



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
[CRISS CROSS]
 Machine Id
JOHN DEERE 35G 1FF035GXHHK281245
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (8 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0163925	JRMC420153	---
Sample Date		Client Info		15 Jan 2024	31 Aug 2018	---
Machine Age	hrs	Client Info		2718	232	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	Not Chngd	---
Filter Changed		Client Info		Not Chngd	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	14	19	---
Iron	ppm	ASTM D5185m	>32	15	6	---
Chromium	ppm	ASTM D5185m	>9	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>9	1	0	---
Lead	ppm	ASTM D5185m	>28	0	0	---
Copper	ppm	ASTM D5185m	>50	7	3	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

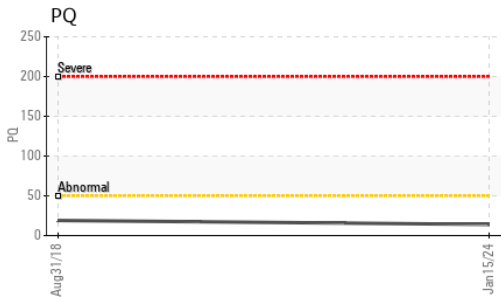
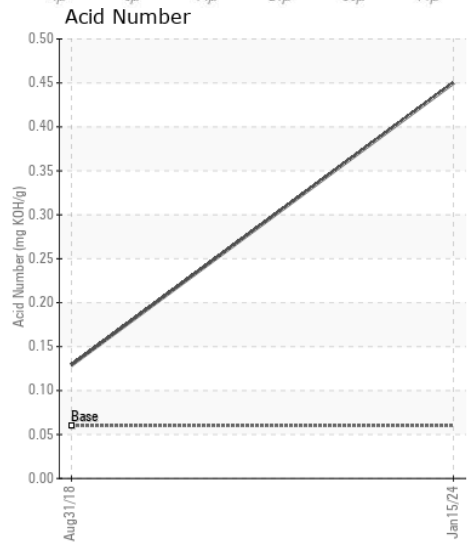
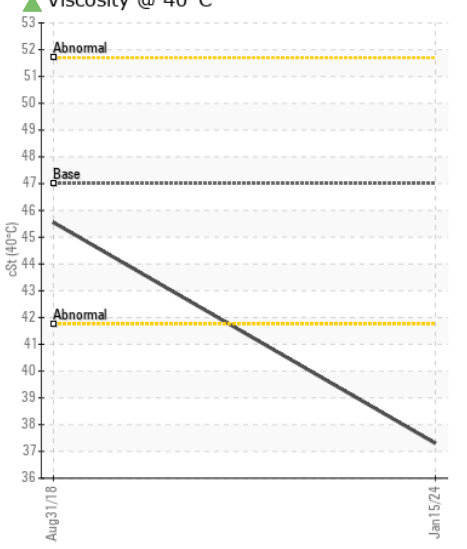
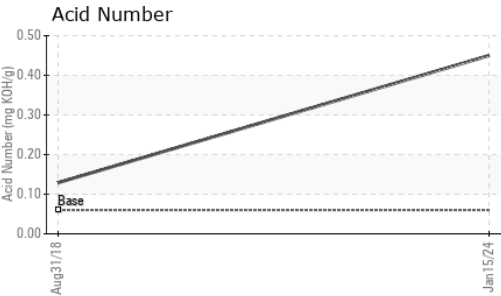
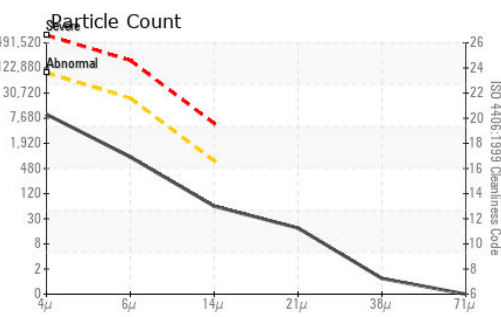
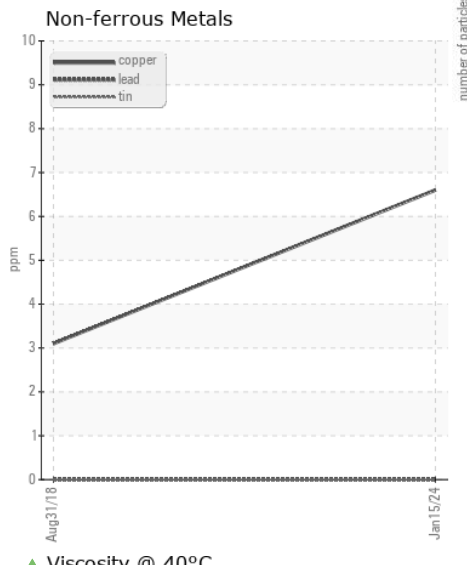
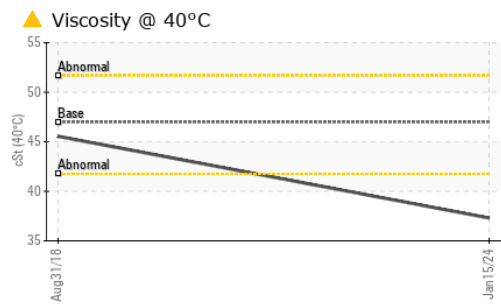
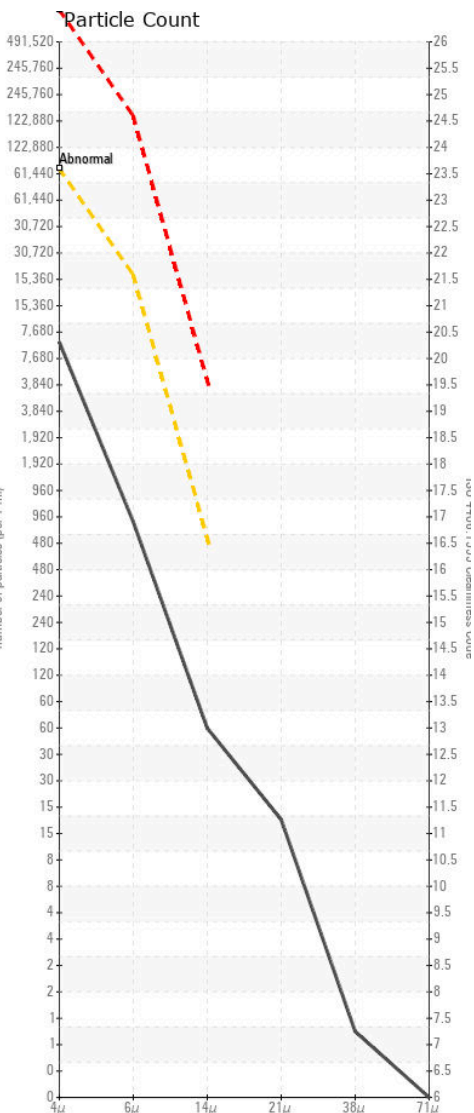
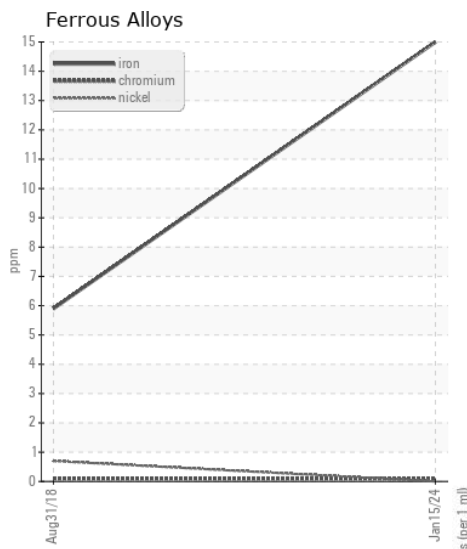
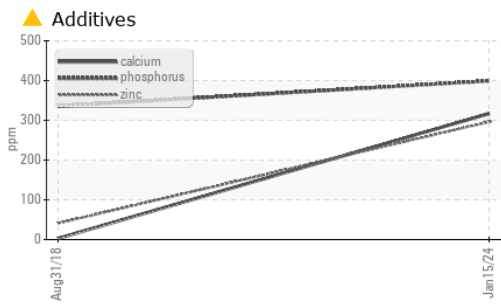
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	8	1	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	8286	▲ 24775	---
Particles >6µm		ASTM D7647	>20000	788	▲ 6620	---
Particles >14µm		ASTM D7647	>640	53	▲ 473	---
Particles >21µm		ASTM D7647	>160	16	▲ 93	---
Particles >38µm		ASTM D7647	>40	1	2	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	20/17/13	▲ 22/20/16	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	<1	<1	---
Boron	ppm	ASTM D5185m		<1	0	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		1	<1	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		10	15	---
Calcium	ppm	ASTM D5185m		317	3	---
Phosphorus	ppm	ASTM D5185m	827	399	336	---
Zinc	ppm	ASTM D5185m	0	▲ 296	41	---
Sulfur	ppm	ASTM D5185m	13	1565	1564	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.45	0.129	---
Visc @ 40°C	cSt	ASTM D445	47	▲ 37.3	45.55	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0163925 **Received** : 17 Jan 2024
Lab Number : 06062557 **Diagnosed** : 18 Jan 2024
Unique Number : 10833939 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - ASHLAND
 11053 LEADBETTER ROAD
 ASHLAND, VA
 US 23005
 Contact: COLTON HANKS
 colton.hanks@jamesriverequipment.com
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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)