



WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 180G 1FF180GXEJF020853

Component
Rear Left Final Drive

Fluid
JOHN DEERE GL-5 80W90 (--- GAL)

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. (Customer Sample Comment: W13167)

WEAR

Moderate concentration of visible metal present. Gear wear is indicated.

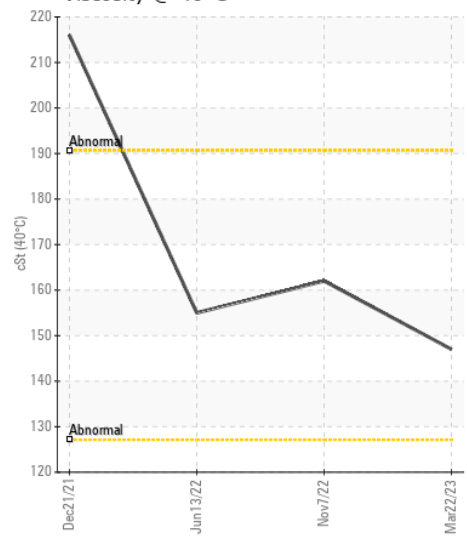
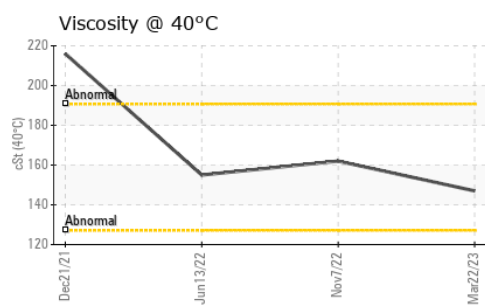
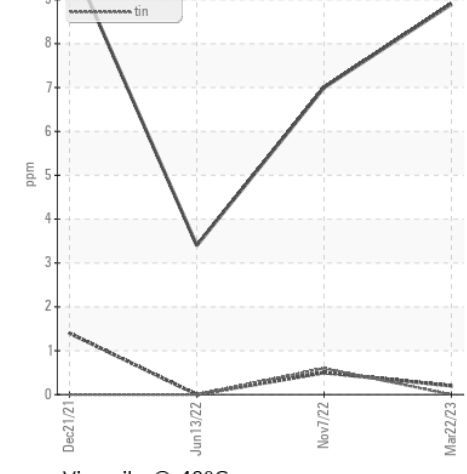
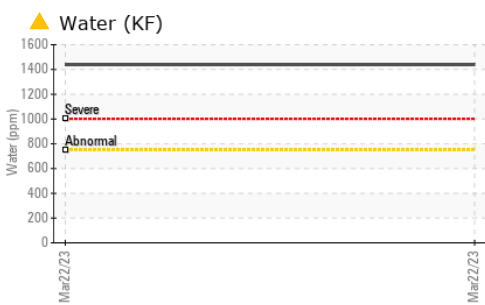
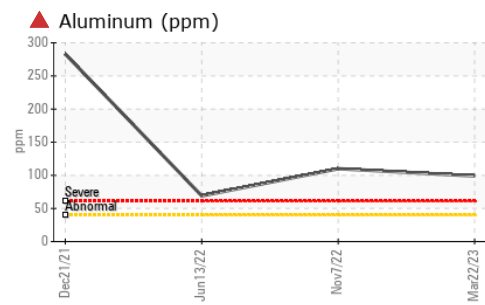
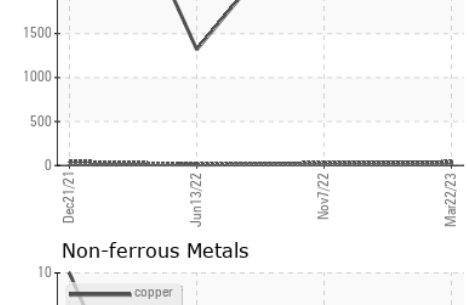
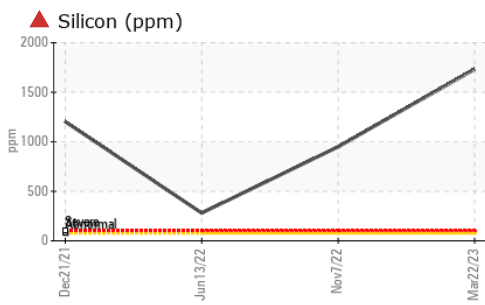
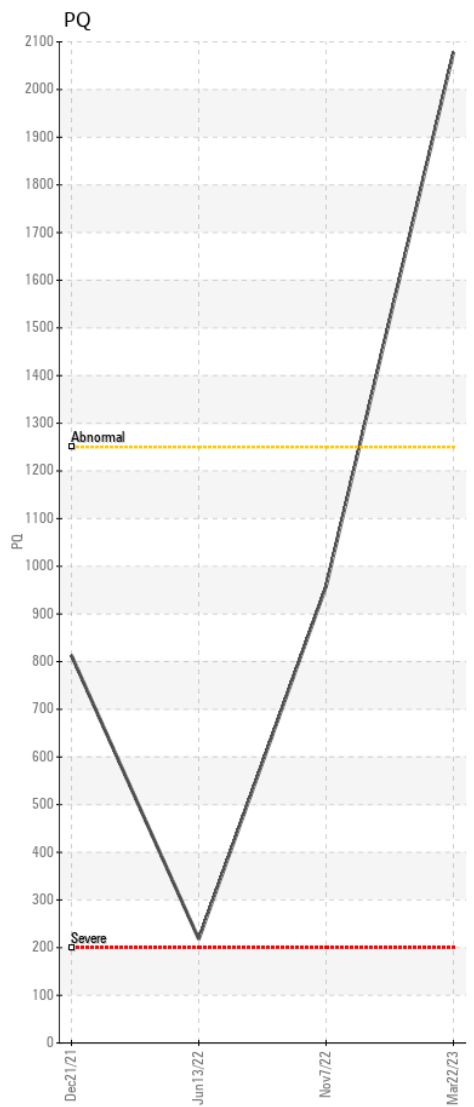
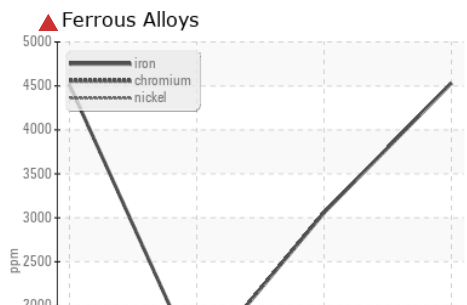
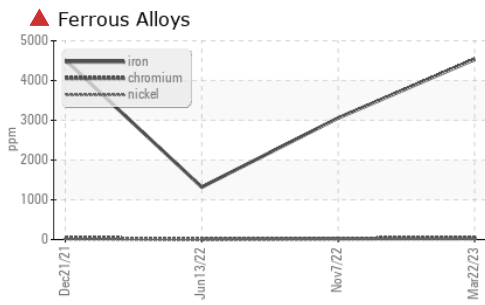
CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0161040	JR0136230	JR0121713
Sample Date		Client Info		22 Mar 2023	07 Nov 2022	13 Jun 2022
Machine Age	hrs	Client Info		3521	3019	2474
Oil Age	hrs	Client Info		1572	1070	525
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE
PQ		ASTM D8184	>1250	2078	958	218
Iron	ppm	ASTM D5185m	>750	▲ 4532	▲ 3058	▲ 1319
Chromium	ppm	ASTM D5185m	>9	▲ 38	▲ 26	▲ 11
Nickel	ppm	ASTM D5185m	>10	10	7	1
Titanium	ppm	ASTM D5185m		20	14	5
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>40	▲ 99	▲ 110	● 69
Lead	ppm	ASTM D5185m	>15	<1	<1	0
Copper	ppm	ASTM D5185m	>40	9	7	3
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	▲ MODER	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	▲ 1732	▲ 949	▲ 280
Potassium	ppm	ASTM D5185m	>20	10	13	6
Water	%	ASTM D6304	>0.075	▲ 0.144	---	---
ppm Water	ppm	ASTM D6304	>750	▲ 1440	---	---
Silt	scalar	*Visual	NONE	NONE	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	>0.075	0.2%	NEG	NEG
Sodium	ppm	ASTM D5185m	>51	<1	4	4
Boron	ppm	ASTM D5185m		15	22	22
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		4	3	1
Manganese	ppm	ASTM D5185m		34	24	12
Magnesium	ppm	ASTM D5185m		13	23	16
Calcium	ppm	ASTM D5185m		24	54	26
Phosphorus	ppm	ASTM D5185m		390	329	320
Zinc	ppm	ASTM D5185m		6	22	15
Sulfur	ppm	ASTM D5185m		20055	19104	14843
Visc @ 40°C	cSt	ASTM D445		147	162	155



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0161040 **Received** : 24 Mar 2023
Lab Number : 05801752 **Tested** : 28 Mar 2023
Unique Number : 10399281 **Diagnosed** : 29 Mar 2023 - Don Baldrige
Test Package : CONST (Additional Tests: KF, 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)