



WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[W45222]

Machine Id
JOHN DEERE 4052R 1LV4052RLJJ401893

Component
Power Take Off

Fluid
GEAR OIL LS 80W90 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: W45222)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0190737	JR0185929	JR0167809
Sample Date		Client Info		01 Nov 2023	11 Sep 2023	03 May 2023
Machine Age	hrs	Client Info		3245	3063	2727
Oil Age	hrs	Client Info		2909	336	2727
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				SEVERE	ATTENTION	ABNORMAL

WEAR

Gear wear is indicated.

PQ		ASTM D8184		▲ 564	11	150
Iron	ppm	ASTM D5185m	>200	▲ 2564	6	▲ 990
Chromium	ppm	ASTM D5185m	>10	▲ 27	0	11
Nickel	ppm	ASTM D5185m		6	0	3
Titanium	ppm	ASTM D5185m		1	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>50	▲ 150	0	▲ 127
Lead	ppm	ASTM D5185m	>50	<1	1	0
Copper	ppm	ASTM D5185m	>200	9	4	8
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

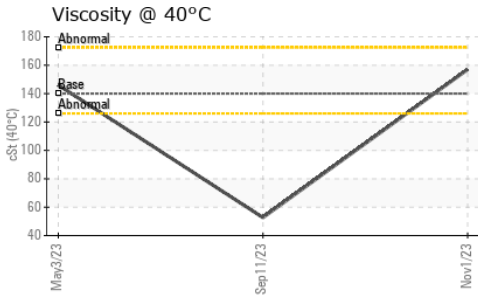
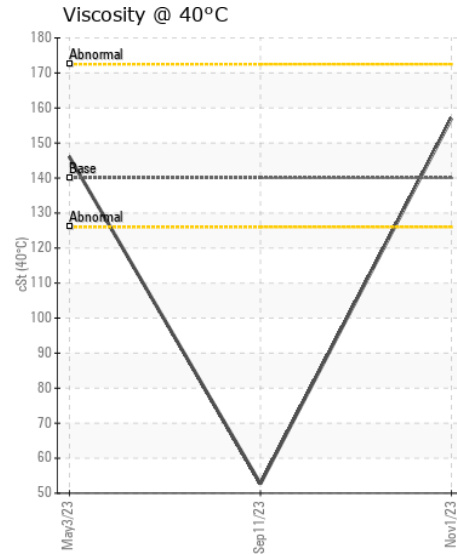
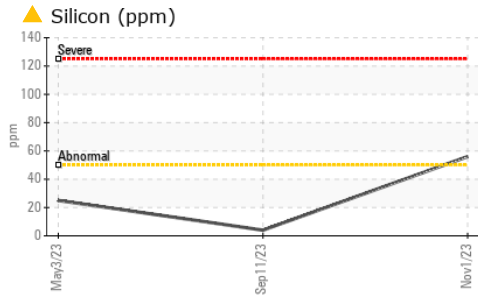
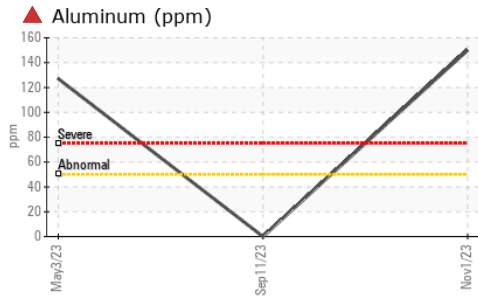
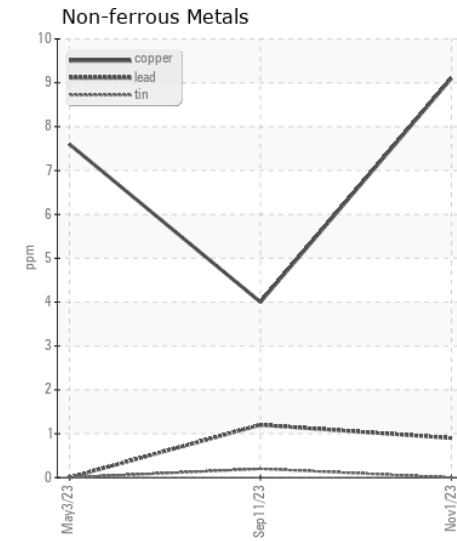
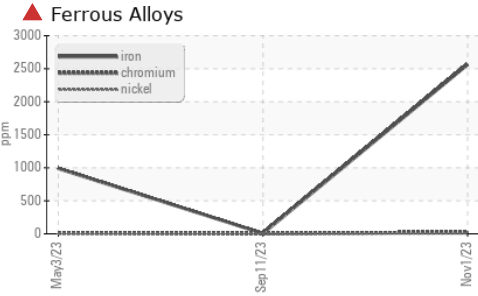
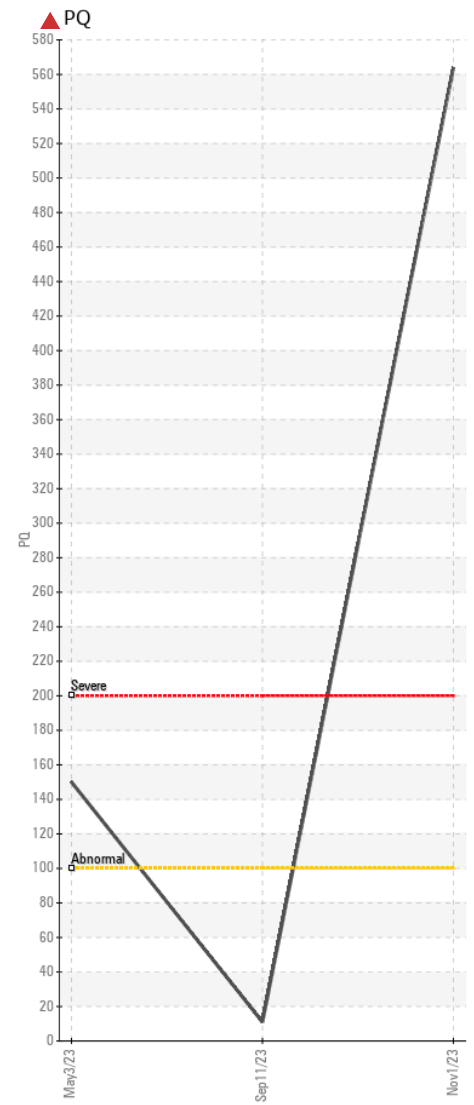
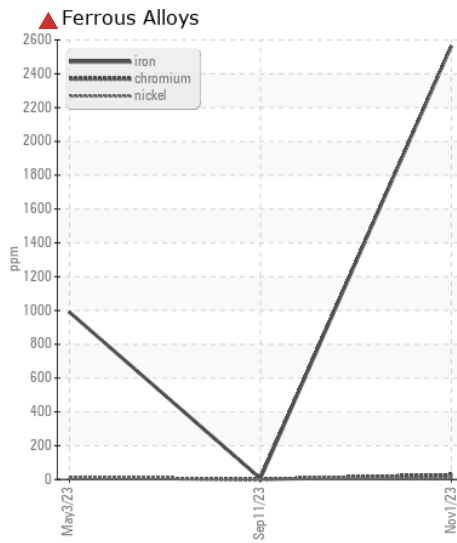
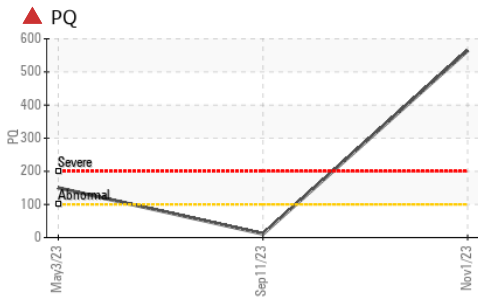
Elemental level of silicon (Si) above normal indicating ingress of seal material. There is a moderate amount of visible silt present in the sample.

Silicon	ppm	ASTM D5185m	>50	▲ 56	4	25
Potassium	ppm	ASTM D5185m	>20	3	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m		6	2	7
Boron	ppm	ASTM D5185m	150	186	● 9	108
Barium	ppm	ASTM D5185m		7	0	0
Molybdenum	ppm	ASTM D5185m		3	<1	<1
Manganese	ppm	ASTM D5185m		25	<1	13
Magnesium	ppm	ASTM D5185m	10	183	● 100	8
Calcium	ppm	ASTM D5185m	70	168	● 3477	267
Phosphorus	ppm	ASTM D5185m	2000	2007	1021	1893
Zinc	ppm	ASTM D5185m	50	84	● 1252	105
Sulfur	ppm	ASTM D5185m	20000	25610	● 4331	28454
Visc @ 40°C	cSt	ASTM D445	140	157	● 52.7	146



Certificate L2367

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

Sample No. : JR0190737

Lab Number : 05998227

Unique Number : 10726587

Test Package : CONST (Additional Tests: PQ)

Received : 03 Nov 2023

Tested : 06 Nov 2023

Diagnosed : 07 Nov 2023 - Jonathan Hester

JRE - GARNER

4161 AUBURN CHURCH RD

GARNER, NC

US 27529

Contact: RALEIGH SHOP

sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

T: (919)614-2260

F: (919)779-5432

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)