CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
[05W45248]
Machine Id
JOHN DEERE 245G 1FF245GXHKF801532
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (35 GAL)

RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

WEAR

All component wear rates are normal.

CONTAMINATION

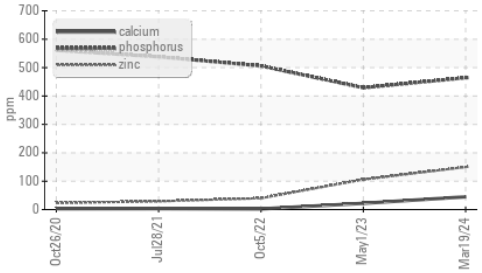
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

FLUID CONDITION

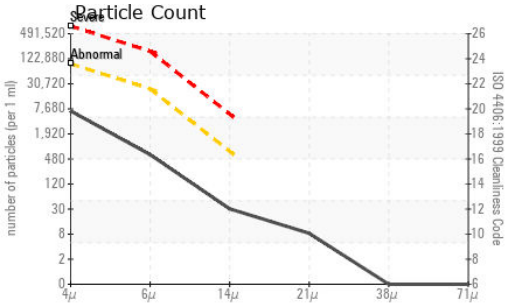
Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0208185	JR0172966	JR0144234
Sample Date		Client Info		19 Mar 2024	01 May 2023	05 Oct 2022
Machine Age	hrs	Client Info		2464	1951	1491
Oil Age	hrs	Client Info		2464	1951	0
Filter Age	hrs	Client Info		513	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	ABNORMAL
PQ		ASTM D8184	>50	12	11	10
Iron	ppm	ASTM D5185m	>32	13	12	13
Chromium	ppm	ASTM D5185m	>9	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	0	<1	1
Lead	ppm	ASTM D5185m	>28	0	0	<1
Copper	ppm	ASTM D5185m	>50	6	3	2
Tin	ppm	ASTM D5185m	>5	<1	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
Silicon	ppm	ASTM D5185m	>11	11	<1	1
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	5958	3292	54504
Particles >6µm		ASTM D7647	>20000	534	1525	▲ 28136
Particles >14µm		ASTM D7647	>640	27	267	▲ 6923
Particles >21µm		ASTM D7647	>160	7	74	▲ 1693
Particles >38µm		ASTM D7647	>40	0	2	▲ 81
Particles >71µm		ASTM D7647	>10	0	0	3
Oil Cleanliness		ISO 4406 (c)	>23/21/16	20/16/12	19/18/15	▲ 23/22/20
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	>0.075	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>21	2	0	2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		2	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		45	22	2
Phosphorus	ppm	ASTM D5185m	827	464	429	506
Zinc	ppm	ASTM D5185m	0	▲ 150	106	40
Sulfur	ppm	ASTM D5185m	13	734	500	179
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.21	0.30	0.14
Visc @ 40°C	cSt	ASTM D445	47	44.4	44.8	45.9

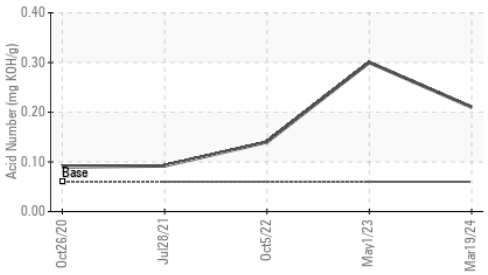
Additives



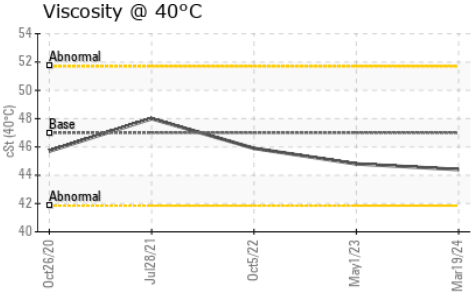
Particle Count



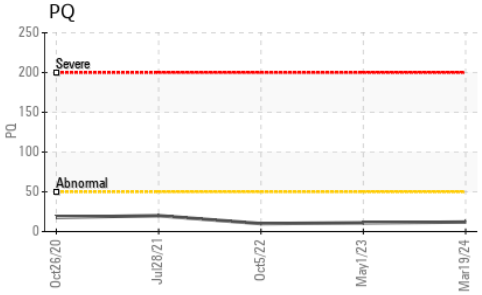
Acid Number



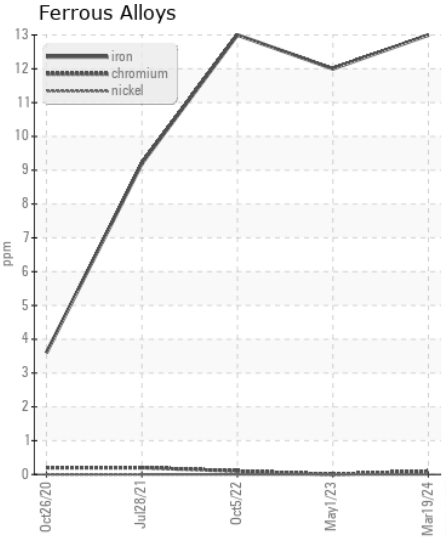
Viscosity @ 40°C



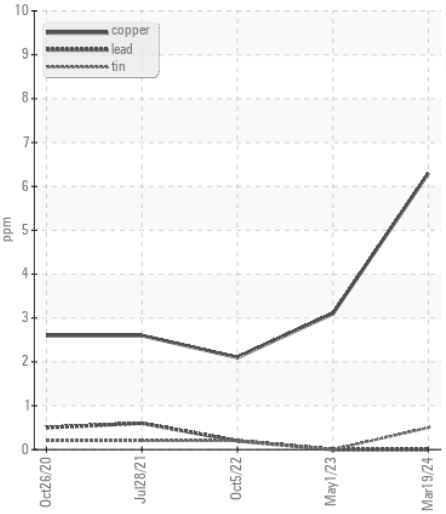
PQ



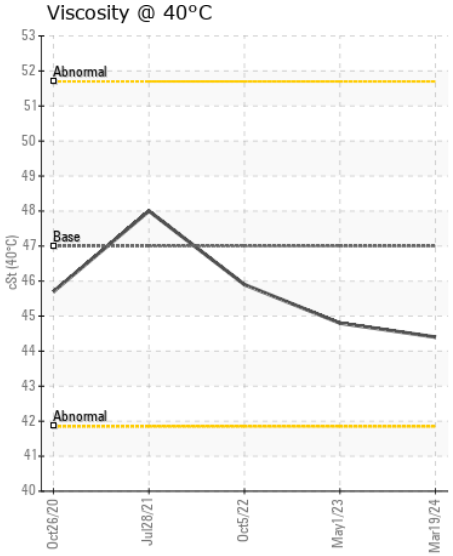
Ferrous Alloys



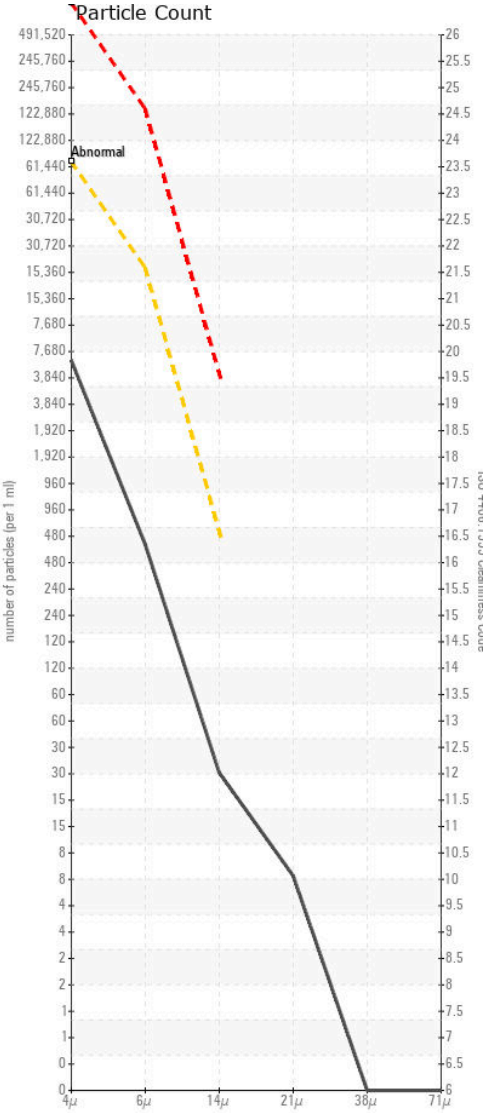
Non-ferrous Metals



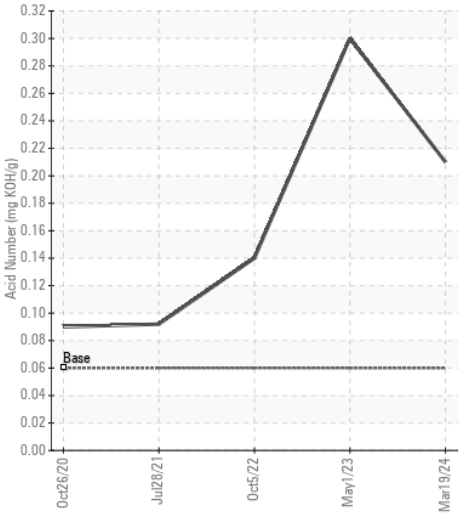
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0208185 **Received** : 21 Mar 2024
Lab Number : 06125584 **Tested** : 26 Mar 2024
Unique Number : 10939735 **Diagnosed** : 26 Mar 2024 - Jonathan Hester
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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