



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
JOHN DEERE 210G 1FF210GXTFF523690
 Component
Hydraulic System
 Fluid
ENVIRONMENTAL OIL ISO 46 (--- GAL)

RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil. The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0198548	JR0135300	JR0102086
Sample Date		Client Info		22 Dec 2023	28 Jul 2022	10 Dec 2021
Machine Age	hrs	Client Info		5950	5052	4555
Oil Age	hrs	Client Info		431	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	15	20	15
Iron	ppm	ASTM D5185m	>32	<1	10	1
Chromium	ppm	ASTM D5185m	>9	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	3	1
Lead	ppm	ASTM D5185m	>28	0	<1	<1
Copper	ppm	ASTM D5185m	>50	3	8	<1
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

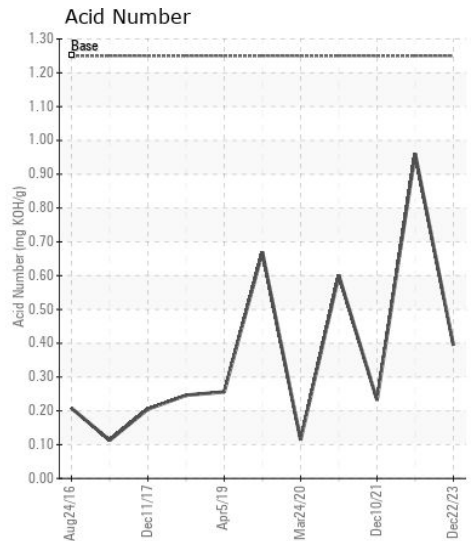
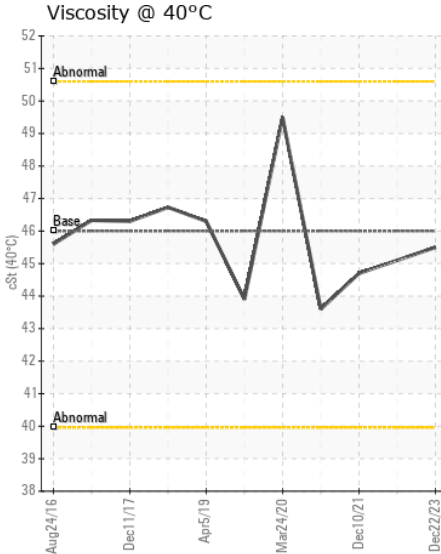
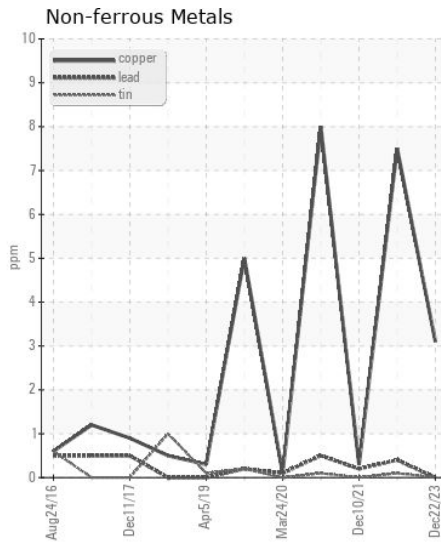
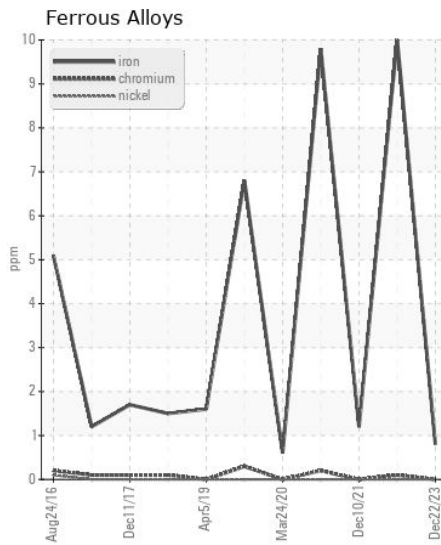
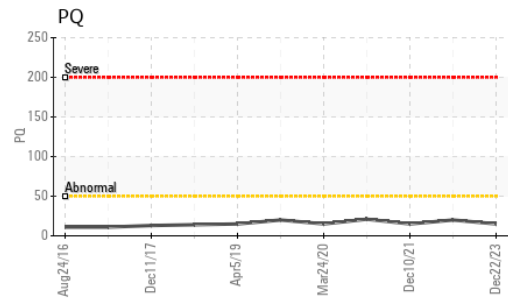
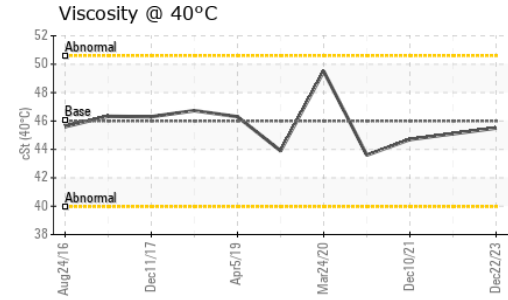
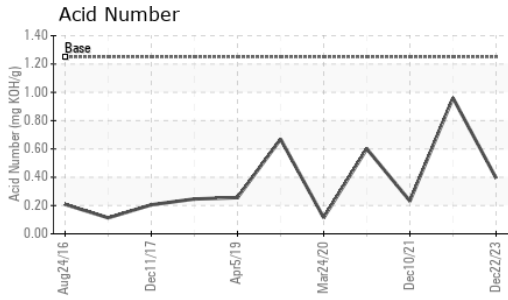
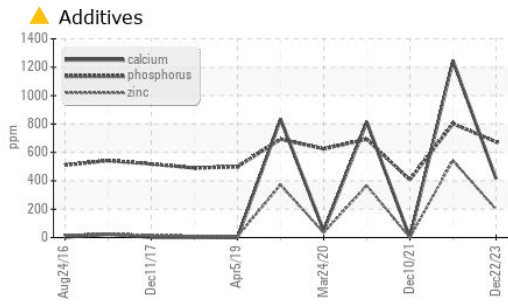
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>11	1	3	<1
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	---	16248	3907
Particles >6µm		ASTM D7647	>20000	---	2446	887
Particles >14µm		ASTM D7647	>640	---	87	127
Particles >21µm		ASTM D7647	>160	---	18	41
Particles >38µm		ASTM D7647	>40	---	1	2
Particles >71µm		ASTM D7647	>10	---	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	---	21/18/14	19/17/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT	LIGHT
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

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<1	0	0
Boron	ppm	ASTM D5185m	5	0	5	<1
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	2	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	5	4	12	0
Calcium	ppm	ASTM D5185m	15	415	1246	<1
Phosphorus	ppm	ASTM D5185m	1100	674	802	407
Zinc	ppm	ASTM D5185m	10	▲ 198	▲ 542	0
Sulfur	ppm	ASTM D5185m	1400	615	1913	1111
Acid Number (AN)	mg KOH/g	ASTM D8045	1.25	0.394	0.96	0.232
Visc @ 40°C	cSt	ASTM D445	46	45.5	45.1	44.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0198548 **Received** : 10 Jan 2024
Lab Number : 06056585 **Diagnosed** : 11 Jan 2024
Unique Number : 10822534 **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)