



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZAED661834
Component
Front Axle
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		JR0212446	JR0197513	JR0167646
Sample Date		Client Info		18 Apr 2024	15 Jan 2024	18 May 2023
Machine Age	hrs	Client Info		11523	11098	10147
Oil Age	hrs	Client Info		11523	11098	1000
Filter Age	hrs	Client Info		0	0	1000
Oil Changed		Client Info		Not Changed	Not Changed	N/A
Filter Changed		Client Info		Not Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		21	18	12
Iron	ppm	ASTM D5185m	>750	182	171	164
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	0	<1	<1
Lead	ppm	ASTM D5185m	>49	17	18	18
Copper	ppm	ASTM D5185m	>101	35	28	25
Tin	ppm	ASTM D5185m	>10	4	2	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

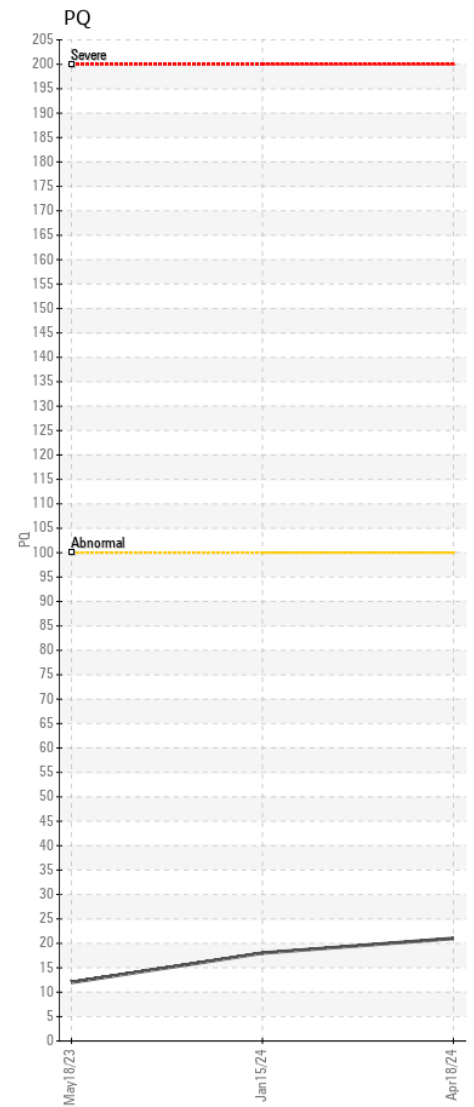
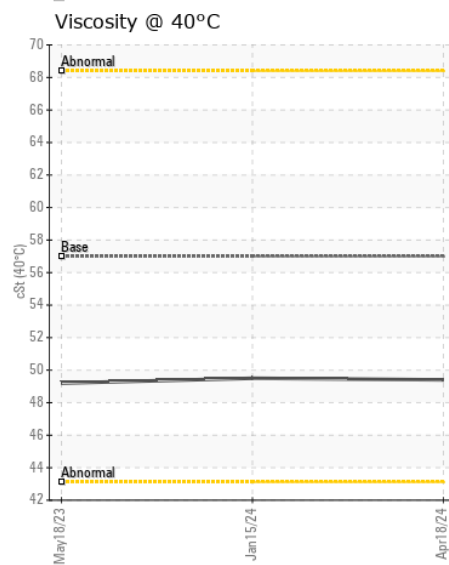
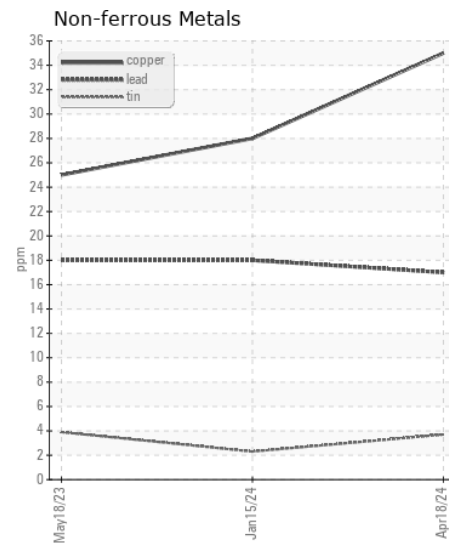
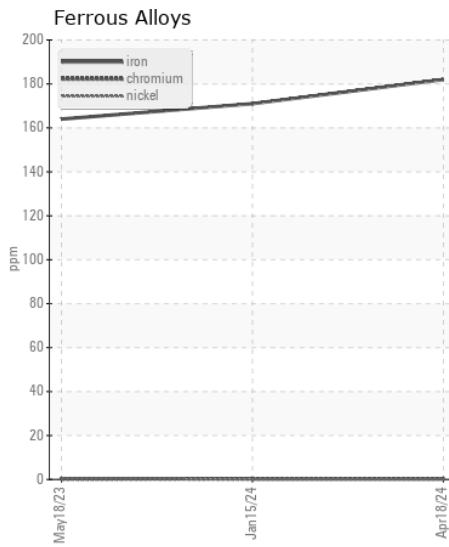
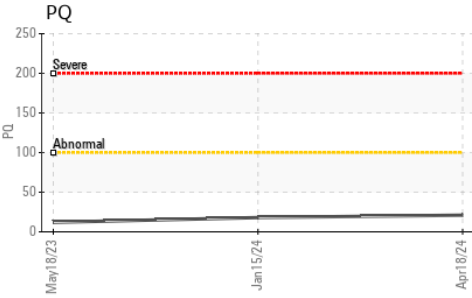
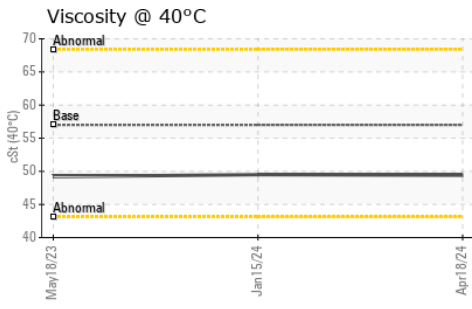
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>31	9	9	9
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m	>51	7	6	5
Boron	ppm	ASTM D5185m	6	1	11	4
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	2	2	2
Manganese	ppm	ASTM D5185m		3	1	2
Magnesium	ppm	ASTM D5185m	145	93	91	99
Calcium	ppm	ASTM D5185m	3570	3165	2948	3256
Phosphorus	ppm	ASTM D5185m	1290	1051	1069	1034
Zinc	ppm	ASTM D5185m	1640	1222	1196	1304
Sulfur	ppm	ASTM D5185m		4117	4099	4474
Visc @ 40°C	cSt	ASTM D445	57.0	49.4	49.5	49.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212446 **Received** : 22 Apr 2024
Lab Number : 06156234 **Tested** : 23 Apr 2024
Unique Number : 10991657 **Diagnosed** : 24 Apr 2024 - Sean Felton
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)