



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 648LB 1DW648LBANF716232
 Component
Front Differential
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0208910	JR0200812	JR0193872
Sample Date		Client Info		17 Jun 2024	29 Feb 2024	15 Dec 2023
Machine Age	hrs	Client Info		2114	1535	1071
Oil Age	hrs	Client Info		2114	1071	581
Filter Age	hrs	Client Info		1000	0	581
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		20	17	20
Iron	ppm	ASTM D5185m	>500	38	43	30
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
Lead	ppm	ASTM D5185m	>25	3	<1	1
Copper	ppm	ASTM D5185m	>100	15	15	9
Tin	ppm	ASTM D5185m	>10	<1	<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.

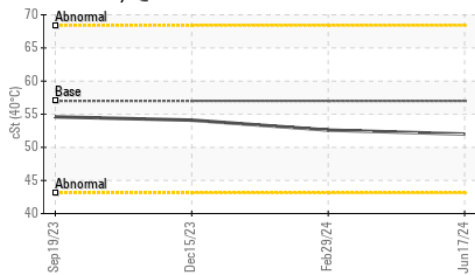
Silicon	ppm	ASTM D5185m	>75	4	5	4
Potassium	ppm	ASTM D5185m	>20	0	3	<1
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

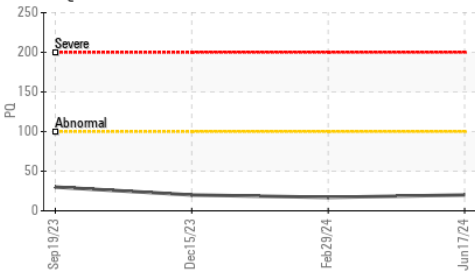
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	2	2
Boron	ppm	ASTM D5185m	6	2	1	7
Barium	ppm	ASTM D5185m	0	<1	<1	<1
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m	145	93	133	97
Calcium	ppm	ASTM D5185m	3570	3326	4713	3473
Phosphorus	ppm	ASTM D5185m	1290	1033	1307	1051
Zinc	ppm	ASTM D5185m	1640	1215	1741	1259
Sulfur	ppm	ASTM D5185m		4222	5395	4382
Visc @ 40°C	cSt	ASTM D445	57.0	52.0	52.6	54.1

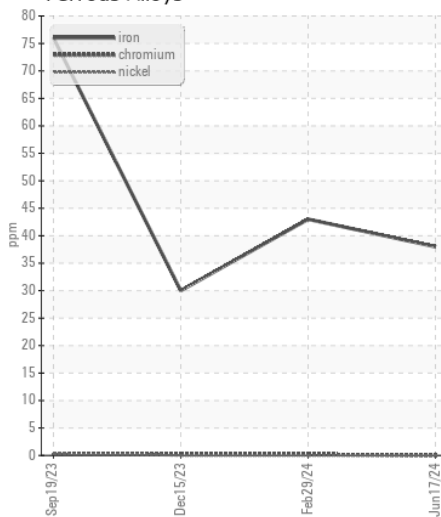
Viscosity @ 40°C



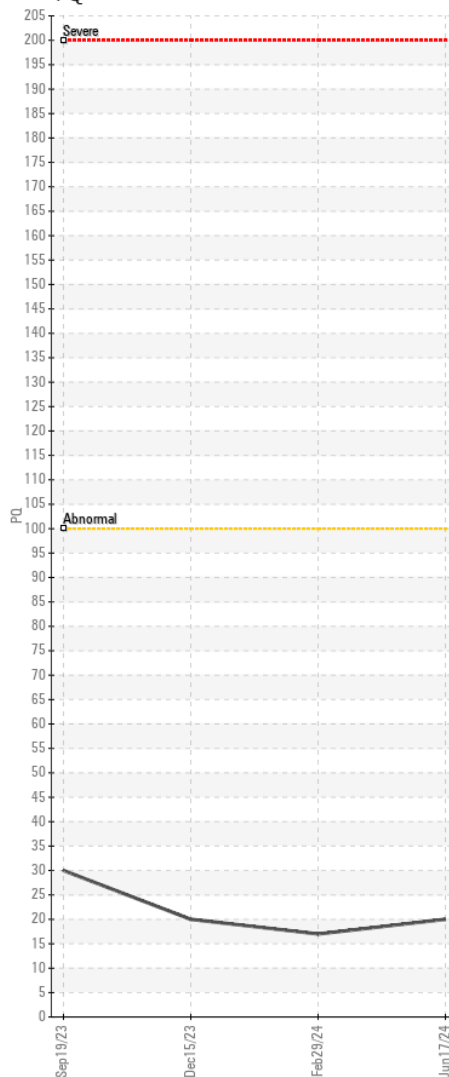
PQ



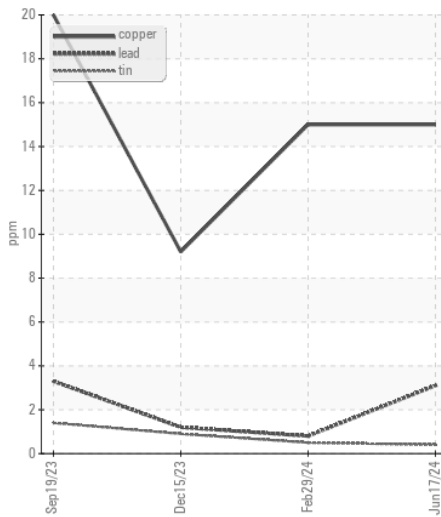
Ferrous Alloys



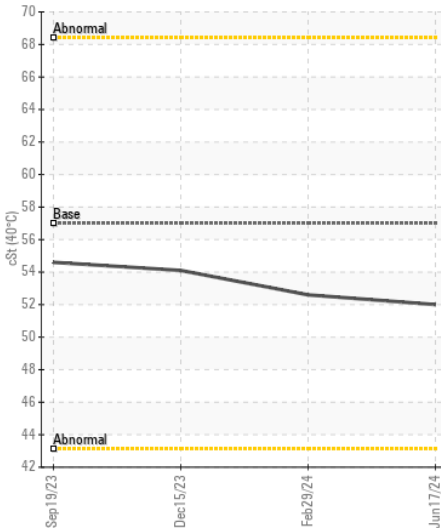
PQ



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0208910 Received : 20 Jun 2024
 Lab Number : 06216001 Tested : 22 Jun 2024
 Unique Number : 11088865 Diagnosed : 22 Jun 2024 - Wes Davis
 Test Package : CONST (Additional Tests: PQ)

NEUSE RIVER FOREST PRODUCTS
 PO BOX 234
 PRINCETON, NC
 US 27569
 Contact: Service Manager
 neuseriverfp@gmail.com

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)