



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

E-183

Component

Hydraulic System

Fluid

JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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

Sample Number	Client Info	method	limit/base	current	history1	history2
Sample Number	Client Info			WC0900273	---	---
Sample Date	Client Info			11 Jun 2024	---	---
Machine Age	hrs	Client Info		438	---	---
Oil Age	hrs	Client Info		438	---	---
Oil Changed	Client Info			Not Chngd	---	---
Sample Status				NORMAL	---	---

CONTAMINATION

Water	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	3	---	---
Chromium	ppm	ASTM D5185m >10	<1	---	---
Nickel	ppm	ASTM D5185m >10	<1	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m	<1	---	---
Aluminum	ppm	ASTM D5185m >10	2	---	---
Lead	ppm	ASTM D5185m >10	<1	---	---
Copper	ppm	ASTM D5185m >75	3	---	---
Tin	ppm	ASTM D5185m >10	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	<1	---	---
Molybdenum	ppm	ASTM D5185m	<1	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	1	---	---
Calcium	ppm	ASTM D5185m	6	---	---
Phosphorus	ppm	ASTM D5185m	527	---	---
Zinc	ppm	ASTM D5185m	34	---	---
Sulfur	ppm	ASTM D5185m	67	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	3	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	1	---	---

FLUID CLEANLINESS

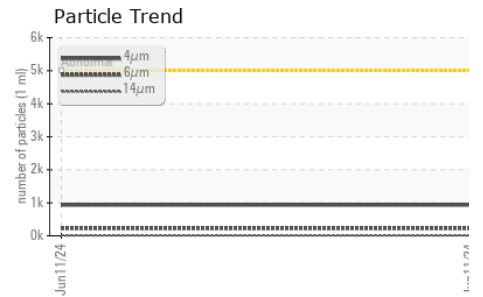
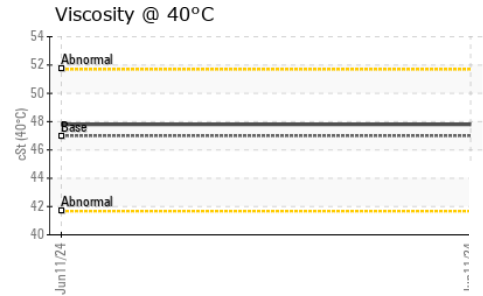
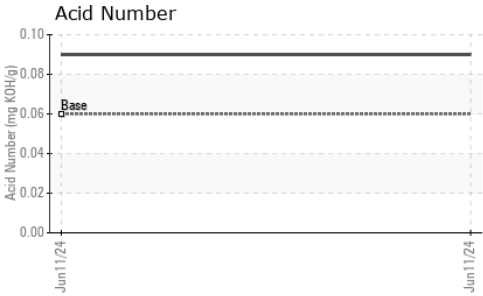
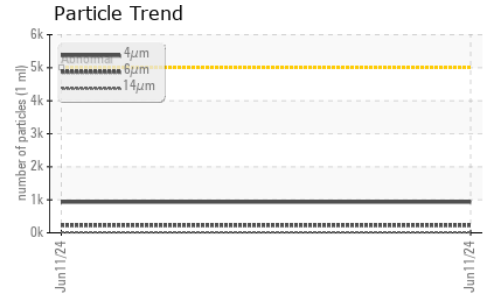
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	933	---	---
Particles >6µm	ASTM D7647	>1300	226	---	---
Particles >14µm	ASTM D7647	>160	16	---	---
Particles >21µm	ASTM D7647	>40	4	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	17/15/11	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.06	0.09	---	---



OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

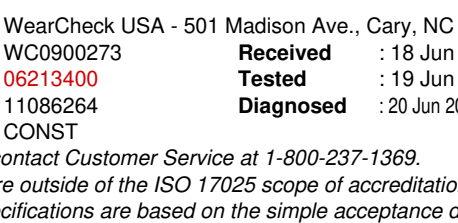
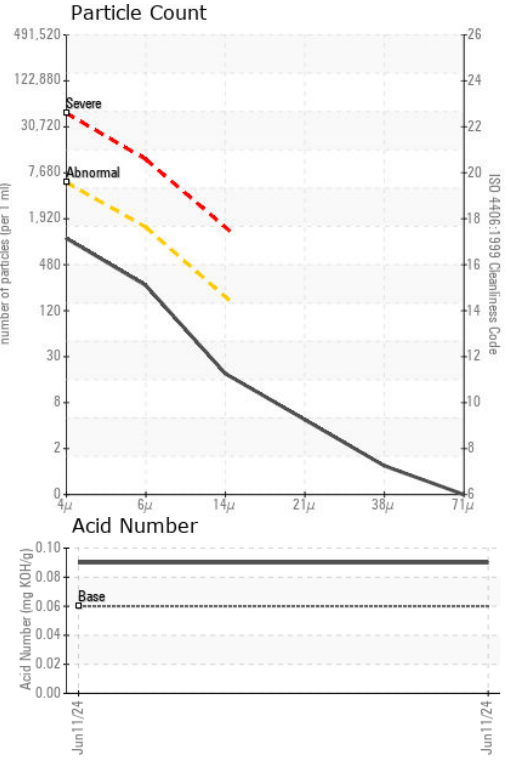
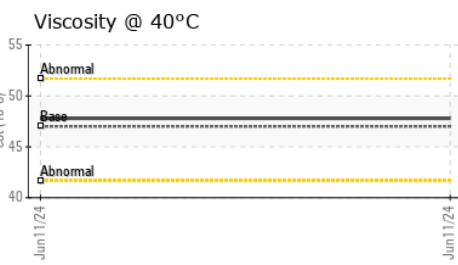
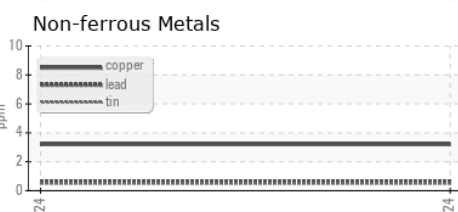
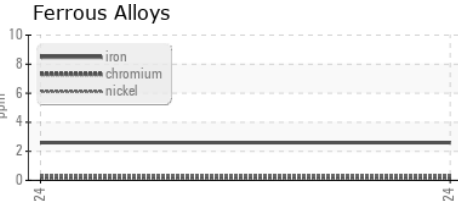
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	47	47.8	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

Bottom

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900273
Lab Number : 06213400
Unique Number : 11086264
Test Package : CONST
Received : 18 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 20 Jun 2024 - Don Baldrige

DUKE LAZZARA
 4201 FAYETTEVILLE RD
 RALEIGH, NC
 US 27603
 Contact: BRANDON BYRUM
 b.byrum@dukellazzara.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)