



Machine Id
JOHN DEERE 470G 1FF470GXJJF235253

Component
Right Final Drive

Fluid
GEAR OIL SAE 80W140 (--- QTS)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

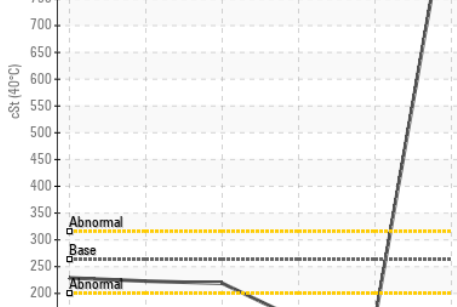
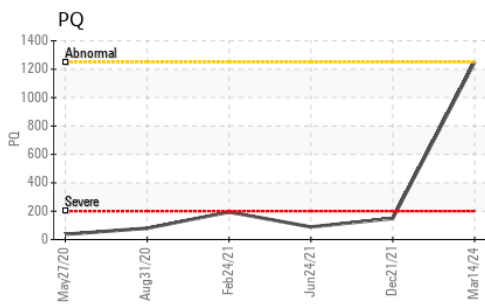
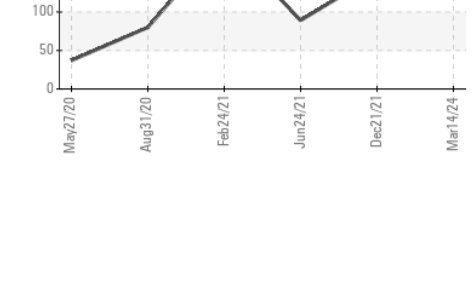
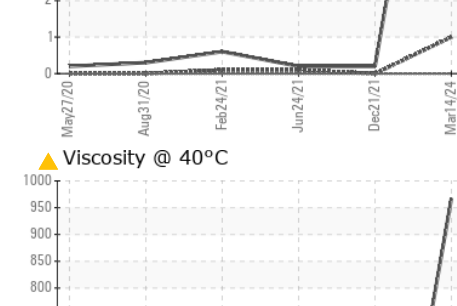
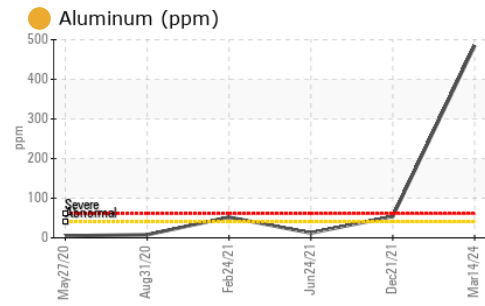
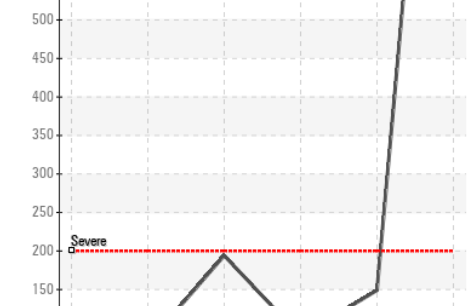
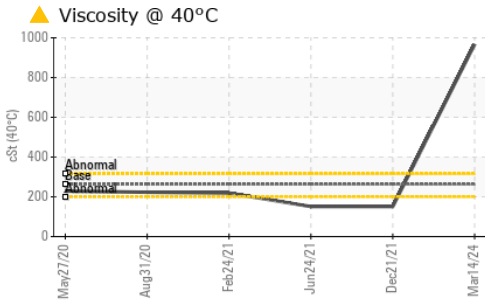
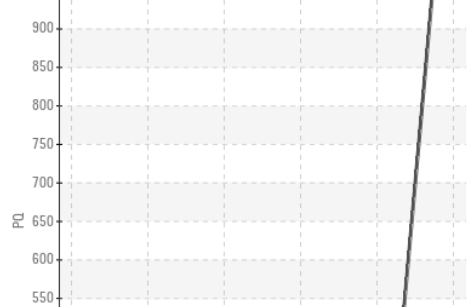
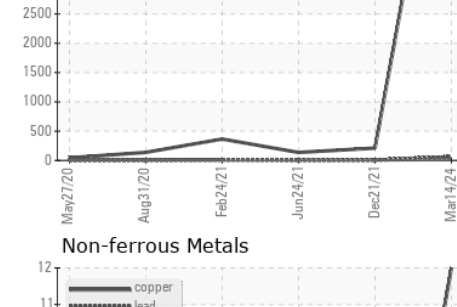
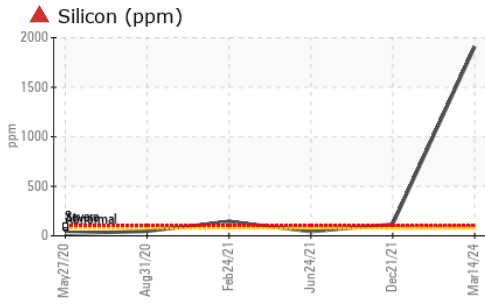
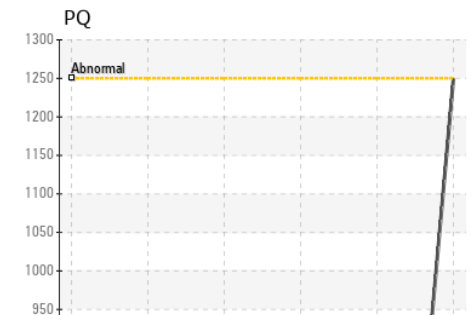
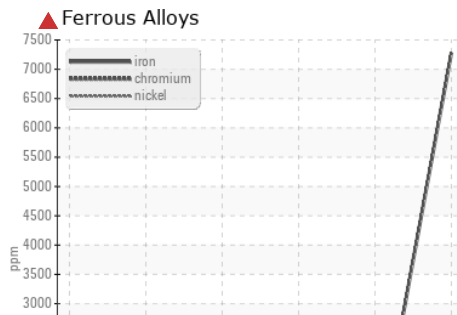
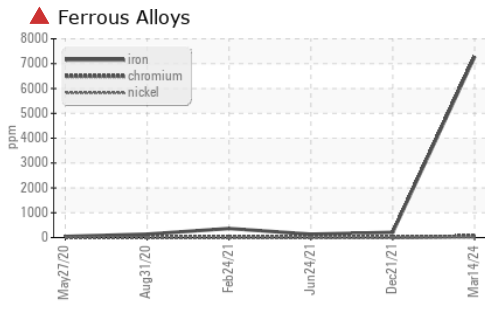
CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0203470	JR0113735	JR0087270
Sample Date		Client Info		14 Mar 2024	21 Dec 2021	24 Jun 2021
Machine Age	hrs	Client Info		6231	3536	0
Oil Age	hrs	Client Info		2695	500	500
Filter Age	hrs	Client Info		0	500	500
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL
PQ		ASTM D8184	>1250	1249	149	89
Iron	ppm	ASTM D5185m	>750	▲ 7279	211	137
Chromium	ppm	ASTM D5185m	>9	▲ 61	5	3
Nickel	ppm	ASTM D5185m	>10	7	0	<1
Titanium	ppm	ASTM D5185m		37	4	1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>40	● 485	● 54	12
Lead	ppm	ASTM D5185m	>15	1	0	<1
Copper	ppm	ASTM D5185m	>40	12	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		2	<1	<1
White Metal	scalar	*Visual	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	▲ 1906	▲ 117	41
Potassium	ppm	ASTM D5185m	>20	74	6	3
Water		WC Method	>0.075	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	VLITE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	▲ MODER
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	>0.075	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>51	47	4	1
Boron	ppm	ASTM D5185m	400	62	40	27
Barium	ppm	ASTM D5185m	200	<1	0	0
Molybdenum	ppm	ASTM D5185m	12	6	2	1
Manganese	ppm	ASTM D5185m		57	3	2
Magnesium	ppm	ASTM D5185m	12	52	8	6
Calcium	ppm	ASTM D5185m	150	78	25	85
Phosphorus	ppm	ASTM D5185m	1650	366	431	408
Zinc	ppm	ASTM D5185m	125	13	9	17
Sulfur	ppm	ASTM D5185m	22500	21602	18487	15528
Visc @ 40°C	cSt	ASTM D445	263	▲ 967	151	151



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0203470 **Received** : 19 Mar 2024
Lab Number : 06122714 **Tested** : 22 Mar 2024
Unique Number : 10936865 **Diagnosed** : 22 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

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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)