



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
[W68055]
Machine Id
JOHN DEERE 644K 1DW644KZKDE652005
Component
Front Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (6 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W68055)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0219731	JR0198229	JR0178336
Sample Date		Client Info		20 Jun 2024	30 Jan 2024	30 Aug 2023
Machine Age	hrs	Client Info		15382	14513	14513
Oil Age	hrs	Client Info		14968	14927	1042
Filter Age	hrs	Client Info		0	14927	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>135	33	32	28
Iron	ppm	ASTM D5185m	>420	92	63	126
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	2
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>5	3	<1	3
Lead	ppm	ASTM D5185m	>95	1	0	1
Copper	ppm	ASTM D5185m	>170	5	2	10
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

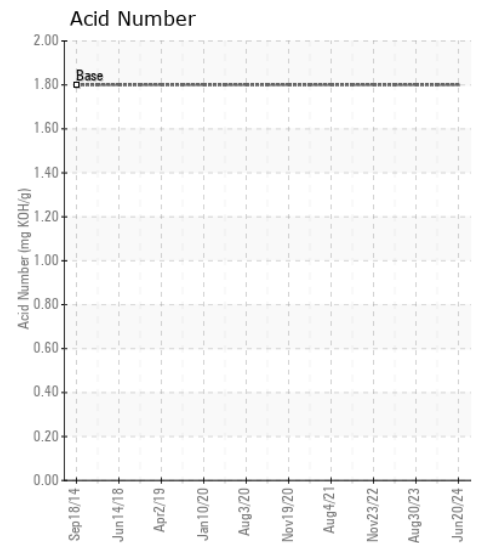
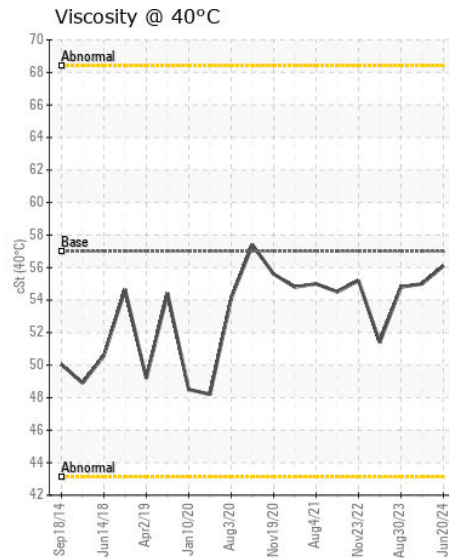
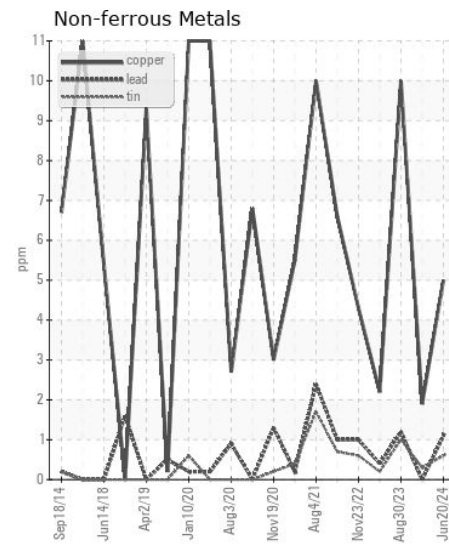
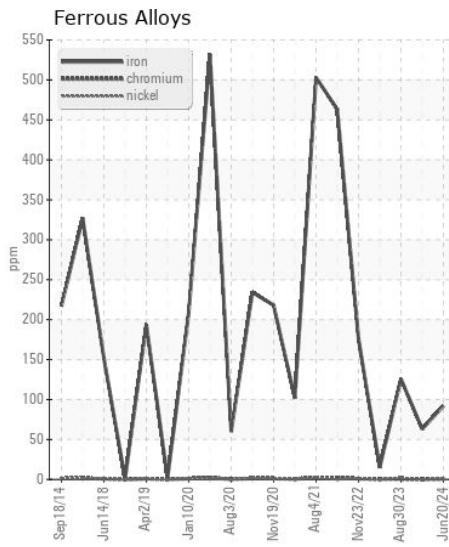
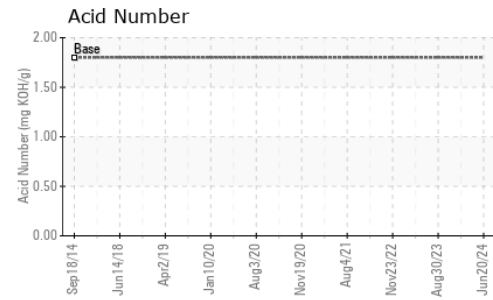
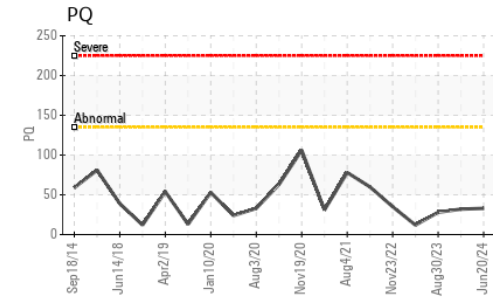
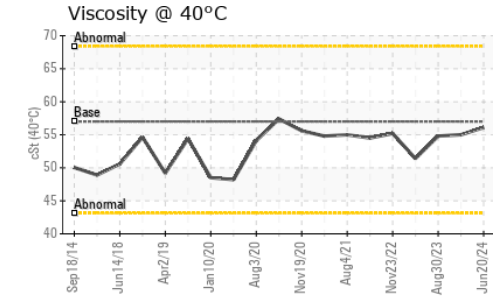
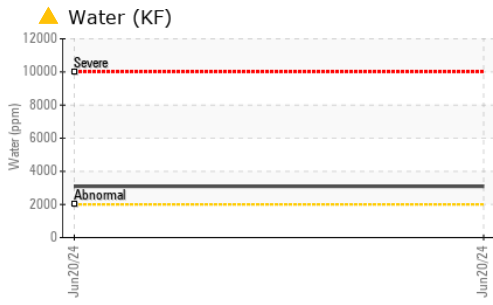
There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>35	10	9	18
Potassium	ppm	ASTM D5185m	>20	2	0	2
Water	%	ASTM D6304	>.2	▲ 0.309	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 3090	---	---
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	>.2	▲ 0.2%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m	6	2	<1	6
Barium	ppm	ASTM D5185m	0	1	<1	3
Molybdenum	ppm	ASTM D5185m	0	1	0	1
Manganese	ppm	ASTM D5185m		2	1	1
Magnesium	ppm	ASTM D5185m	145	91	99	98
Calcium	ppm	ASTM D5185m	3570	3326	3191	3745
Phosphorus	ppm	ASTM D5185m	1290	922	996	1073
Zinc	ppm	ASTM D5185m	1640	1181	1166	1176
Sulfur	ppm	ASTM D5185m		3692	3166	3948
Visc @ 40°C	cSt	ASTM D445	57.0	56.1	55.0	54.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0219731

Lab Number : 06220006

Unique Number : 11098203

Test Package : CONST (Additional Tests: ICP, KF, KV40, PQ, PrtCount, SCREEN, TAN)

Received : 25 Jun 2024

Tested : 26 Jun 2024

Diagnosed : 26 Jun 2024 - Sean Felton

JRE - CHARLOTTE

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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)