



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZCFF666910

Component
Transmission (Manual)

Fluid
JOHN DEERE HY-GARD HYD/TRANS (200 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0195920	JR0184007	JR0166373
Sample Date		Client Info		12 Jan 2024	07 Sep 2023	30 Mar 2023
Machine Age	hrs	Client Info		10437	10096	9779
Oil Age	hrs	Client Info		10120	0	939
Filter Age	hrs	Client Info		0	0	939
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Not Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>95	14	15	14
Iron	ppm	ASTM D5185m	>200	3	6	8
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>7	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	<1
Lead	ppm	ASTM D5185m	>45	0	<1	0
Copper	ppm	ASTM D5185m	>225	2	1	<1
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the fluid.

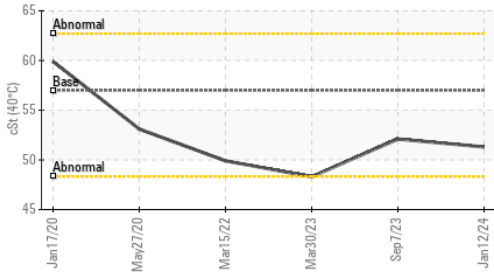
Silicon	ppm	ASTM D5185m	>125	2	3	4
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

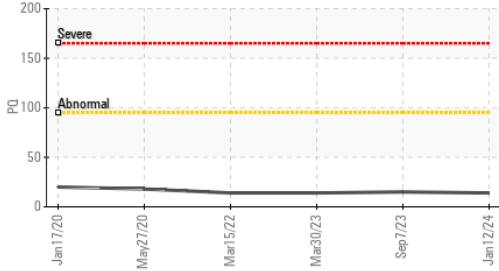
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	2	<1
Boron	ppm	ASTM D5185m	6	0	5	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	4	5	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	145	95	95	65
Calcium	ppm	ASTM D5185m	3570	2575	2767	1874
Phosphorus	ppm	ASTM D5185m	1290	874	877	661
Zinc	ppm	ASTM D5185m	1640	1055	1090	840
Sulfur	ppm	ASTM D5185m		2917	3617	2594
Visc @ 40°C	cSt	ASTM D445	57.0	51.3	52.1	48.3

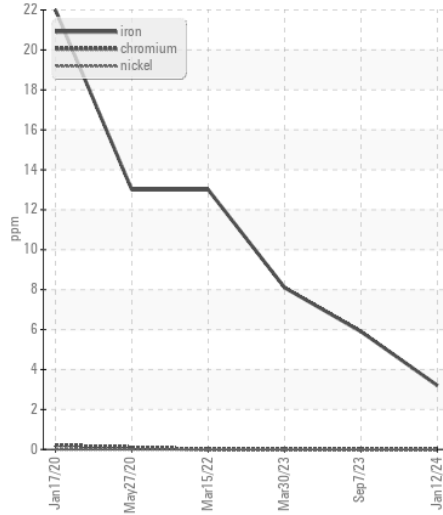
Viscosity @ 40°C



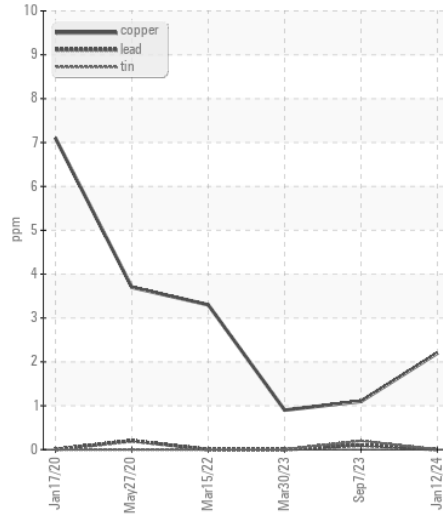
PQ



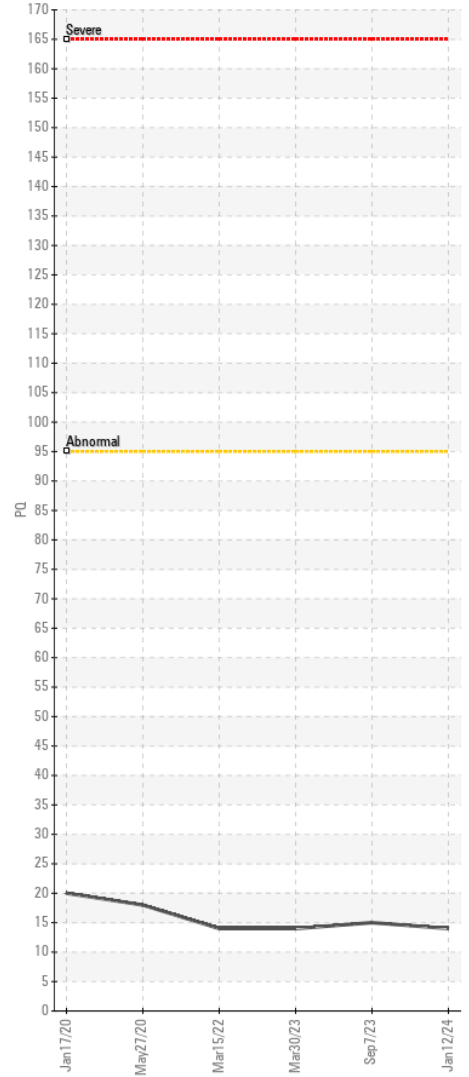
Ferrous Alloys



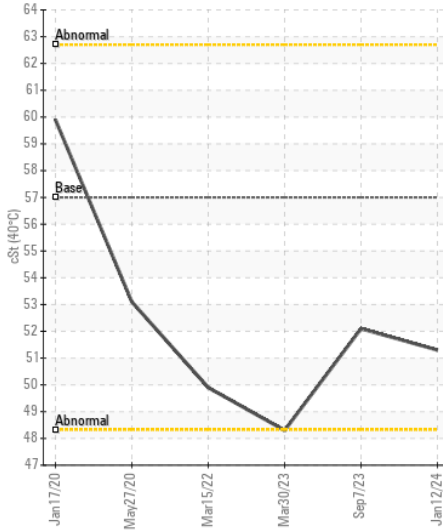
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0195920 **Received** : 16 Jan 2024
Lab Number : 06061406 **Diagnosed** : 17 Jan 2024
Unique Number : 10832788 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

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 ROANOKE, TX
 US 76262
 Contact: TROY COREY
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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)