



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[A31678]
 Machine Id
JOHN DEERE 444P 1DW444PADNLZ16734
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0003078	---	---
Sample Date		Client Info		16 Jan 2023	---	---
Machine Age	hrs	Client Info		493	---	---
Oil Age	hrs	Client Info		493	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		10	---	---
Iron	ppm	ASTM D5185m	>20	3	---	---
Chromium	ppm	ASTM D5185m	>10	2	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	0	---	---
Lead	ppm	ASTM D5185m	>10	<1	---	---
Copper	ppm	ASTM D5185m	>75	2	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

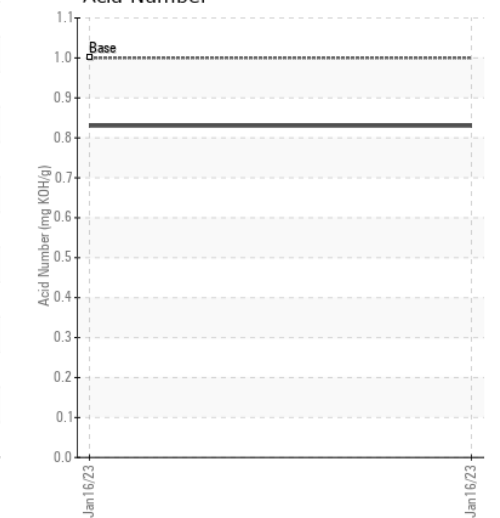
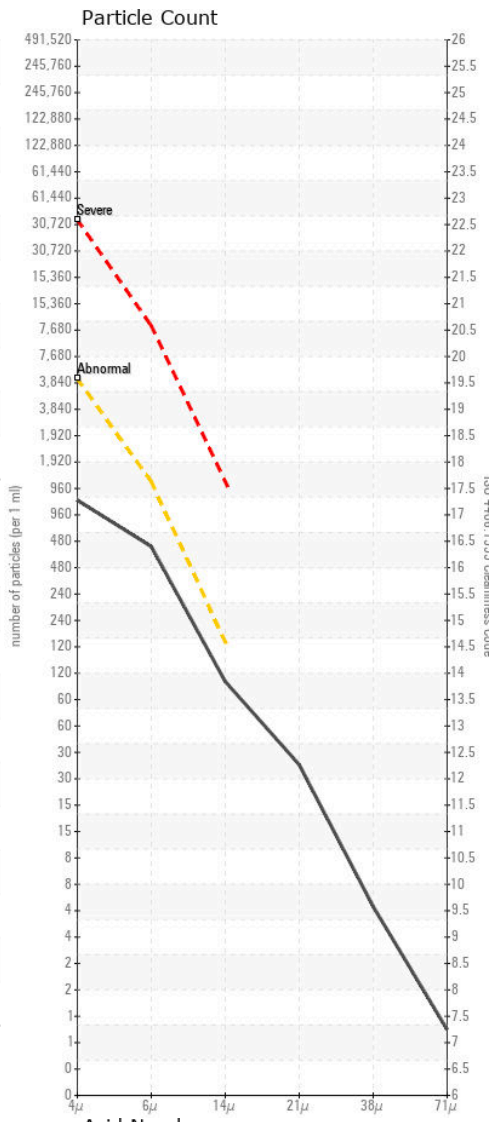
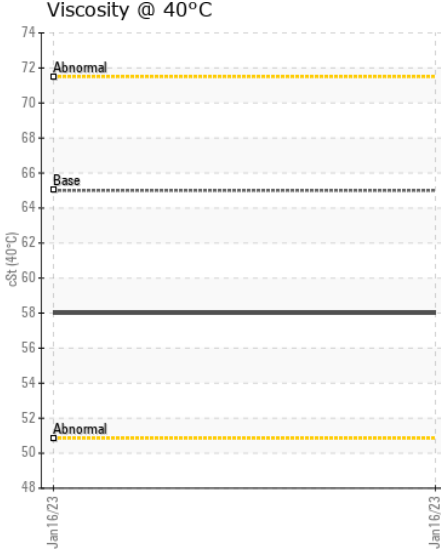
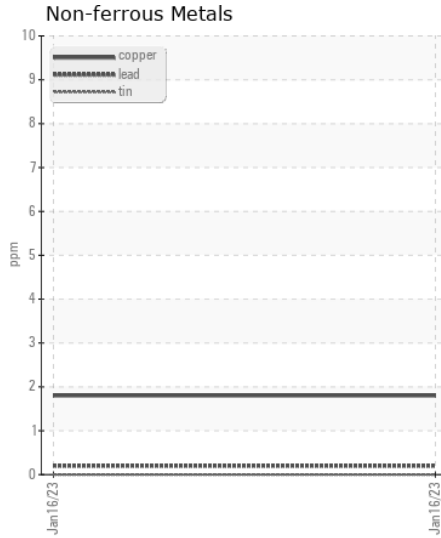
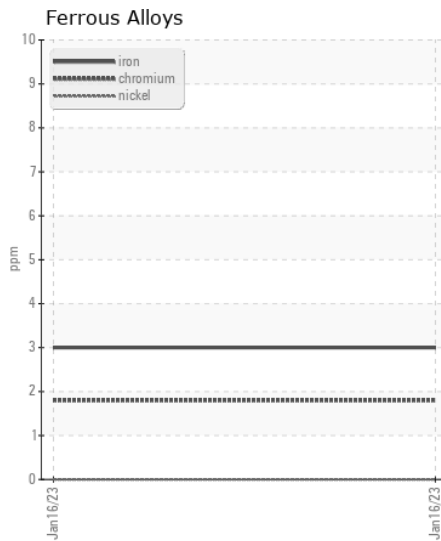
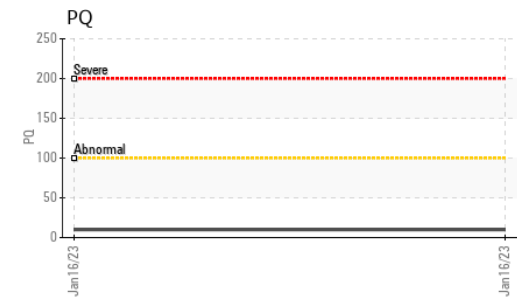
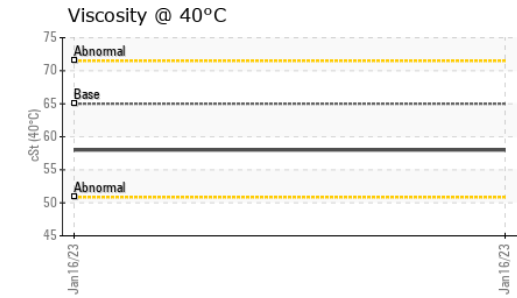
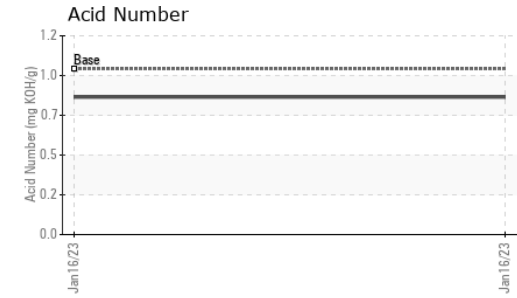
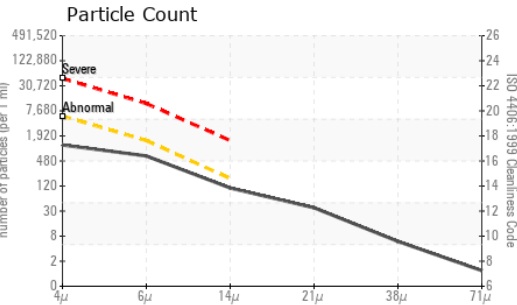
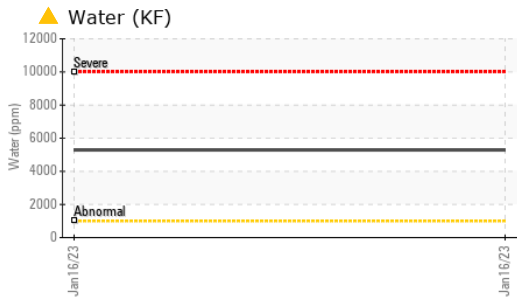
Appearance is hazy. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	6	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Water	%	ASTM D6304	>0.1	▲ 0.529	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 5290	---	---
Particles >4µm		ASTM D7647	>5000	1020	---	---
Particles >6µm		ASTM D7647	>1300	556	---	---
Particles >14µm		ASTM D7647	>160	95	---	---
Particles >21µm		ASTM D7647	>40	32	---	---
Particles >38µm		ASTM D7647	>10	5	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/16/14	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	▲ HAZY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	0.2%	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		28	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		15	---	---
Calcium	ppm	ASTM D5185m	87	969	---	---
Phosphorus	ppm	ASTM D5185m	727	785	---	---
Zinc	ppm	ASTM D5185m	900	1000	---	---
Sulfur	ppm	ASTM D5185m	1500	2136	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.83	---	---
Visc @ 40°C	cSt	ASTM D445	65	58.0	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0003078 **Received** : 19 Jan 2023
Lab Number : 05743478 **Diagnosed** : 24 Jan 2023
Unique Number : 10298077 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: KF, PQ)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
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 MADISON, AL
 US 35756
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 WTE013@WARRIORTRACTOR.COM
 T:
 F:

Certificate L2367
 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)