



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZAJF690443
Component
Rear Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221092	JR0201285	JR0193588
Sample Date		Client Info		03 Jul 2024	25 Mar 2024	04 Jan 2024
Machine Age	hrs	Client Info		7989	7512	7050
Oil Age	hrs	Client Info		6578	6563	6622
Filter Age	hrs	Client Info		0	0	1000
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>135	19	14	15
Iron	ppm	ASTM D5185m	>420	24	23	23
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	<1	2	0
Lead	ppm	ASTM D5185m	>95	0	<1	<1
Copper	ppm	ASTM D5185m	>170	21	17	14
Tin	ppm	ASTM D5185m	>15	0	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	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.

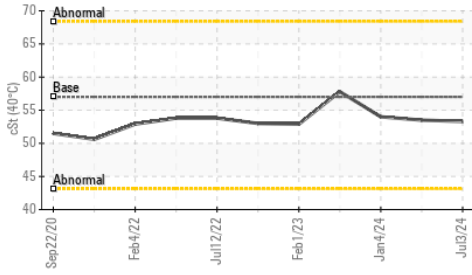
Silicon	ppm	ASTM D5185m	>35	3	3	6
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

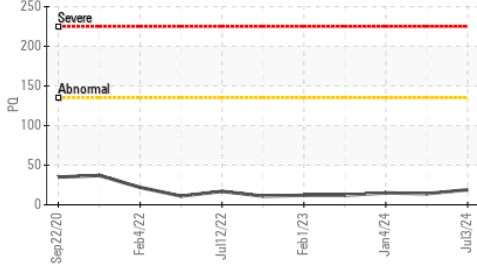
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		6	5	3
Boron	ppm	ASTM D5185m	6	4	2	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	145	83	89	89
Calcium	ppm	ASTM D5185m	3570	3063	3136	3100
Phosphorus	ppm	ASTM D5185m	1290	1001	965	978
Zinc	ppm	ASTM D5185m	1640	1084	1153	1185
Sulfur	ppm	ASTM D5185m		3985	3889	3301
Visc @ 40°C	cSt	ASTM D445	57.0	53.3	53.5	54.0

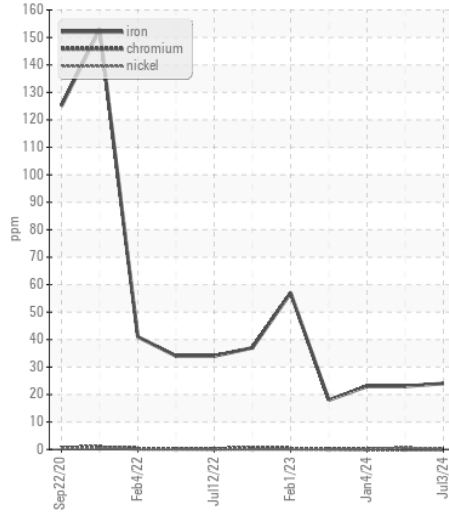
Viscosity @ 40°C



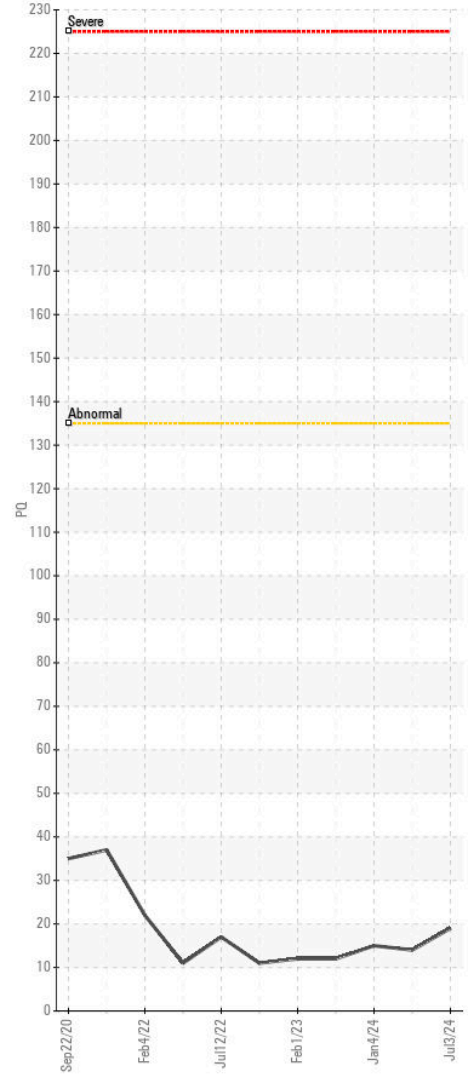
PQ



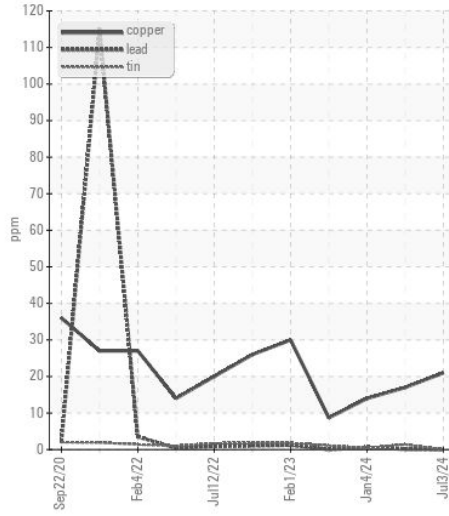
Ferrous Alloys



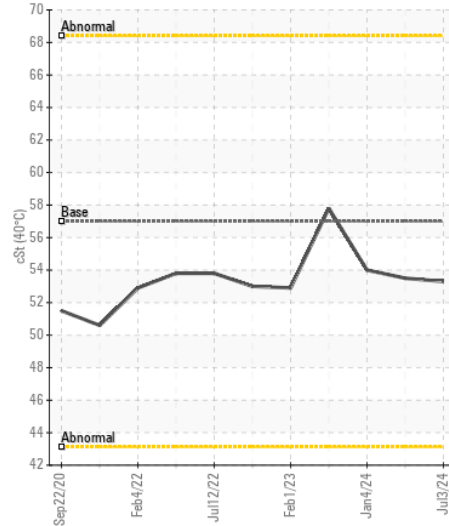
PQ



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0221092 **Received** : 09 Jul 2024
Lab Number : 06231692 **Tested** : 10 Jul 2024
Unique Number : 11115185 **Diagnosed** : 10 Jul 2024 - 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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