



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	ATTENTION

Area

[W9010]

Machine Id

8036-1024

Component

Hydraulic System

Fluid

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

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W9010)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196898	JR0197164	---
Sample Date		Client Info		12 Jun 2024	01 Feb 2024	---
Machine Age	hrs	Client Info		1882	1391	---
Oil Age	hrs	Client Info		1882	1391	---
Filter Age	hrs	Client Info		1882	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

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

CONTAMINATION

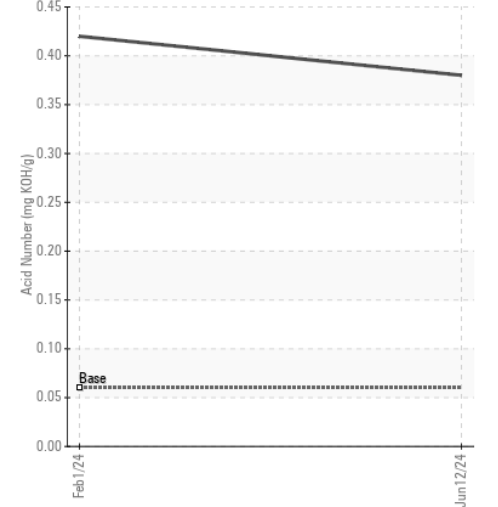
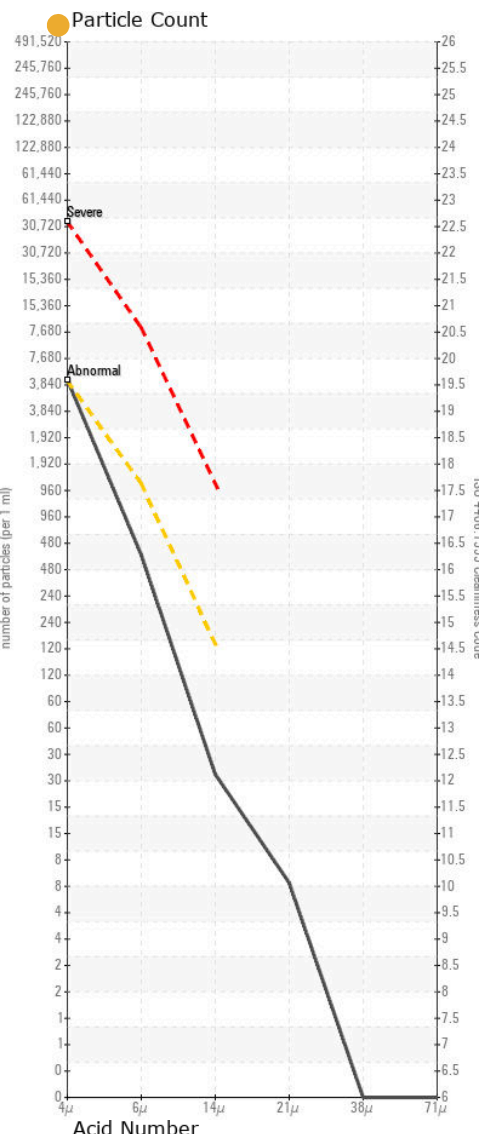
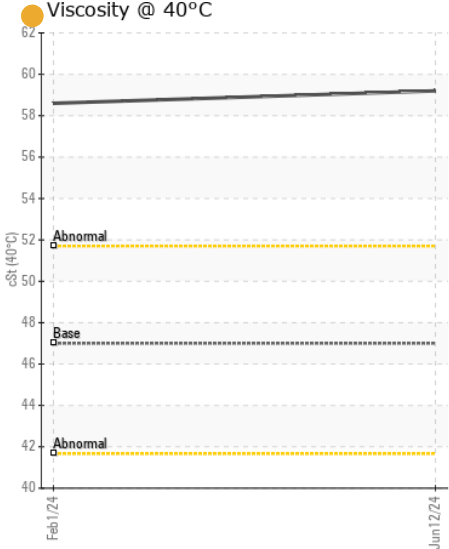
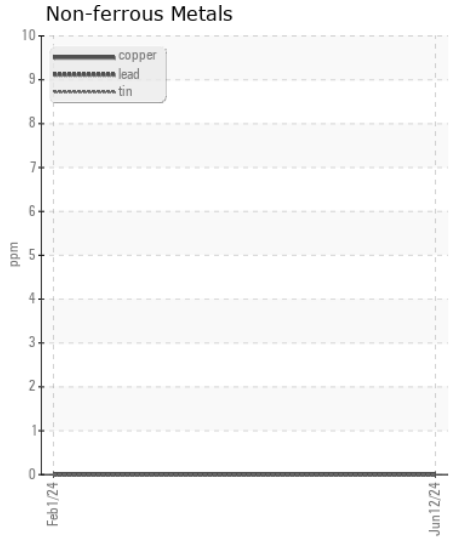
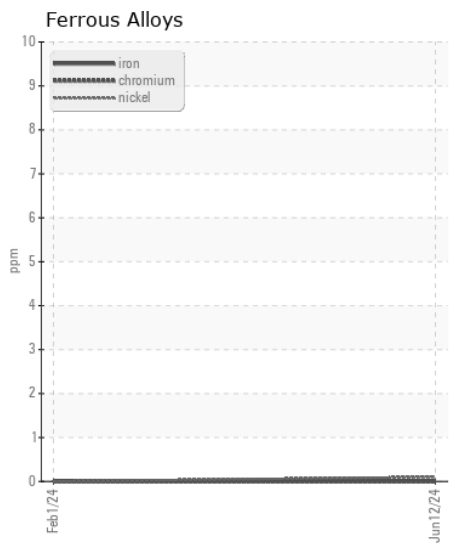
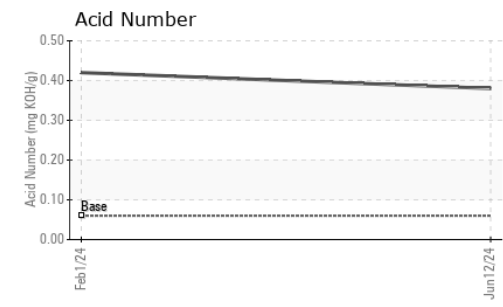
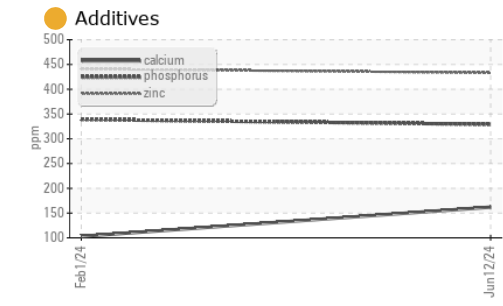
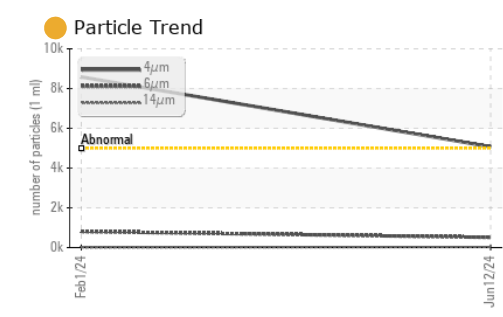
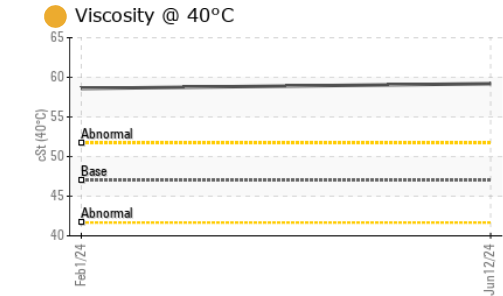
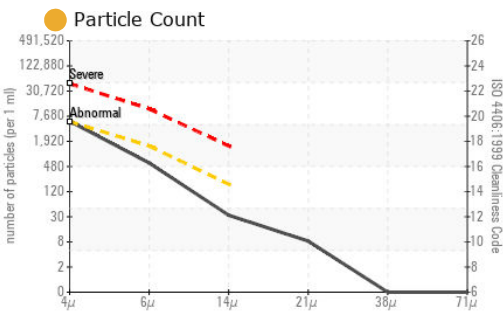
There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	0	---
Potassium	ppm	ASTM D5185m	>20	2	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	5072	8584	---
Particles >6µm		ASTM D7647	>1300	512	807	---
Particles >14µm		ASTM D7647	>160	29	10	---
Particles >21µm		ASTM D7647	>40	7	1	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/16/12	20/17/10	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		2	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	<1	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		7	0	---
Calcium	ppm	ASTM D5185m		162	103	---
Phosphorus	ppm	ASTM D5185m		329	339	---
Zinc	ppm	ASTM D5185m		433	441	---
Sulfur	ppm	ASTM D5185m		4950	4366	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.38	0.42	---
Visc @ 40°C	cSt	ASTM D445	47	59.2	58.6	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196898 **Received** : 14 Jun 2024
Lab Number : 06209973 **Tested** : 17 Jun 2024
Unique Number : 11082837 **Diagnosed** : 17 Jun 2024 - Angela Borella
Test Package : MOBCE (Additional Tests: PQ)

JRE - HOPE MILLS/FAYETTEVILLE
 5039 HWY 301 SOUTH
 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; panastasio@wearcheck.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)