



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE CP690 1N0C690PHK4075724 - 4WD

Component
Hydraulic System

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0216808	JR0172493	---
Sample Date		Client Info		07 Jul 2024	29 Jul 2023	---
Machine Age	hrs	Client Info		1264	1058	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		19	12	---
Iron	ppm	ASTM D5185m	>20	9	10	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	<1	<1	---
Lead	ppm	ASTM D5185m	>10	2	4	---
Copper	ppm	ASTM D5185m	>75	10	8	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

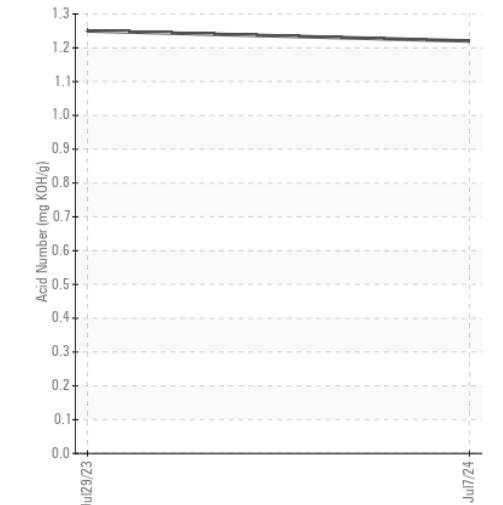
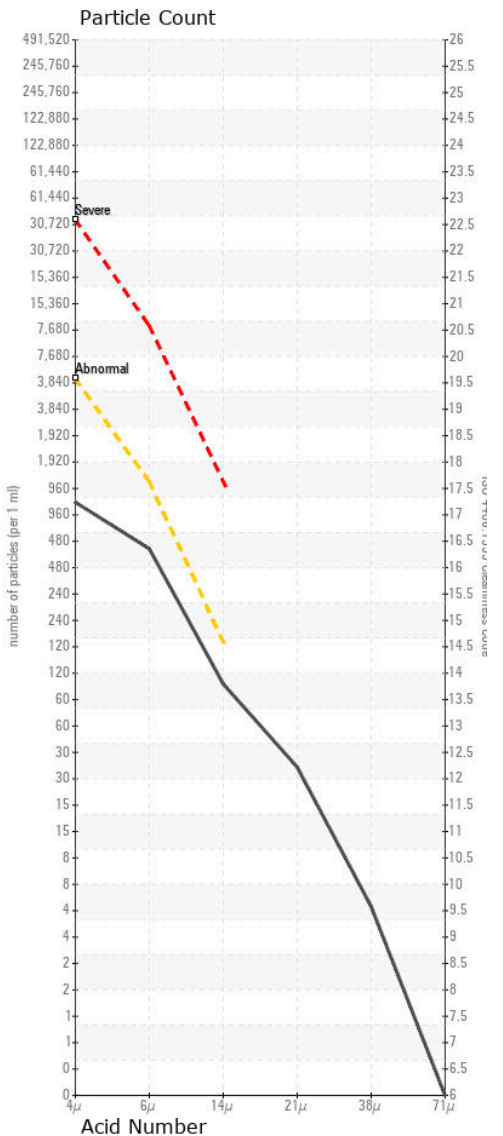
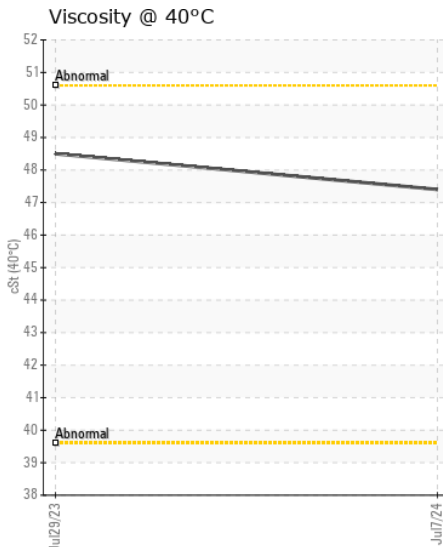
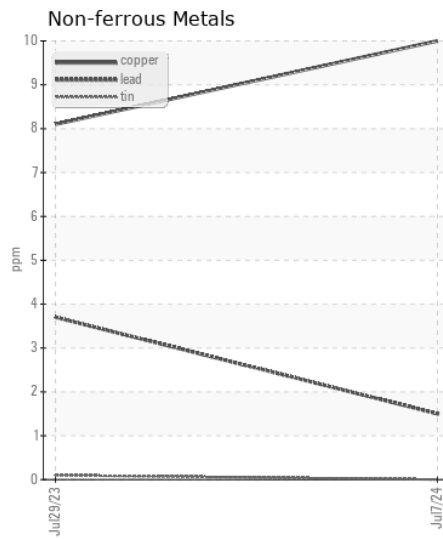
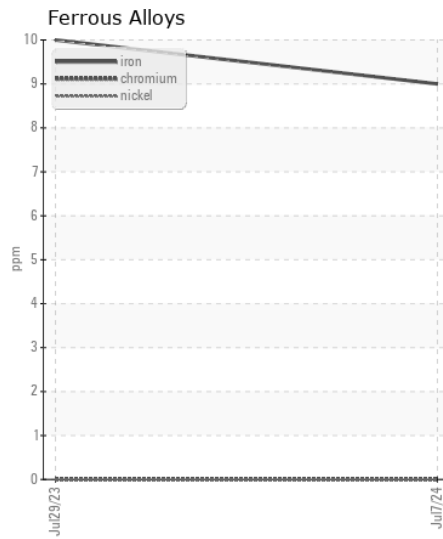
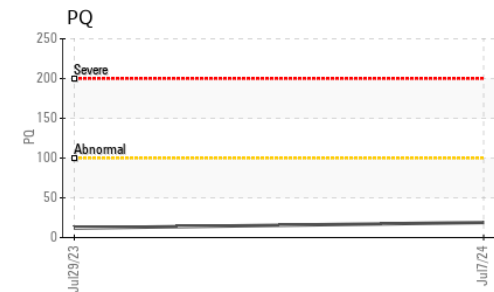
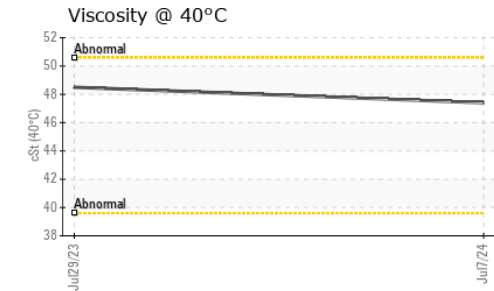
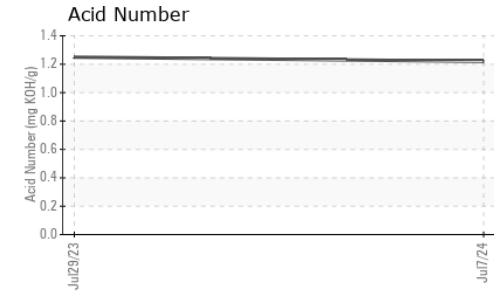
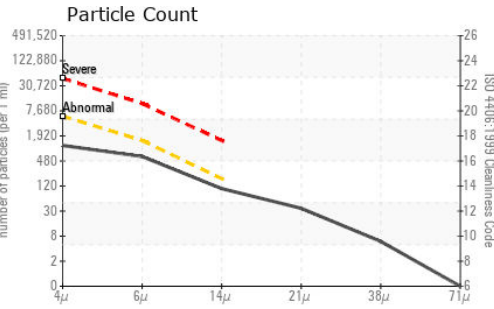
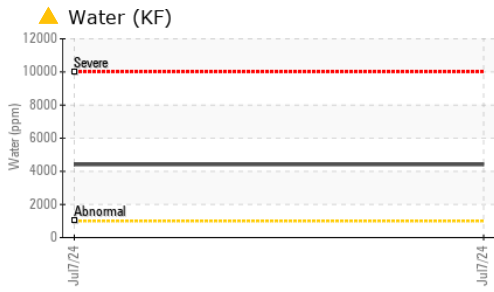
There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	4	5	---
Potassium	ppm	ASTM D5185m	>20	1	2	---
Water	%	ASTM D6304	>0.1	▲ 0.441	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 4410	---	---
Particles >4µm		ASTM D7647	>5000	992	▲ 13407	---
Particles >6µm		ASTM D7647	>1300	540	358	---
Particles >14µm		ASTM D7647	>160	92	22	---
Particles >21µm		ASTM D7647	>40	31	7	---
Particles >38µm		ASTM D7647	>10	5	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/16/14	▲ 21/16/12	---
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	0.2%	NEG	---

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		3	3	---
Boron	ppm	ASTM D5185m		2	0	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		71	96	---
Calcium	ppm	ASTM D5185m		3012	3456	---
Phosphorus	ppm	ASTM D5185m		916	1005	---
Zinc	ppm	ASTM D5185m		1006	1278	---
Sulfur	ppm	ASTM D5185m		3343	4012	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.22	1.25	---
Visc @ 40°C	cSt	ASTM D445		47.4	48.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0216808 **Received** : 08 Jul 2024
Lab Number : 06230046 **Tested** : 11 Jul 2024
Unique Number : 11113539 **Diagnosed** : 11 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, PQ)

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)

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