James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
HAMM H12I H2840084
Component
Hydraulic System
Fluid
JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

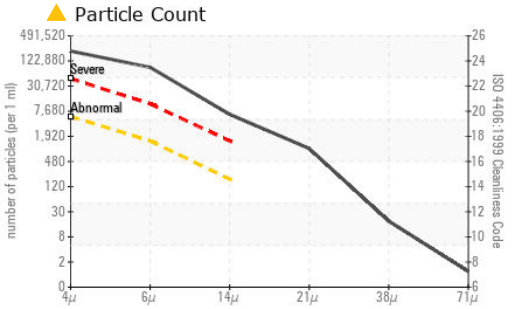
CONTAMINATION

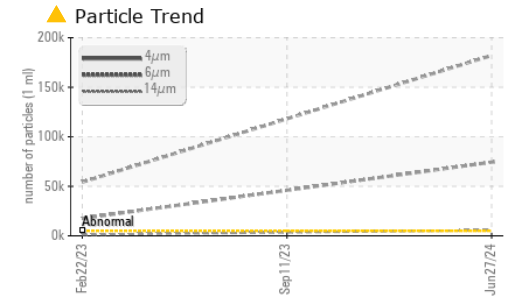
There is a high amount of particulates present in the oil.

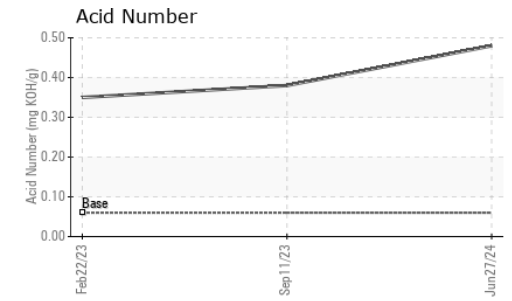
FLUID CONDITION

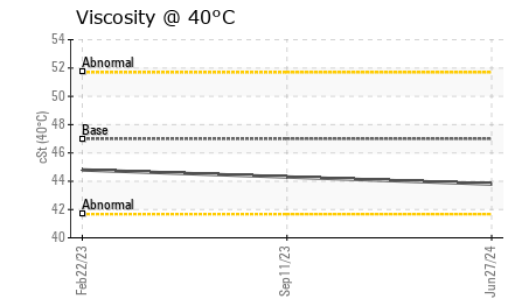
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

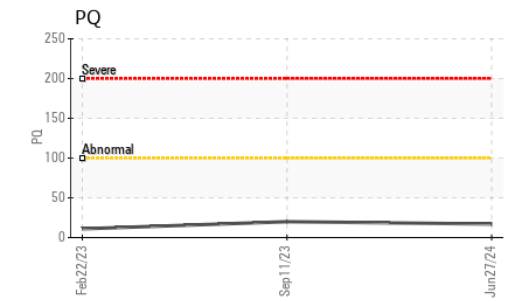
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0225547	JR0187731	JR0160209
Sample Date		Client Info		27 Jun 2024	11 Sep 2023	22 Feb 2023
Machine Age	hrs	Client Info		1509	946	455
Oil Age	hrs	Client Info		1509	946	0
Filter Age	hrs	Client Info		1509	946	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
PQ		ASTM D8184		17	20	11
Iron	ppm	ASTM D5185m	>20	12	10	3
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>10	2	2	1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>75	6	4	6
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	10	11	6
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 182117	---	▲ 54197
Particles >6µm		ASTM D7647	>1300	▲ 74407	---	▲ 17611
Particles >14µm		ASTM D7647	>160	▲ 5640	---	▲ 1189
Particles >21µm		ASTM D7647	>40	▲ 861	---	▲ 288
Particles >38µm		ASTM D7647	>10	▲ 16	---	▲ 11
Particles >71µm		ASTM D7647	>3	1	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 25/23/20	---	▲ 23/21/17
Silt	scalar	*Visual	NONE	LIGHT	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	<1	<1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		40	44	36
Calcium	ppm	ASTM D5185m		201	19	17
Phosphorus	ppm	ASTM D5185m		270	146	239
Zinc	ppm	ASTM D5185m		413	347	312
Sulfur	ppm	ASTM D5185m		1052	1071	925
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.48	0.38	0.35
Visc @ 40°C	cSt	ASTM D445	47	43.8	44.3	44.8

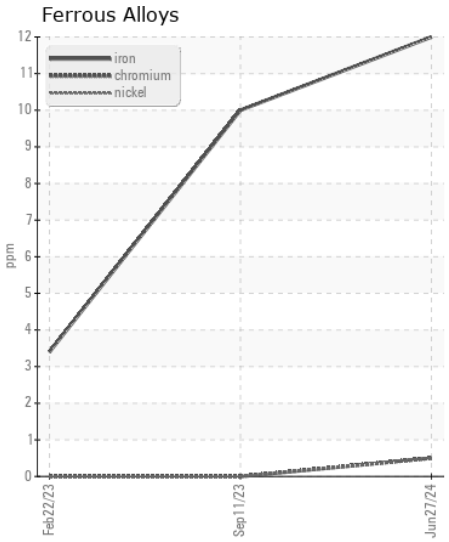


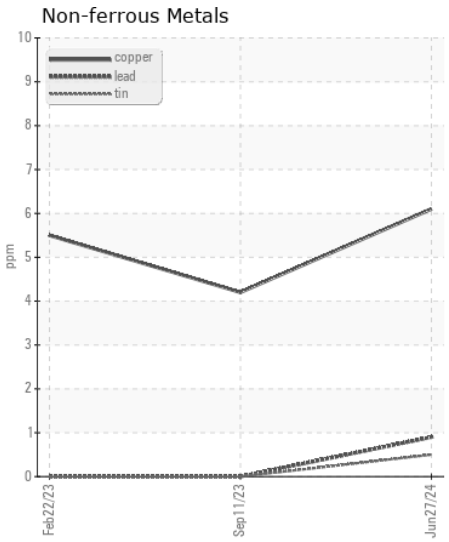


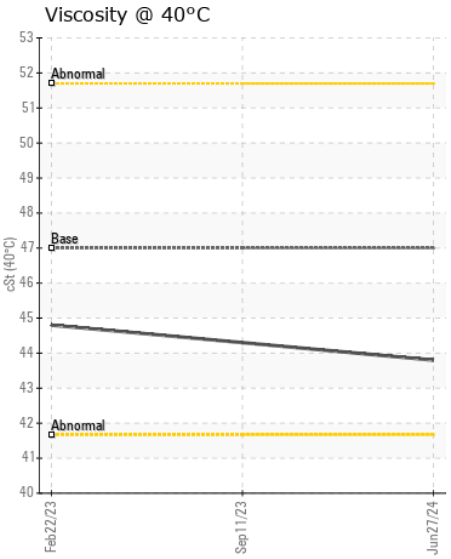


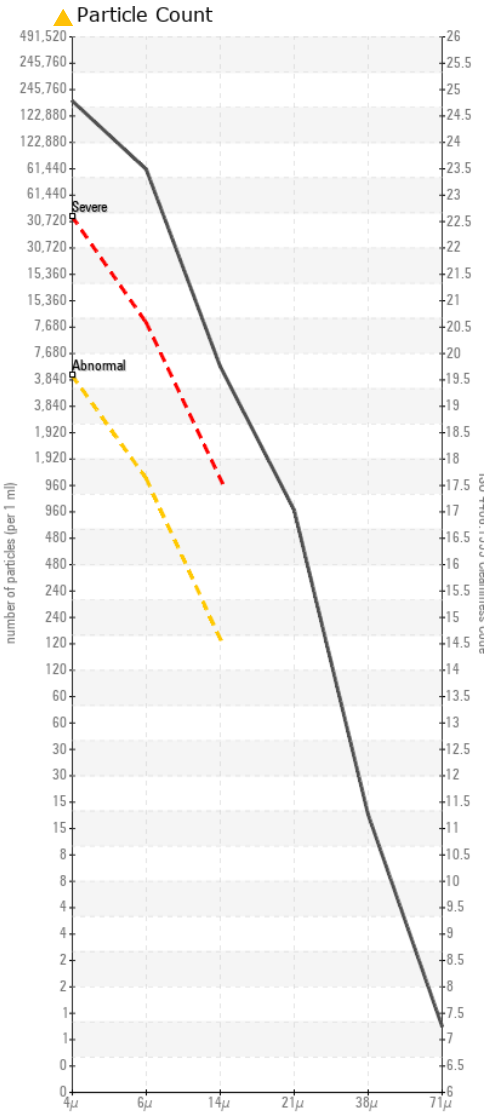


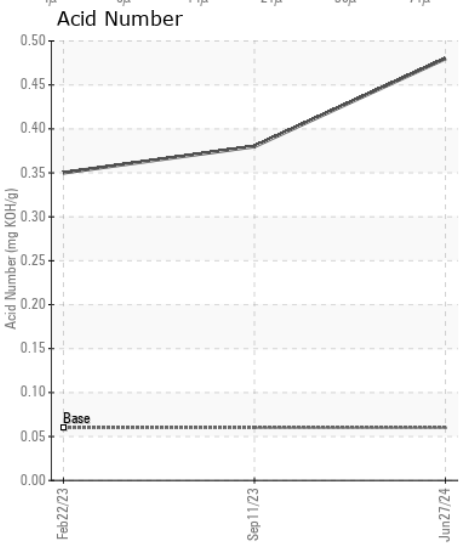












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0225547 **Received** : 28 Jun 2024
Lab Number : 06223422 **Tested** : 01 Jul 2024
Unique Number : 11101619 **Diagnosed** : 01 Jul 2024 - Don Baldridge
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)

B & S SITE DEVLEOPMENT
7800 PINEY BRANCH LANE
BRISTOW, VA
US 20136
Contact: DANNY HUFF
dhuff@bandssite.com
T: (540)270-3203
F: (703)753-0605