



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[COUNTY OF WARREN]
 Machine Id
JOHN DEERE 50G 1FF050GXTJH287986
 Component
Right Final Drive
 Fluid
JOHN DEERE GL-5 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0195655	JR0138242	JR0015756
Sample Date		Client Info		11 Jan 2024	21 Sep 2022	29 Aug 2019
Machine Age	hrs	Client Info		2330	1829	520
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

The chromium level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184	>1250	174	333	502
Iron	ppm	ASTM D5185m	>750	631	▲ 853	438
Chromium	ppm	ASTM D5185m	>9	▲ 15	▲ 23	15
Nickel	ppm	ASTM D5185m	>10	10	15	3
Titanium	ppm	ASTM D5185m		2	3	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>40	▲ 10	▲ 18	3
Lead	ppm	ASTM D5185m	>15	0	0	0
Copper	ppm	ASTM D5185m	>40	2	2	2
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

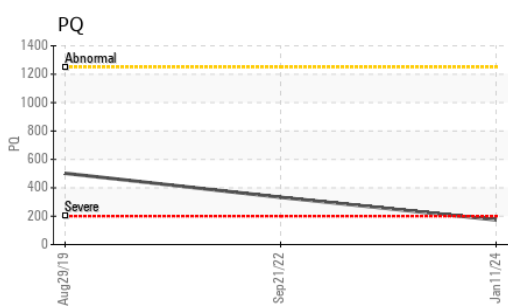
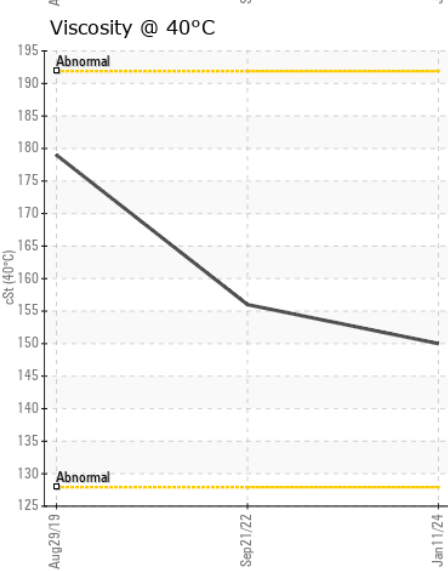
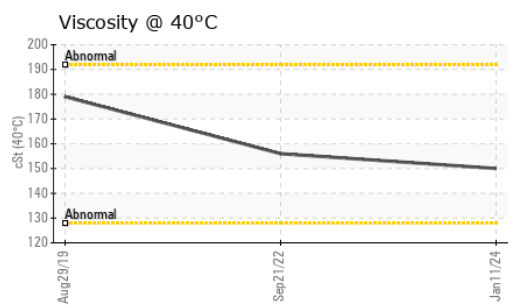
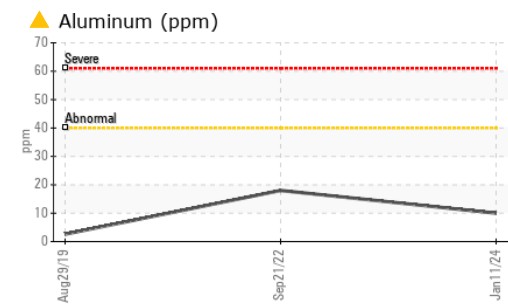
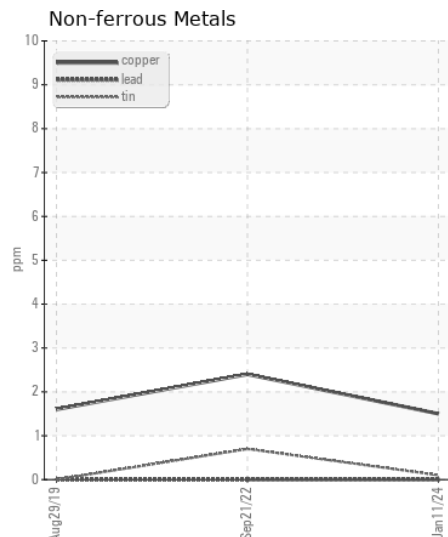
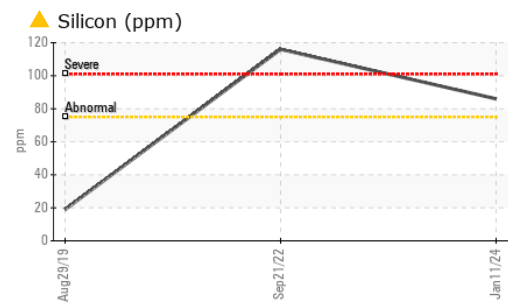
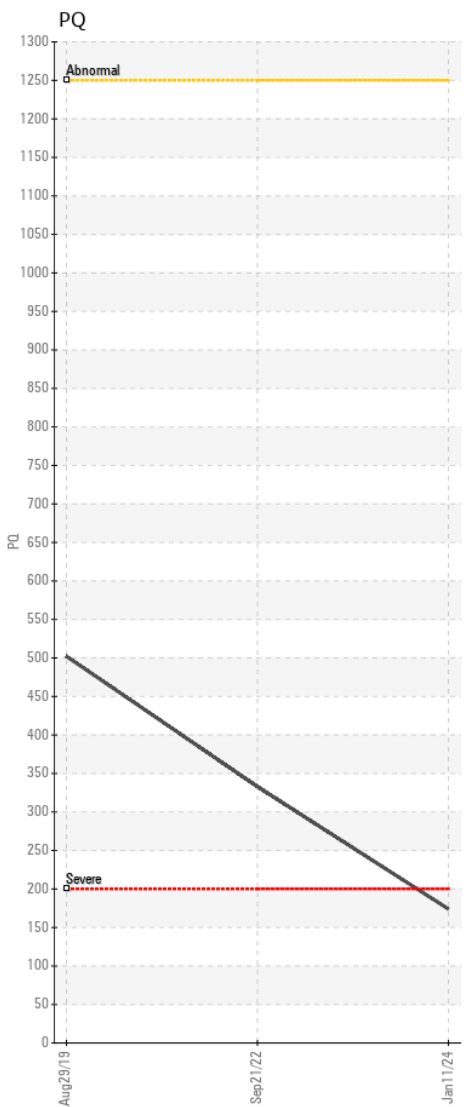
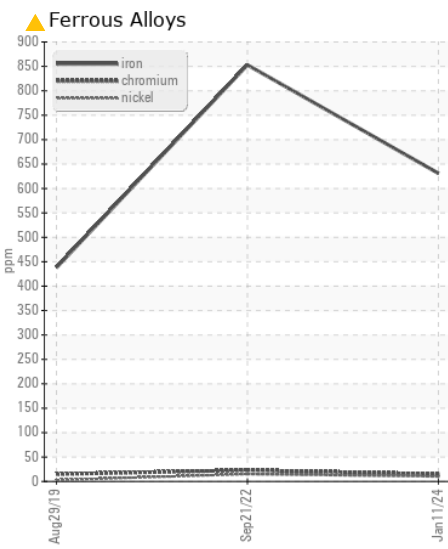
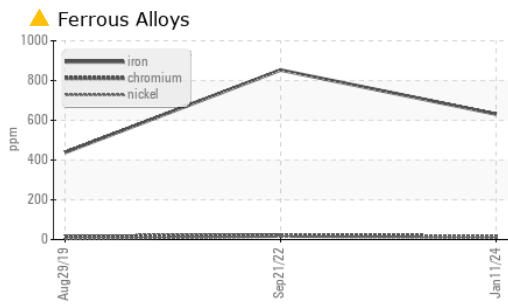
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 86	▲ 116	19
Potassium	ppm	ASTM D5185m	>20	4	5	6
Water		WC Method	>0.075	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	NONE	LIGHT
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	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	2	4	2
Boron	ppm	ASTM D5185m		12	18	51
Barium	ppm	ASTM D5185m		<1	2	1
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		11	15	10
Magnesium	ppm	ASTM D5185m		4	8	1
Calcium	ppm	ASTM D5185m		85	32	11
Phosphorus	ppm	ASTM D5185m		361	403	458
Zinc	ppm	ASTM D5185m		155	202	141
Sulfur	ppm	ASTM D5185m		16700	18796	13136
Visc @ 40°C	cSt	ASTM D445		150	156	179



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0195655 **Received** : 17 Jan 2024
Lab Number : 06063852 **Diagnosed** : 20 Jan 2024
Unique Number : 10835234 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)