



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[127648]

Machine Id

JOHN DEERE 460P 1DW460PAPPFB06219

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		WE0007891	WE0007794	WE0006294
Sample Date		Client Info		08 Jul 2024	20 Jun 2024	21 Feb 2024
Machine Age	hrs	Client Info		2229	2121	1471
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		14	17	13
Iron	ppm	ASTM D5185m	>20	4	<1	2
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	<1	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	2	2	2
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

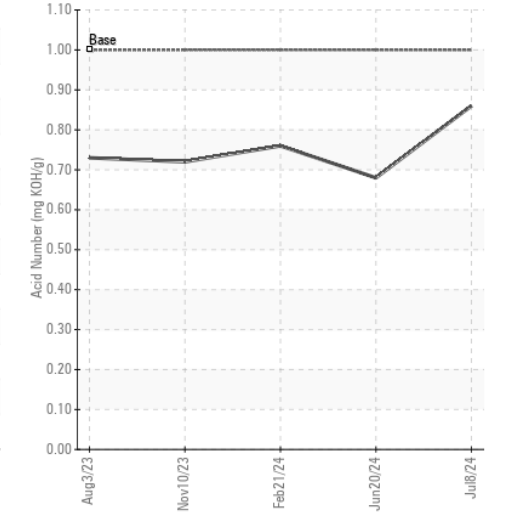
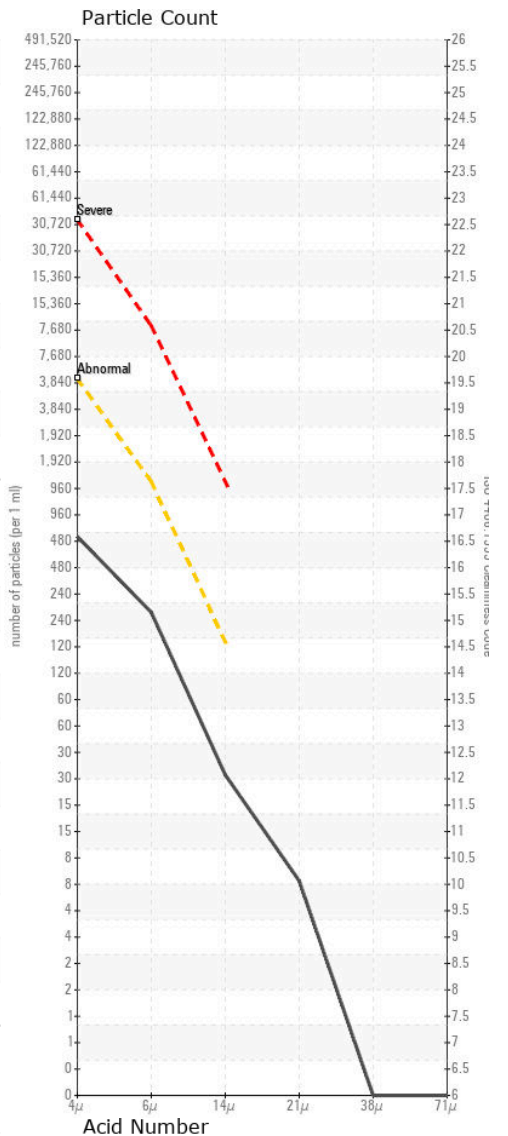
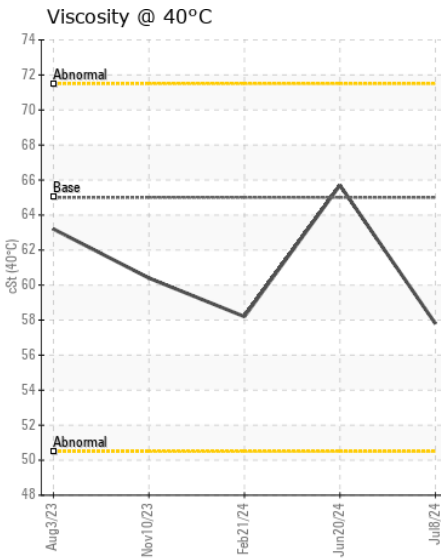
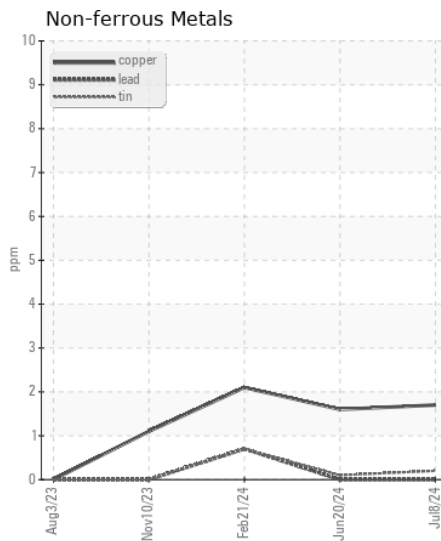
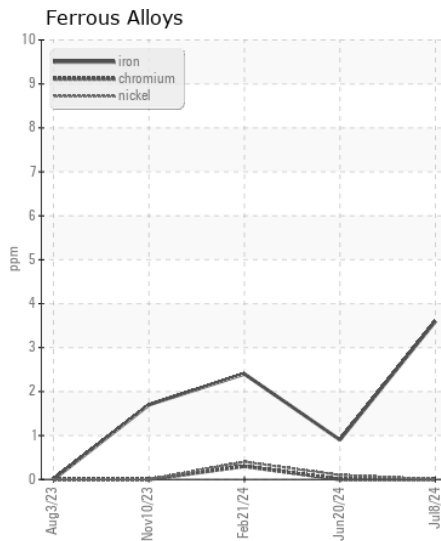
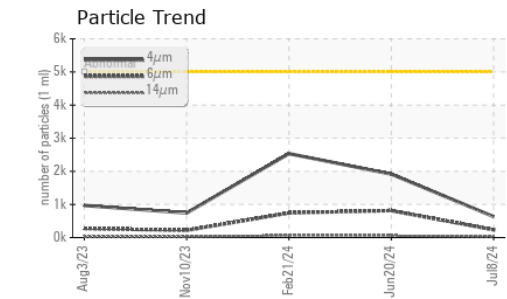
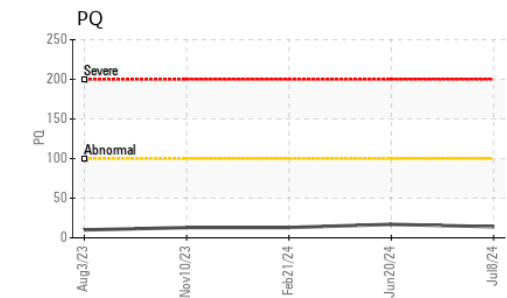
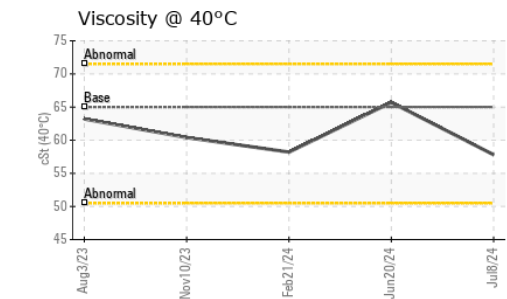
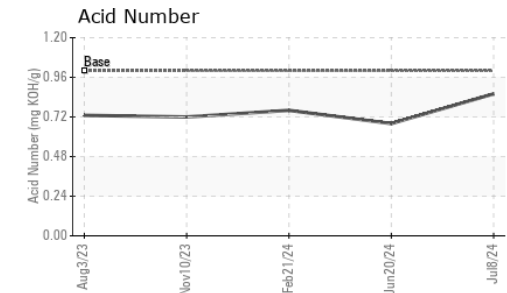
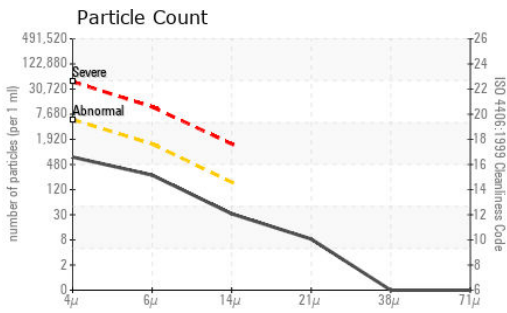
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	1	1	1
Potassium	ppm	ASTM D5185m	>20	4	4	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	633	1916	2534
Particles >6µm		ASTM D7647	>1300	235	814	744
Particles >14µm		ASTM D7647	>160	28	55	64
Particles >21µm		ASTM D7647	>40	7	5	18
Particles >38µm		ASTM D7647	>10	0	0	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/15/12	18/17/13	19/17/13
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		2	3	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	5
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		1	0	<1
Calcium	ppm	ASTM D5185m	87	94	89	82
Phosphorus	ppm	ASTM D5185m	727	695	684	523
Zinc	ppm	ASTM D5185m	900	854	870	774
Sulfur	ppm	ASTM D5185m	1500	1985	2002	1503
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.86	0.68	0.76
Visc @ 40°C	cSt	ASTM D445	65	57.8	65.7	58.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WE0007891

Lab Number : 06232193

Unique Number : 11115686

Test Package : CONST (Additional Tests: PQ)

Received : 10 Jul 2024

Tested : 11 Jul 2024

Diagnosed : 11 Jul 2024 - Wes Davis

WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT

P.O. BOX 412

NORTHPORT, AL

US 35476

Contact: PAMELA CLARK

pamela@warriortractor.com

T: (205)339-0300

F:

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)