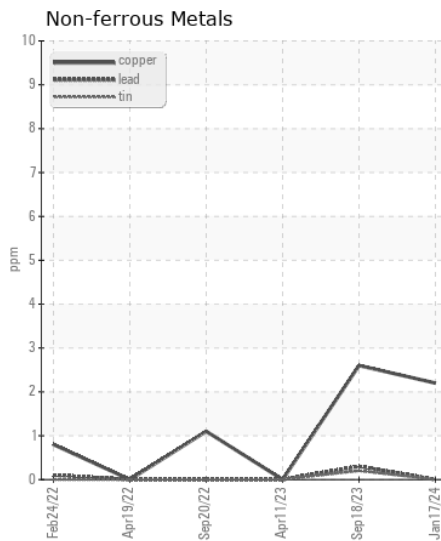
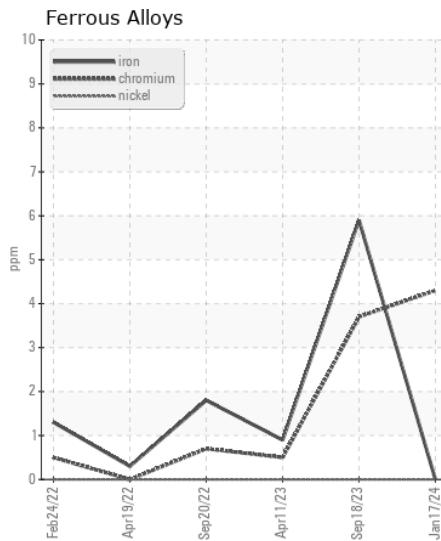
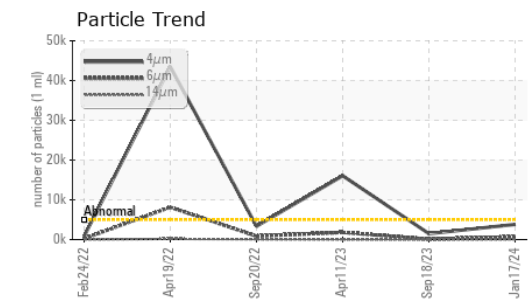
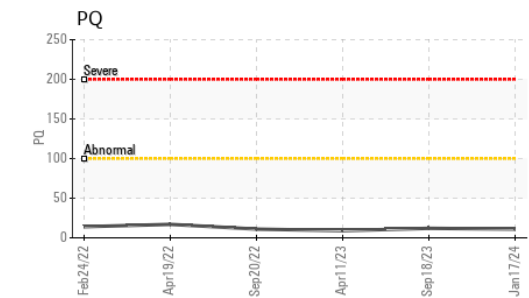
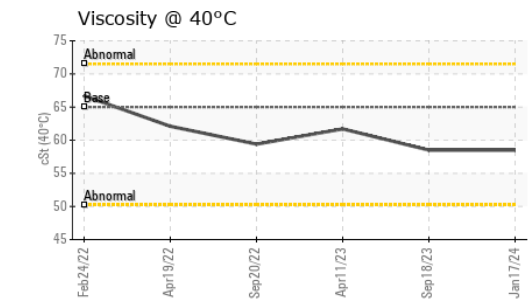
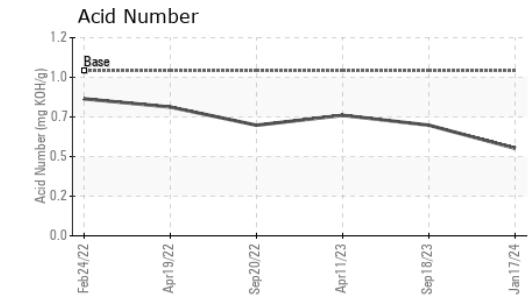
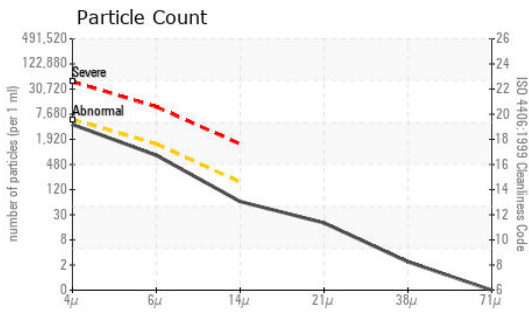
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	2	3	2
Potassium	ppm	ASTM D5185m	>20	0	3	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	3809	1488	▲ 16052
Particles >6µm		ASTM D7647	>1300	695	106	▲ 1805
Particles >14µm		ASTM D7647	>160	55	13	37
Particles >21µm		ASTM D7647	>40	17	5	7
Particles >38µm		ASTM D7647	>10	2	2	0
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	18/14/11	▲ 21/18/12
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	>0.1	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		1	3	15
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		1	<1	2
Calcium	ppm	ASTM D5185m	87	83	108	57
Phosphorus	ppm	ASTM D5185m	727	630	639	338
Zinc	ppm	ASTM D5185m	900	790	858	443
Sulfur	ppm	ASTM D5185m	1500	1512	1773	789
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.53	0.67	0.73
Visc @ 40°C	cSt	ASTM D445	65	58.5	58.5	61.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0198578 **Received** : 19 Jan 2024
Lab Number : 06065502 **Diagnosed** : 22 Jan 2024
Unique Number : 10836884 **Diagnostician** : Wes Davis
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)

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