



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 245GLC 1FF245GXJF800677

Component
Hydraulic System

Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. 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		JR0199826	JR0147263	JR0124493
Sample Date		Client Info		07 Feb 2024	30 Nov 2022	17 Oct 2022
Machine Age	hrs	Client Info		3530	2970	2887
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	11	10	5
Iron	ppm	ASTM D5185m	>32	11	13	12
Chromium	ppm	ASTM D5185m	>9	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	1	0
Lead	ppm	ASTM D5185m	>28	0	<1	0
Copper	ppm	ASTM D5185m	>50	8	8	7
Tin	ppm	ASTM D5185m	>5	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

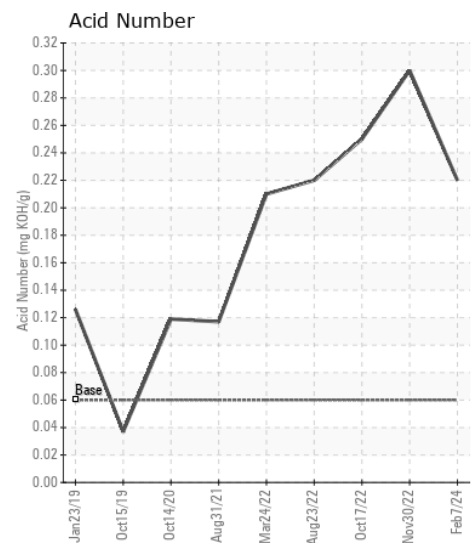
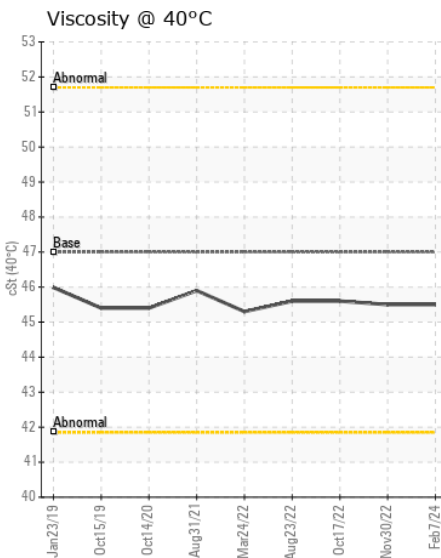
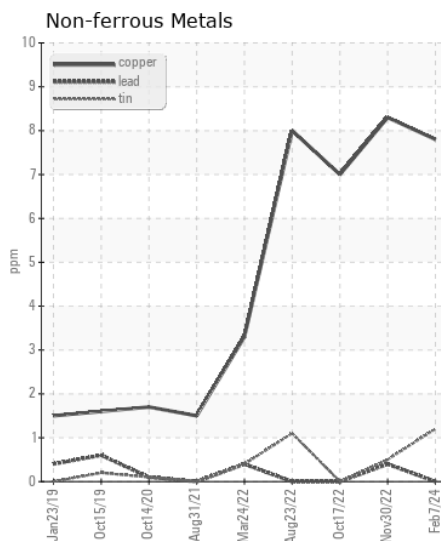
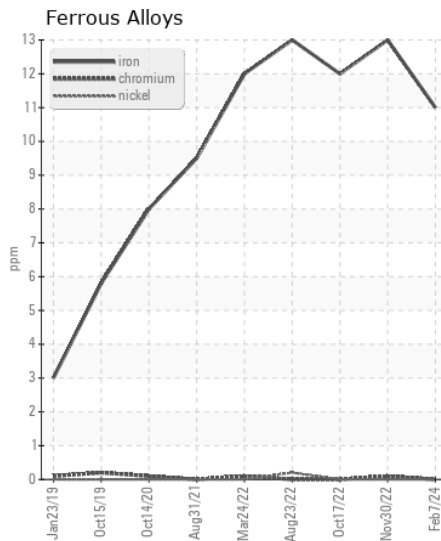
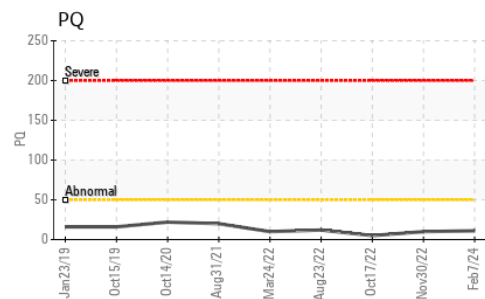
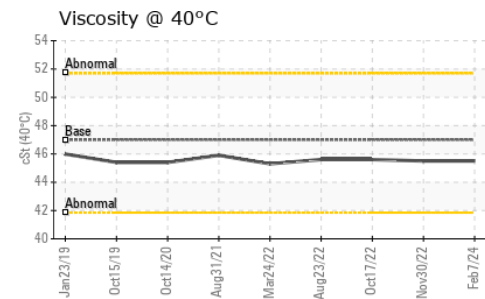
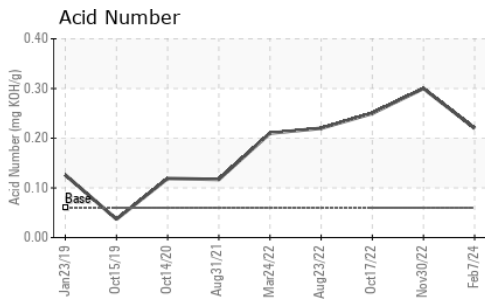
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>11	1	2	3
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	---	1463	▲ 195916
Particles >6µm		ASTM D7647	>20000	---	122	▲ 94610
Particles >14µm		ASTM D7647	>640	---	7	▲ 12499
Particles >21µm		ASTM D7647	>160	---	0	▲ 2225
Particles >38µm		ASTM D7647	>40	---	0	▲ 67
Particles >71µm		ASTM D7647	>10	---	0	1
Oil Cleanliness		ISO 4406 (c)	>23/21/16	---	18/14/10	▲ 25/24/21
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE	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

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>21	2	2	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	<1	0
Calcium	ppm	ASTM D5185m		99	102	93
Phosphorus	ppm	ASTM D5185m	827	497	524	523
Zinc	ppm	ASTM D5185m	0	83	86	80
Sulfur	ppm	ASTM D5185m	13	234	290	62
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.22	0.30	0.25
Visc @ 40°C	cSt	ASTM D445	47	45.5	45.5	45.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199826 **Received** : 08 Feb 2024
Lab Number : 06083540 **Tested** : 10 Feb 2024
Unique Number : 10870985 **Diagnosed** : 10 Feb 2024 - Don Baldrige
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)