James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 850L 1T0850LXHPF445799
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (140 GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

CONTAMINATION

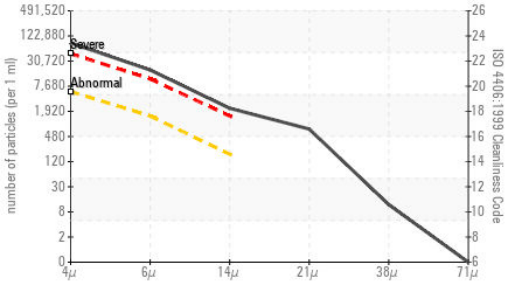
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

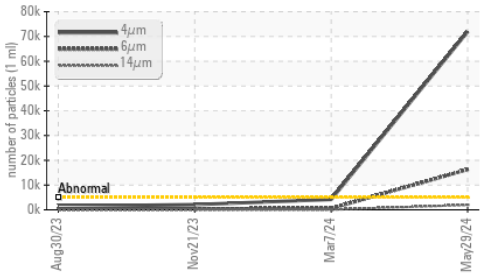
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0217740**	JR0208274	JR0196055
Sample Date		Client Info		**29 May 2024**	07 Mar 2024	21 Nov 2023
Machine Age	hrs	Client Info		**1966**	1471	966
Oil Age	hrs	Client Info		**1966**	1471	966
Filter Age	hrs	Client Info		**1966**	1471	0
Oil Changed		Client Info		**Not Changd**	Not Changd	N/A
Filter Changed		Client Info		**Changed**	Not Changd	N/A
Sample Status				**SEVERE**	NORMAL	NORMAL
PQ		ASTM D8184		**22**	14	15
Iron	ppm	ASTM D5185m	>20	**1**	1	1
Chromium	ppm	ASTM D5185m	>10	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	1	2
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>75	**1**	1	1
Tin	ppm	ASTM D5185m	>10	**0**	0	0
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	>20	**1**	1	2
Potassium	ppm	ASTM D5185m	>20	**1**	2	6
Water		WC Method	>0.1	**NEG**	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ **71921**	4182	2100
Particles >6µm		ASTM D7647	>1300	▲ **16282**	567	406
Particles >14µm		ASTM D7647	>160	▲ **1990**	41	27
Particles >21µm		ASTM D7647	>40	▲ **635**	13	8
Particles >38µm		ASTM D7647	>10	**10**	0	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **23/21/18**	19/16/13	18/16/12
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	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	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m		**<1**	<1	0
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m		**0**	1	2
Calcium	ppm	ASTM D5185m	87	**92**	90	166
Phosphorus	ppm	ASTM D5185m	727	**622**	583	662
Zinc	ppm	ASTM D5185m	900	**581**	558	879
Sulfur	ppm	ASTM D5185m	1500	**1737**	1472	1978
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.67**	0.49	0.71
Visc @ 40°C	cSt	ASTM D445	65	**53.1**	52.9	58.2

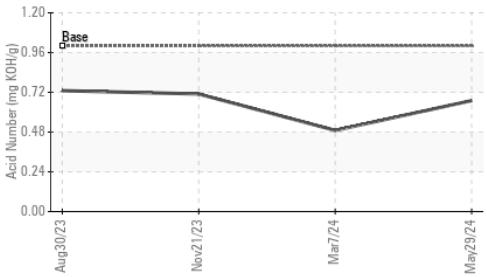
Particle Count



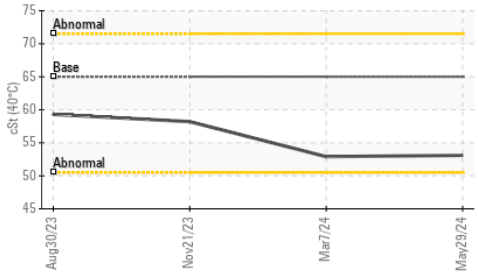
Particle Trend



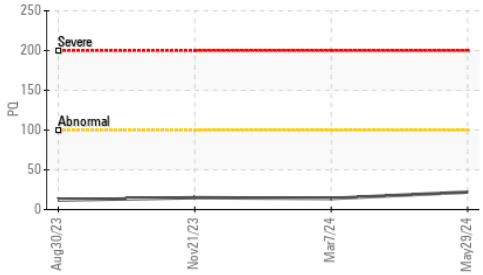
Acid Number



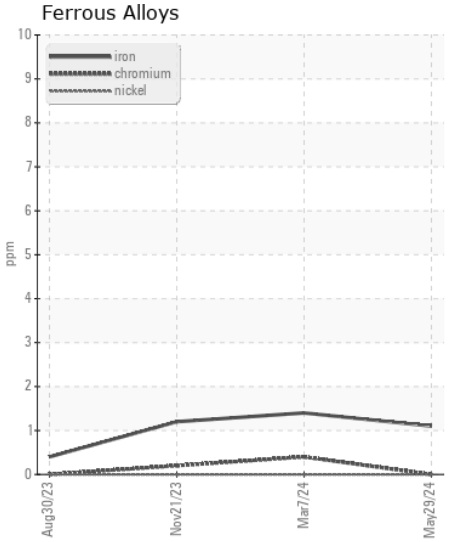
Viscosity @ 40°C



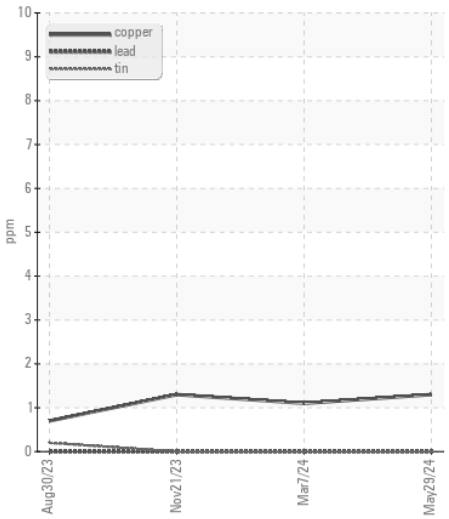
PQ



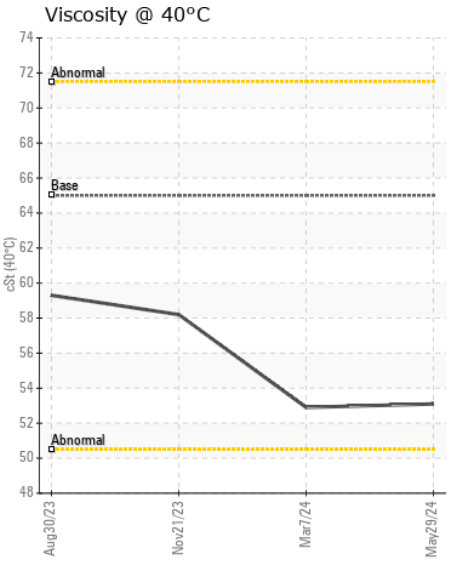
Ferrous Alloys



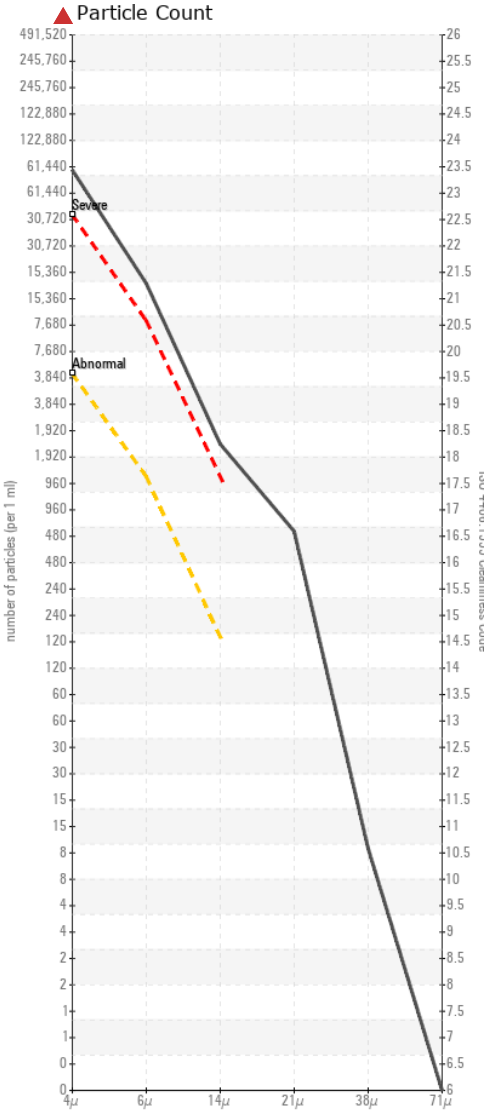
Non-ferrous Metals



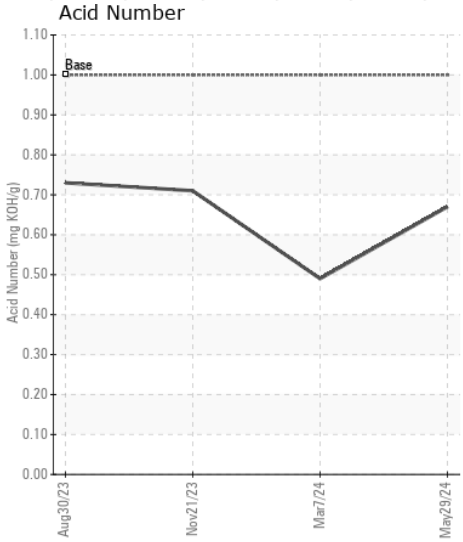
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217740
Lab Number : 06196584
Unique Number : 11058707
Test Package : CONST (Additional Tests: PQ)

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Wes Davis

Certificate L2367

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