



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
CONSTELLIUM [A32090]
Machine Id
JOHN DEERE 644P UNIT#771 (S/N 1DW644PAEBLZ16771)
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		WE0003344	---	---
Sample Date		Client Info		13 Mar 2023	---	---
Machine Age	hrs	Client Info		522	---	---
Oil Age	hrs	Client Info		522	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

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

CONTAMINATION

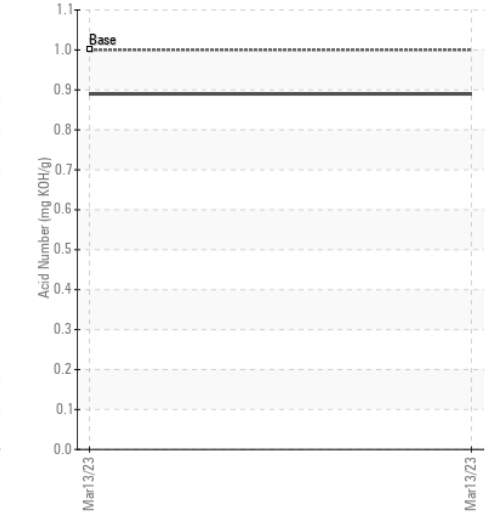
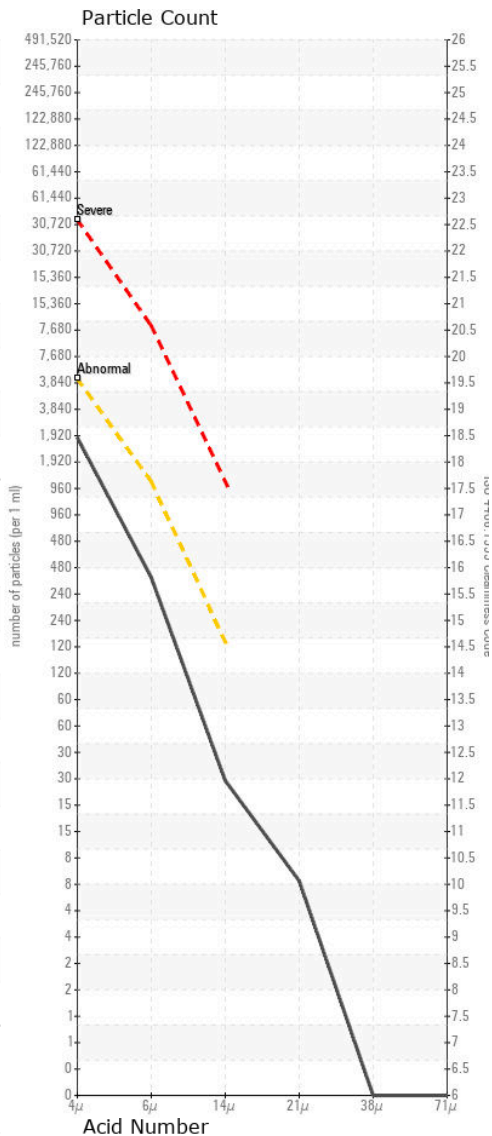
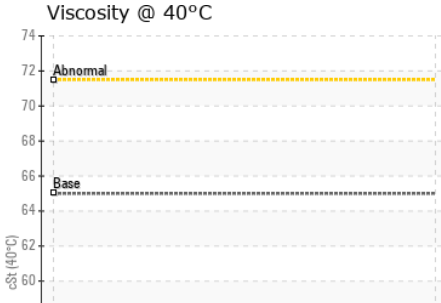
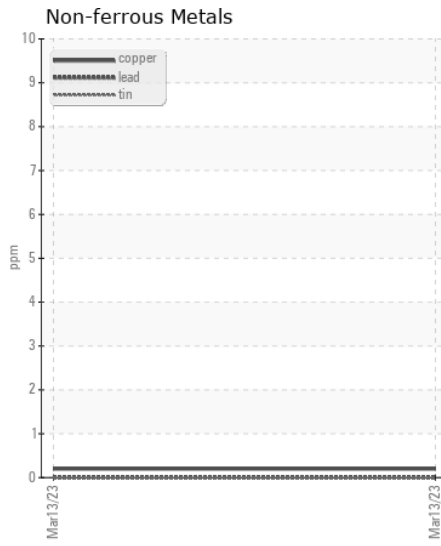
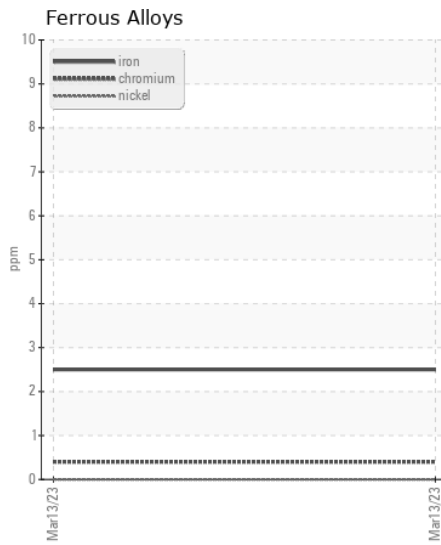
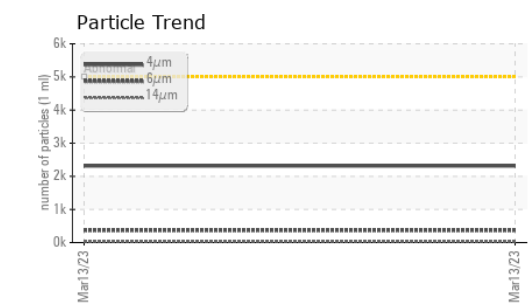
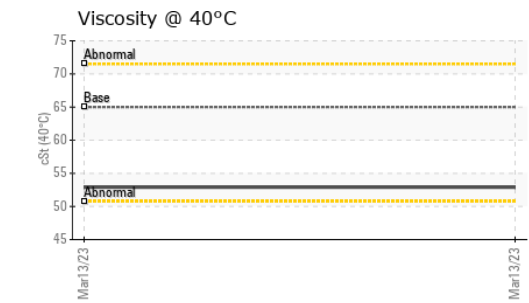
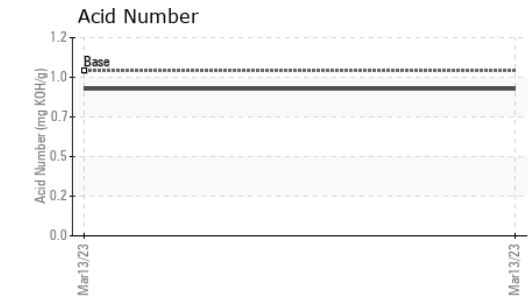
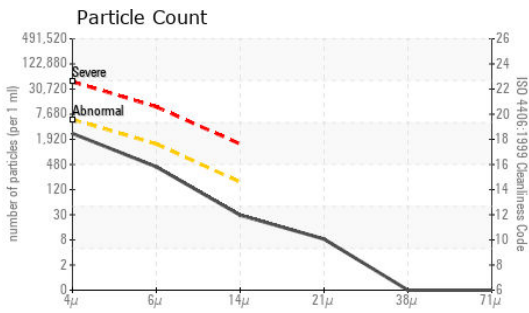
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	9	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	2314	---	---
Particles >6µm		ASTM D7647	>1300	371	---	---
Particles >14µm		ASTM D7647	>160	26	---	---
Particles >21µm		ASTM D7647	>40	7	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/12	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	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		4	---	---
Boron	ppm	ASTM D5185m		86	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		4	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		46	---	---
Calcium	ppm	ASTM D5185m	87	2933	---	---
Phosphorus	ppm	ASTM D5185m	727	969	---	---
Zinc	ppm	ASTM D5185m	900	1175	---	---
Sulfur	ppm	ASTM D5185m	1500	3274	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.89	---	---
Visc @ 40°C	cSt	ASTM D445	65	52.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0003344 **Received** : 16 Mar 2023
Lab Number : 05793366 **Diagnosed** : 20 Mar 2023
Unique Number : 10378037 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
 25135 ONE AVIATION WAY SW
 MADISON, AL
 US 35756
 Contact: HERBERT STONE
 WTE013@WARRIORTRACTOR.COM

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:
F: