



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE CP690 1N0C690PHK4075724

Component
Front Right Final Drive

Fluid
{not provided} (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

The chromium level is abnormal. All other metal levels are typical for a new component breaking in.

CONTAMINATION

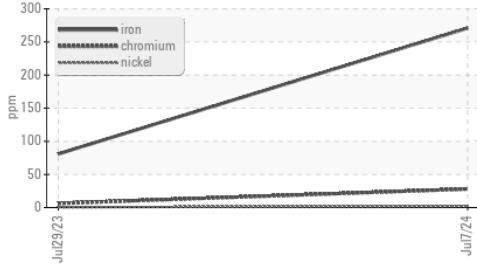
Elemental level of silicon (Si) above normal indicating ingress of seal material.

FLUID CONDITION

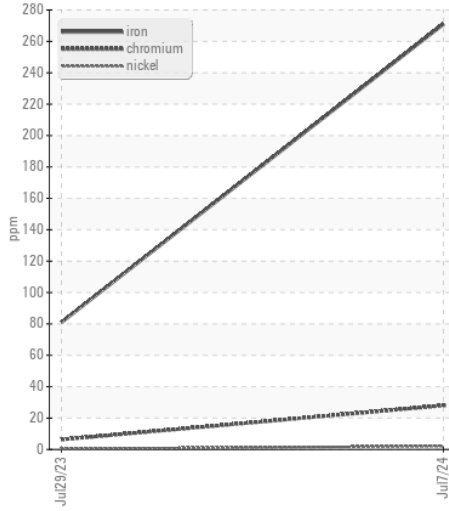
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0216813	JR0172340	---
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	---
PQ		ASTM D8184	>1250	305	60	---
Iron	ppm	ASTM D5185m	>750	271	81	---
Chromium	ppm	ASTM D5185m	>9	▲ 28	6	---
Nickel	ppm	ASTM D5185m	>10	2	<1	---
Titanium	ppm	ASTM D5185m		2	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>40	2	0	---
Lead	ppm	ASTM D5185m	>15	<1	<1	---
Copper	ppm	ASTM D5185m	>40	1	<1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	MODER	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>75	▲ 128	▲ 104	---
Potassium	ppm	ASTM D5185m	>20	3	1	---
Water		WC Method	>0.075	NEG	NEG	---
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	>0.075	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>51	<1	0	---
Boron	ppm	ASTM D5185m		3	2	---
Barium	ppm	ASTM D5185m		<1	<1	---
Molybdenum	ppm	ASTM D5185m		2	<1	---
Manganese	ppm	ASTM D5185m		24	8	---
Magnesium	ppm	ASTM D5185m		8	3	---
Calcium	ppm	ASTM D5185m		483	133	---
Phosphorus	ppm	ASTM D5185m		288	276	---
Zinc	ppm	ASTM D5185m		33	16	---
Sulfur	ppm	ASTM D5185m		21009	25026	---
Visc @ 40°C	cSt	ASTM D445		562	396	---

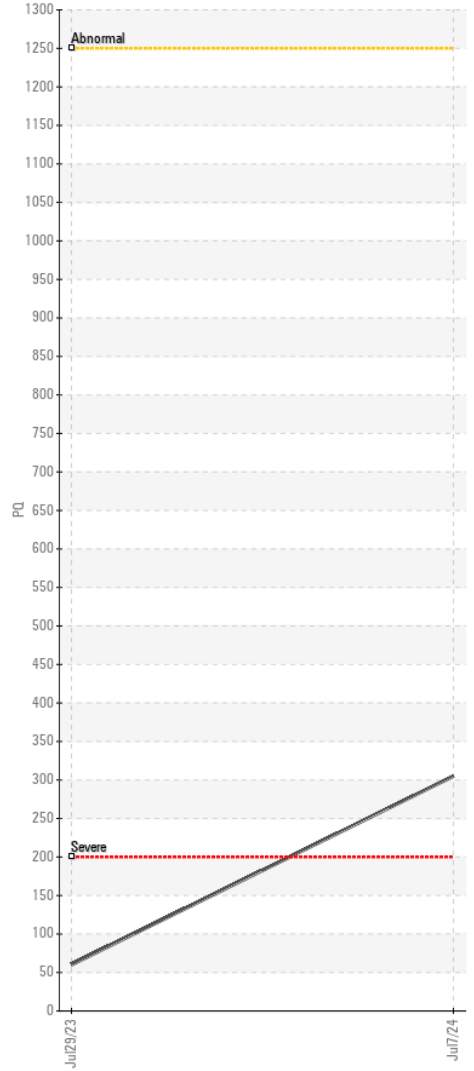
▲ Ferrous Alloys



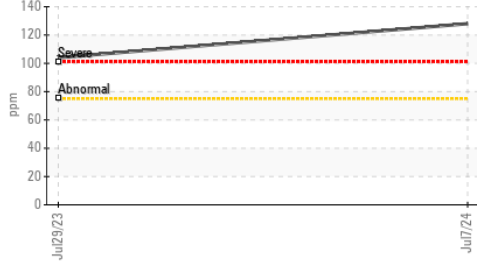
▲ Ferrous Alloys



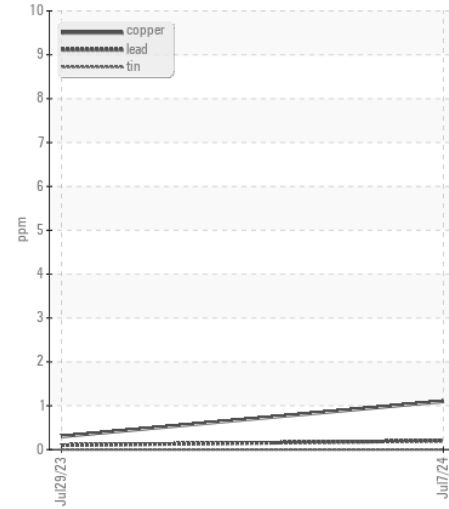
PQ



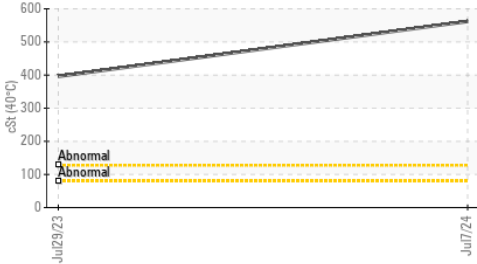
▲ Silicon (ppm)



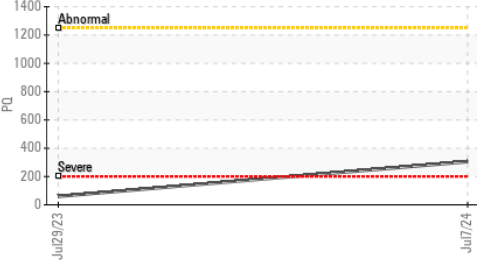
Non-ferrous Metals



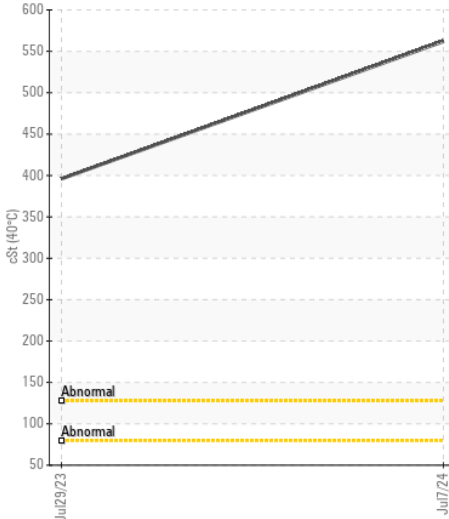
Viscosity @ 40°C



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0216813

Lab Number : 06230444

Unique Number : 11113937

Test Package : CONST (Additional Tests: PQ)

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 10 Jul 2024 - Don Baldrige

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)

JRE - WAKEFIELD

10489 GENERAL MAHONE HWY

WAKEFIELD, VA

US 23888

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