



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXHMF708946
Component
Front Differential
Fluid
TDH FLUID SAE 75W80 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0219479	JR0178116	JR0162347
Sample Date		Client Info		15 Jun 2024	07 Sep 2023	02 Jun 2023
Machine Age	hrs	Client Info		4517	3608	5057
Oil Age	hrs	Client Info		2032	2032	2032
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	N/A	Changed
Sample Status				NORMAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		194	230	9
Iron	ppm	ASTM D5185m	>500	458	772	1
Chromium	ppm	ASTM D5185m	>10	1	2	0
Nickel	ppm	ASTM D5185m	>10	2	4	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	0	1
Lead	ppm	ASTM D5185m	>25	0	5	0
Copper	ppm	ASTM D5185m	>100	215	▲ 452	0
Tin	ppm	ASTM D5185m	>10	5	▲ 10	0
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 oil.

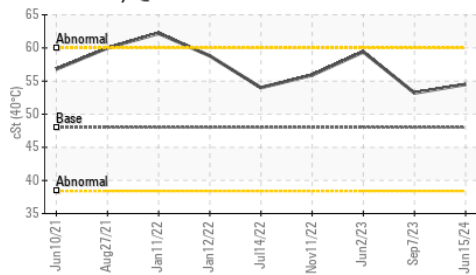
Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	11	15	6
Potassium	ppm	ASTM D5185m	>20	1	2	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

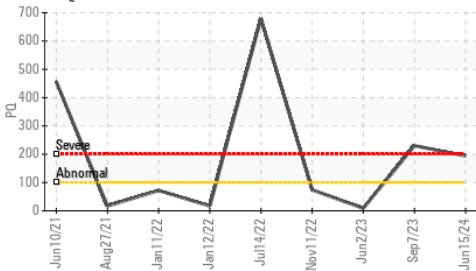
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		0	3	<1
Boron	ppm	ASTM D5185m	10	4	8	0
Barium	ppm	ASTM D5185m	10	1	0	0
Molybdenum	ppm	ASTM D5185m	10	2	3	<1
Manganese	ppm	ASTM D5185m		4	10	0
Magnesium	ppm	ASTM D5185m	100	92	95	97
Calcium	ppm	ASTM D5185m	3500	3312	3519	3503
Phosphorus	ppm	ASTM D5185m	1150	993	1022	967
Zinc	ppm	ASTM D5185m	1150	1234	1239	1212
Sulfur	ppm	ASTM D5185m	5000	3448	4051	4056
Visc @ 40°C	cSt	ASTM D445	48	54.5	53.2	59.4

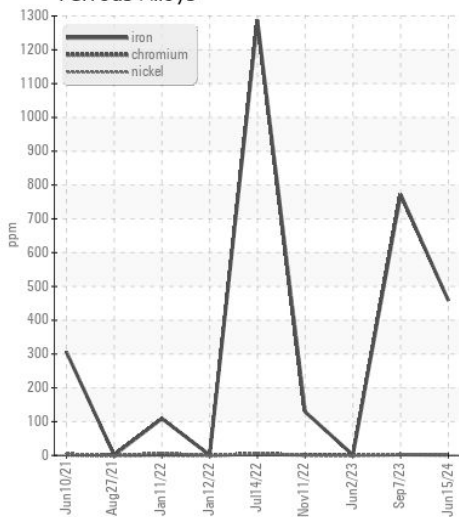
Viscosity @ 40°C



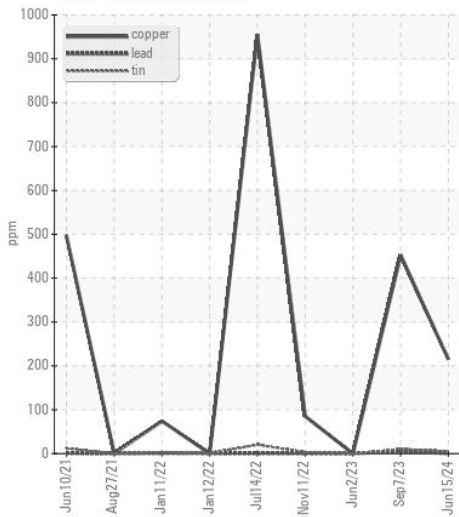
PQ



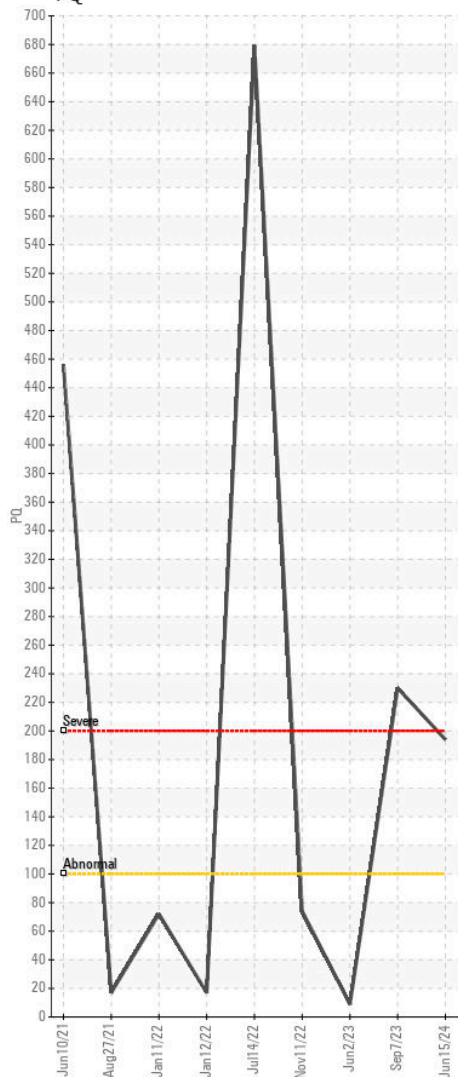
Ferrous Alloys



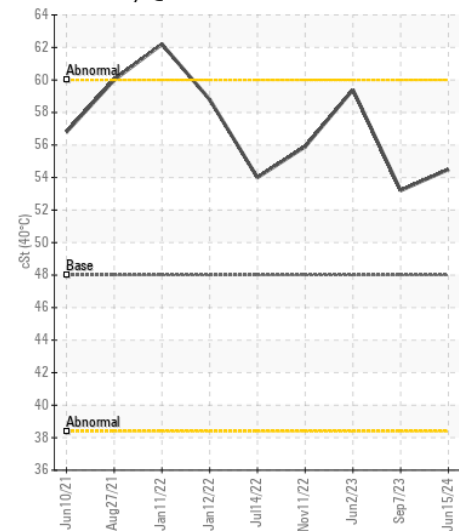
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0219479
 Lab Number : 06213778
 Unique Number : 11086642
 Test Package : CONST (Additional Tests: PQ)

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 CHARLOTTE, NC
 US 28269
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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)