



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXPNF713863
Component
Transmission (Auto)
Fluid
JOHN DEERE HD SynTran (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0199115	JR0183877	JR0173174
Sample Date		Client Info		17 Jan 2024	24 Aug 2023	23 May 2023
Machine Age	hrs	Client Info		1969	1447	944
Oil Age	hrs	Client Info		1969	1447	944
Filter Age	hrs	Client Info		1969	1447	944
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	16	16	18
Iron	ppm	ASTM D5185m	>160	32	27	21
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>50	2	<1	0
Lead	ppm	ASTM D5185m	>50	2	4	2
Copper	ppm	ASTM D5185m	>225	2	2	2
Tin	ppm	ASTM D5185m	>10	0	0	<1
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 fluid.

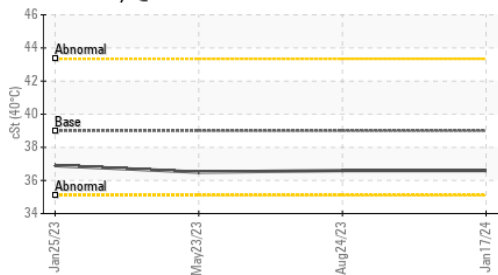
Silicon	ppm	ASTM D5185m	>20	4	6	4
Potassium	ppm	ASTM D5185m	>20	3	3	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

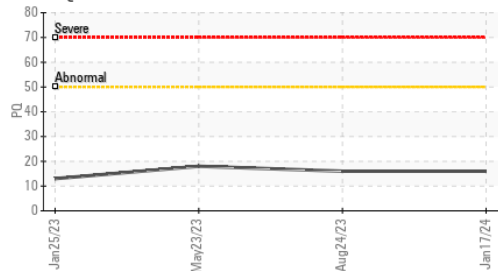
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	<1	3
Boron	ppm	ASTM D5185m	168	103	117	116
Barium	ppm	ASTM D5185m		1	3	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		3	3	0
Calcium	ppm	ASTM D5185m	33	135	148	127
Phosphorus	ppm	ASTM D5185m	330	260	272	262
Zinc	ppm	ASTM D5185m	0	20	39	17
Sulfur	ppm	ASTM D5185m	980	364	566	616
Visc @ 40°C	cSt	ASTM D445	39	36.6	36.6	36.5

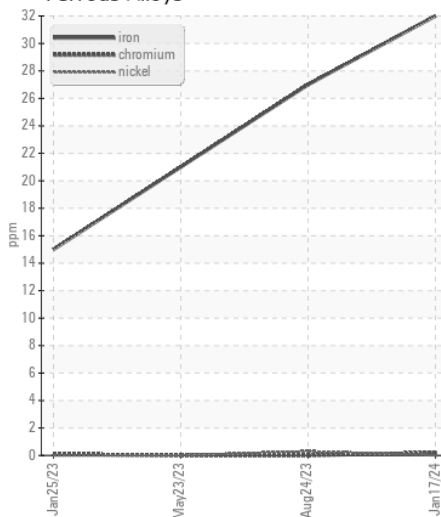
Viscosity @ 40°C



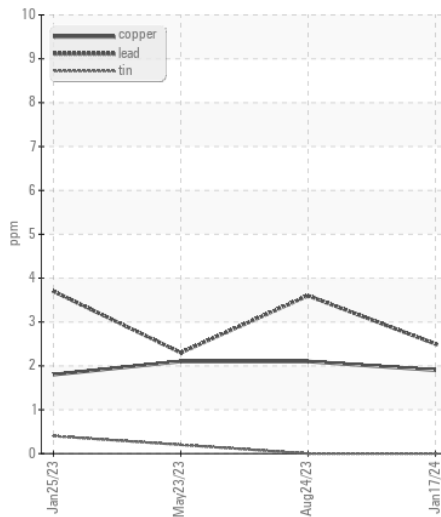
PQ



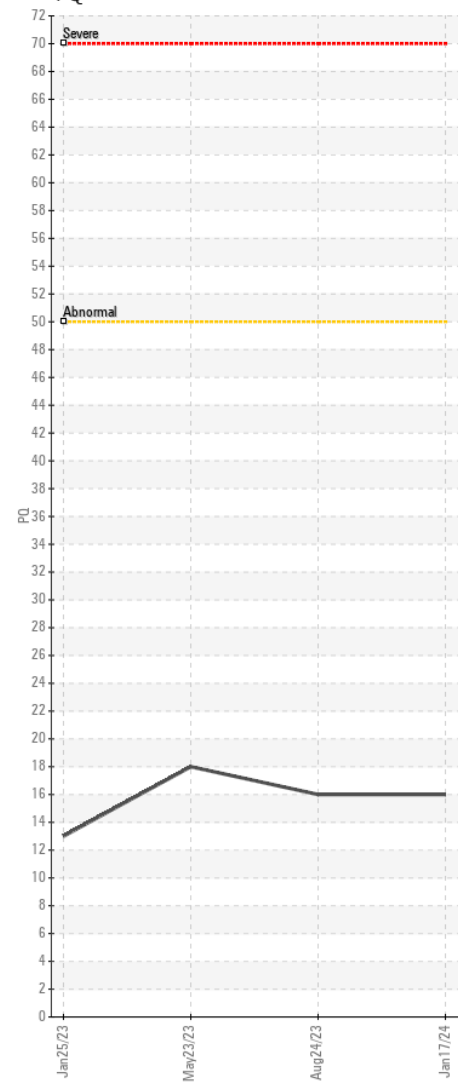
Ferrous Alloys



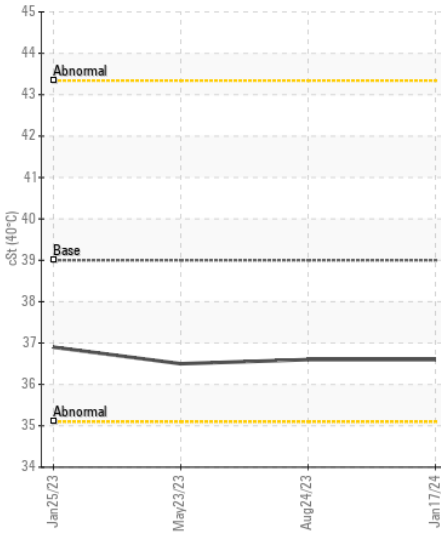
Non-ferrous Metals



PQ



Viscosity @ 40°C



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199115 **Received** : 18 Jan 2024
Lab Number : 06065145 **Diagnosed** : 22 Jan 2024
Unique Number : 10836527 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)