



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZTED658665
Component
Rear 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		JR0217624	JR0199527	JR0172735
Sample Date		Client Info		17 May 2024	24 Jan 2024	05 May 2023
Machine Age	hrs	Client Info		13936	13381	12317
Oil Age	hrs	Client Info		555	11706	11348
Filter Age	hrs	Client Info		555	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		18	13	12
Iron	ppm	ASTM D5185m	>750	18	110	34
Chromium	ppm	ASTM D5185m	>11	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>21	<1	2	2
Lead	ppm	ASTM D5185m	>49	3	2	9
Copper	ppm	ASTM D5185m	>101	10	44	24
Tin	ppm	ASTM D5185m	>10	<1	2	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

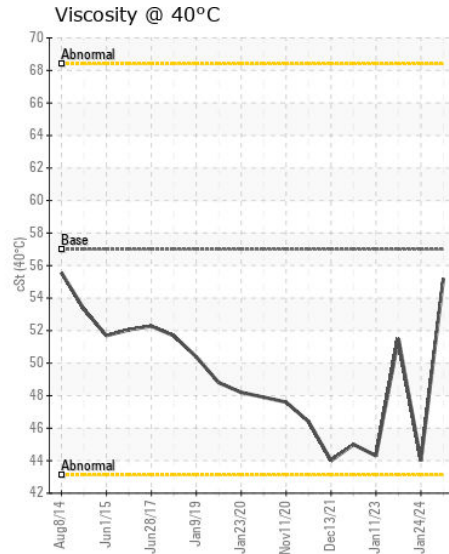
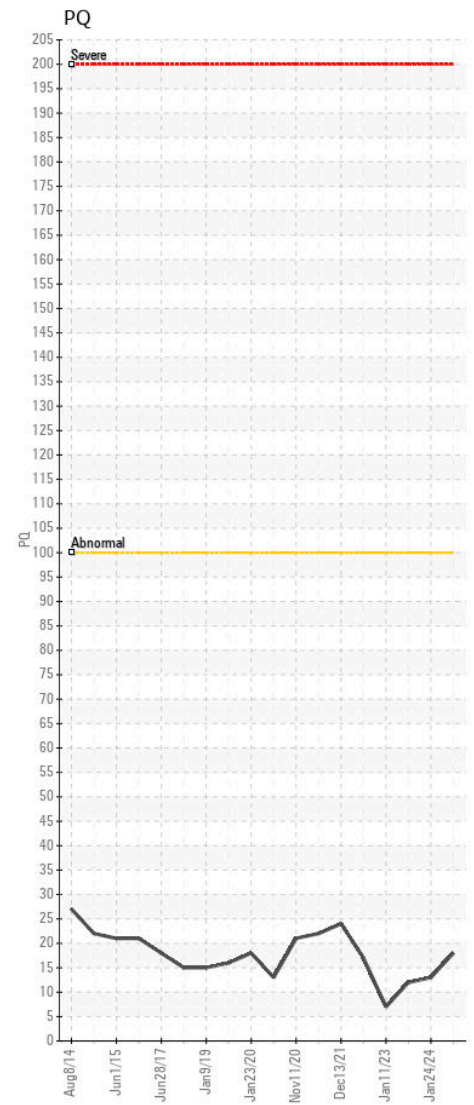
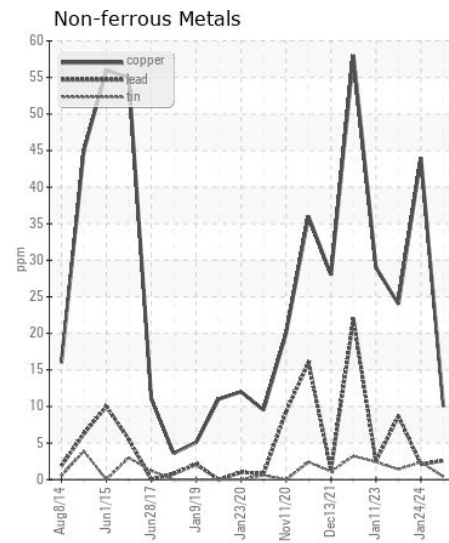
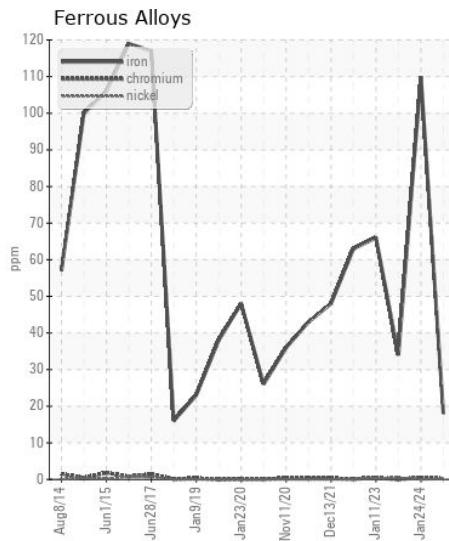
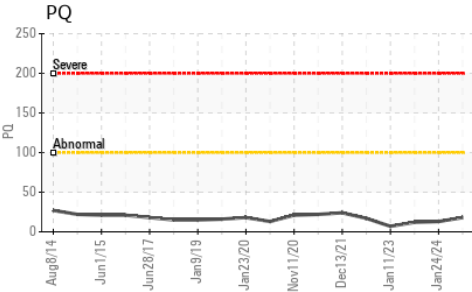
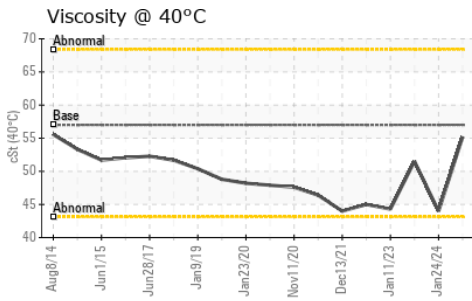
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	4	18	4
Potassium	ppm	ASTM D5185m	>20	3	3	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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.

Sodium	ppm	ASTM D5185m	>51	0	3	<1
Boron	ppm	ASTM D5185m	6	9	2	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	6	<1	6
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	145	104	98	102
Calcium	ppm	ASTM D5185m	3570	3169	3233	3202
Phosphorus	ppm	ASTM D5185m	1290	933	1084	982
Zinc	ppm	ASTM D5185m	1640	1135	1039	1141
Sulfur	ppm	ASTM D5185m		4159	4481	3723
Visc @ 40°C	cSt	ASTM D445	57.0	55.19	44.0	51.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217624 **Received** : 23 May 2024
Lab Number : 06189797 **Tested** : 31 May 2024
Unique Number : 11046549 **Diagnosed** : 31 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

Contact: DON VEST
 dvest@jamesriverequipment.com
 T: (703)631-8500
 F: (703)631-4715

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)