



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KHCDE652296

Component
Front Differential

Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0198550	JR0171159	JR0162098
Sample Date		Client Info		02 Jan 2024	19 Jun 2023	19 Mar 2023
Machine Age	hrs	Client Info		14723	14096	13514
Oil Age	hrs	Client Info		627	13514	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>135	15	19	12
Iron	ppm	ASTM D5185m	>420	0	26	15
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	<1	2	1
Lead	ppm	ASTM D5185m	>95	0	7	0
Copper	ppm	ASTM D5185m	>170	1	54	0
Tin	ppm	ASTM D5185m	>15	<1	7	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

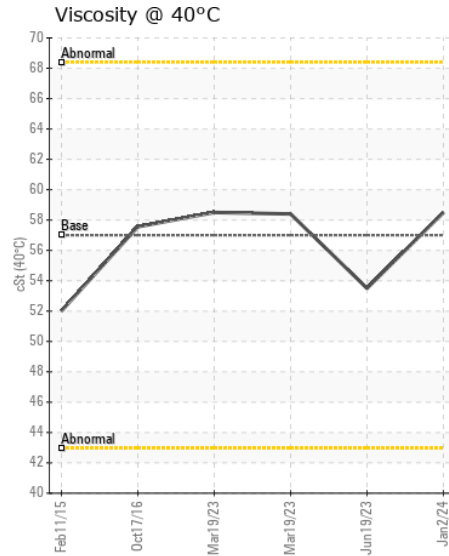
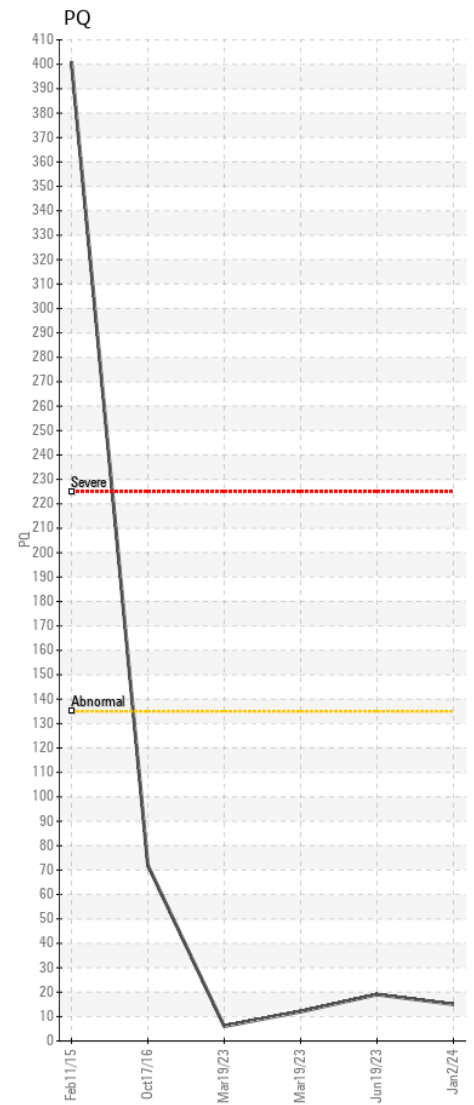
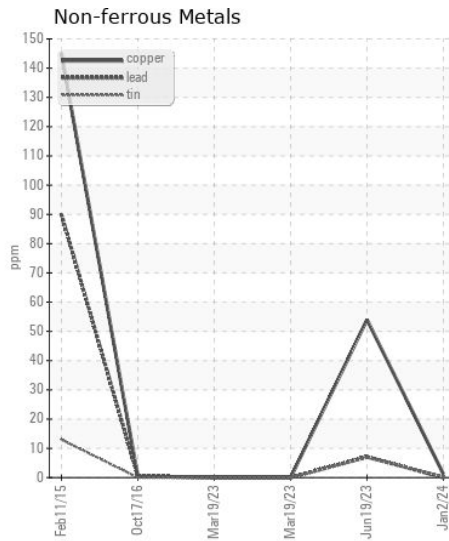
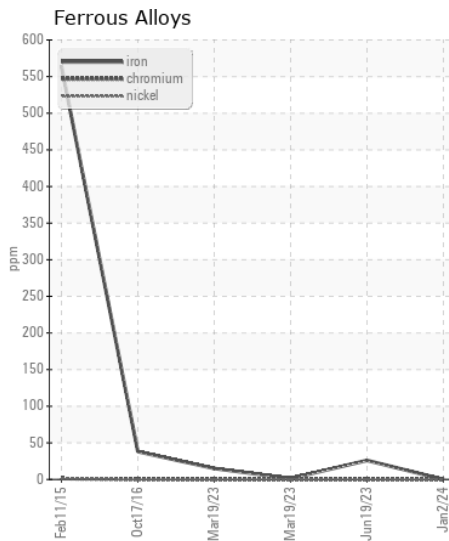
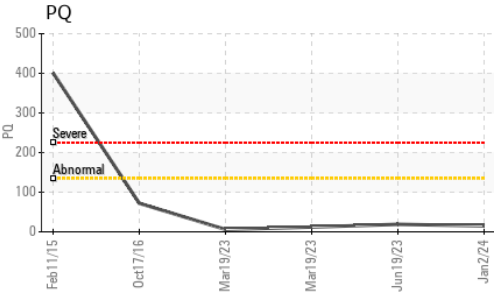
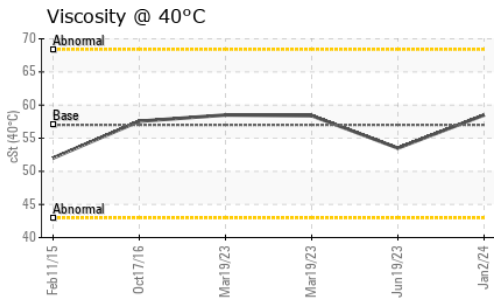
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	4	11	7
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	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	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	6	1
Boron	ppm	ASTM D5185m	6	1	100	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	7	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	145	97	23	93
Calcium	ppm	ASTM D5185m	3570	3060	3114	3442
Phosphorus	ppm	ASTM D5185m	1290	957	1027	938
Zinc	ppm	ASTM D5185m	1640	1155	1277	1197
Sulfur	ppm	ASTM D5185m		3114	7497	4260
Visc @ 40°C	cSt	ASTM D445	57.0	58.5	53.5	58.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0198550 **Received** : 12 Jan 2024
Lab Number : 06059498 **Diagnosed** : 15 Jan 2024
Unique Number : 10830880 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

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)

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