



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

Ascendum Machinery/250 Hour CSA

Machine Id

JOHN DEERE 550K 1862 (S/N 309170)

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007346	ASC0005119	ASC0000239
Sample Date		Client Info		22 Apr 2024	06 Dec 2023	03 Aug 2023
Machine Age	hrs	Client Info		7773	7534	5472
Oil Age	hrs	Client Info		7773	7534	5472
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>23	26	26	22
Chromium	ppm	ASTM D5185m	>9	3	3	3
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	7	6	6
Lead	ppm	ASTM D5185m	>28	0	<1	<1
Copper	ppm	ASTM D5185m	>51	30	32	30
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

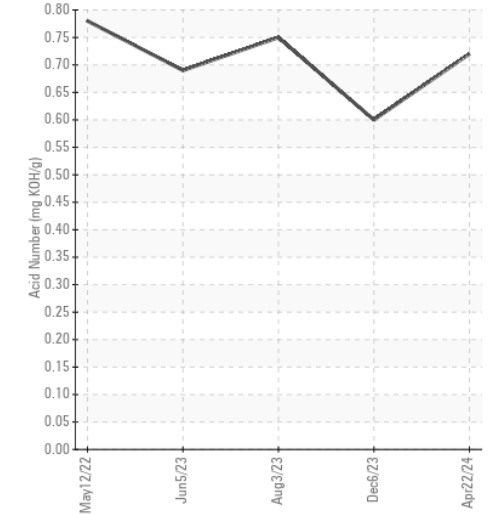
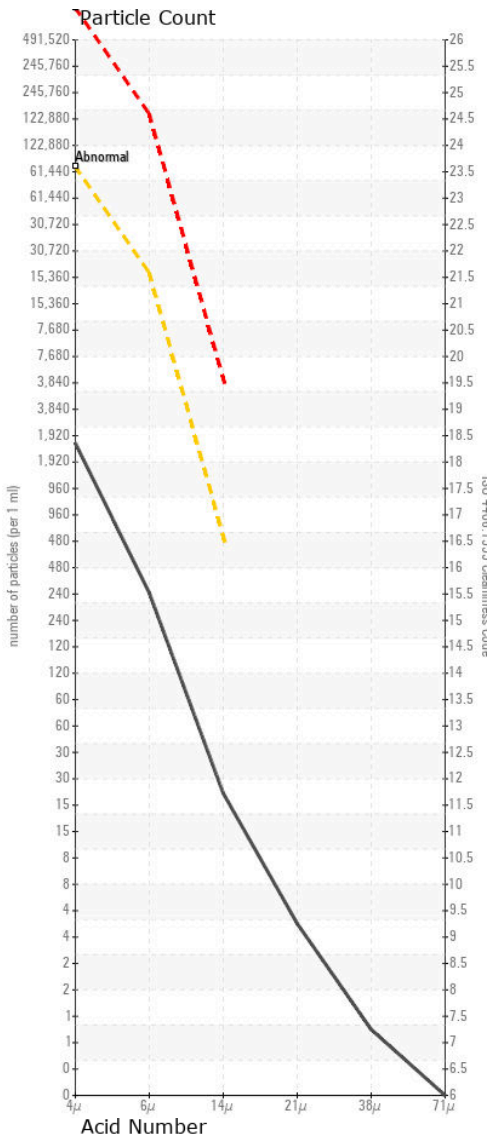
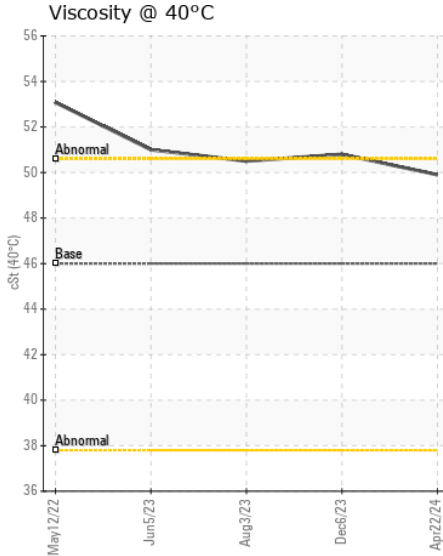
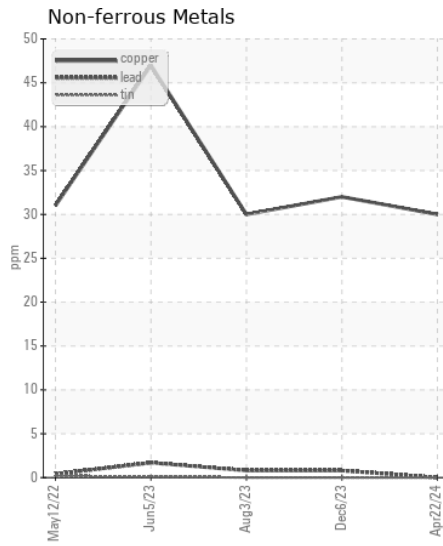
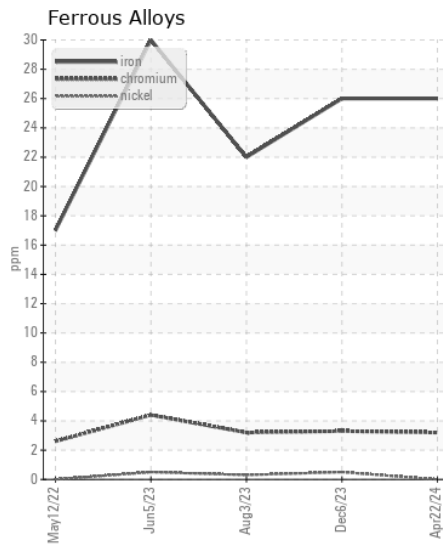
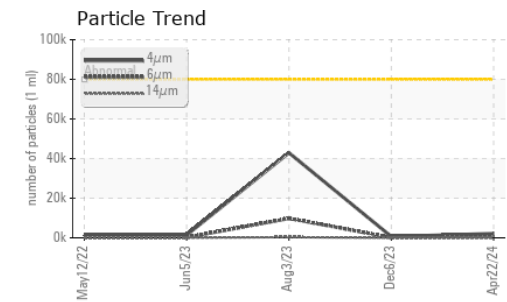
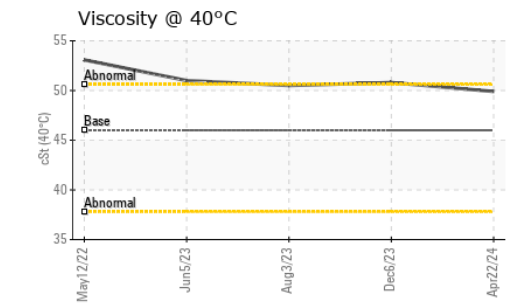
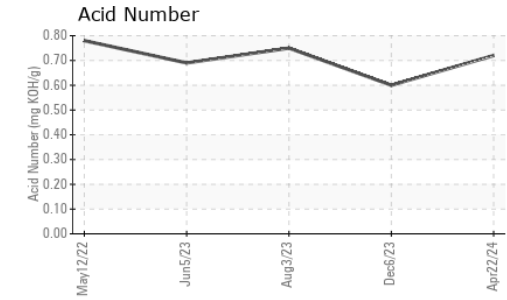
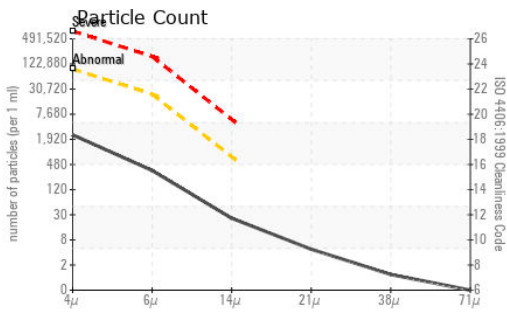
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	10	11	9
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	2153	617	42909
Particles >6µm		ASTM D7647	>20000	303	110	9809
Particles >14µm		ASTM D7647	>640	22	13	340
Particles >21µm		ASTM D7647	>160	4	5	43
Particles >38µm		ASTM D7647	>40	1	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	18/15/12	16/14/11	23/20/16
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	>0.075	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	2	0	2
Boron	ppm	ASTM D5185m	14	2	2	2
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	<1	<1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	3	3	4
Calcium	ppm	ASTM D5185m	49	380	203	230
Phosphorus	ppm	ASTM D5185m	354	664	613	609
Zinc	ppm	ASTM D5185m	419	841	805	820
Sulfur	ppm	ASTM D5185m	3719	2309	1855	2124
Acid Number (AN)	mg KOH/g	ASTM D8045		0.72	0.60	0.75
Visc @ 40°C	cSt	ASTM D445	46	49.9	50.8	50.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0007346

Lab Number : 06160275

Unique Number : 10995698

Test Package : CONST

Received : 25 Apr 2024

Tested : 26 Apr 2024

Diagnosed : 26 Apr 2024 - Don Baldrige

TRIANGLE GRADING AND PAVING INC

1521 Huffman Mill Rd

BURLINGTON, NC

US 27216

Contact: ADAM CORBETT

wacorbett@trianglegradingpaving.com

T:

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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