CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 744K 047-0043
Component
Hydraulic System
Fluid
SCHAEFFER 315 SIMPLEX SUPREME (--- GAL)

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

WEAR

Bearing and/or bushing wear is indicated. All other component wear rates are normal.

CONTAMINATION

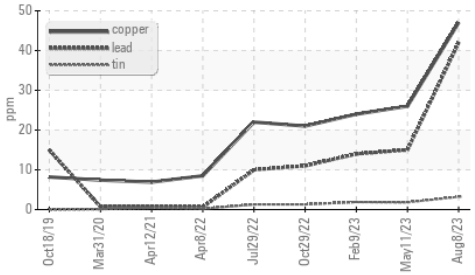
Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

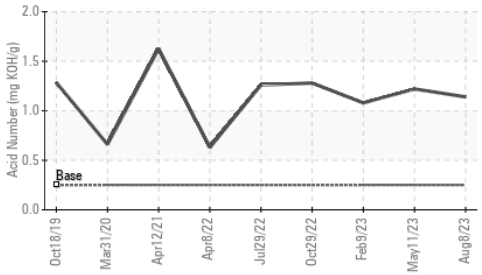
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0815006	WC0815240	WC0750706
Sample Date		Client Info		08 Aug 2023	11 May 2023	09 Feb 2023
Machine Age	hrs	Client Info		14298	13300	12149
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>71	67	44	44
Chromium	ppm	ASTM D5185m	>11	0	0	<1
Nickel	ppm	ASTM D5185m	>6	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	<1	<1	1
Lead	ppm	ASTM D5185m	>13	▲ 42	▲ 15	▲ 14
Copper	ppm	ASTM D5185m	>21	▲ 47	▲ 26	▲ 24
Tin	ppm	ASTM D5185m	>5	3	2	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>24	4	4	4
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	---	---	8460
Particles >6µm		ASTM D7647	>5000	---	---	1800
Particles >14µm		ASTM D7647	>640	---	---	103
Particles >21µm		ASTM D7647	>160	---	---	25
Particles >38µm		ASTM D7647	>40	---	---	1
Particles >71µm		ASTM D7647	>10	---	---	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	---	---	20/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	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
Sodium	ppm	ASTM D5185m	>21	4	2	3
Boron	ppm	ASTM D5185m	100	0	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	90	84	91
Calcium	ppm	ASTM D5185m	4300	3497	3476	3428
Phosphorus	ppm	ASTM D5185m	1400	1034	1059	995
Zinc	ppm	ASTM D5185m	1700	1248	1303	1261
Sulfur	ppm	ASTM D5185m	3800	4170	4160	4144
Acid Number (AN)	mg KOH/g	ASTM D8045	0.25	1.14	1.22	1.08
Visc @ 40°C	cSt	ASTM D445	59	45.8	46.0	46.1

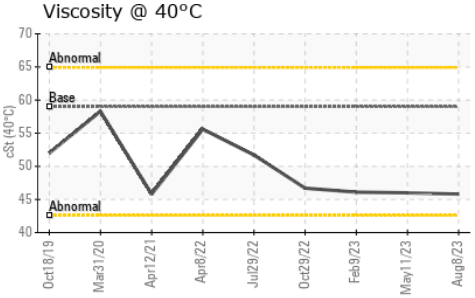
Non-ferrous Metals



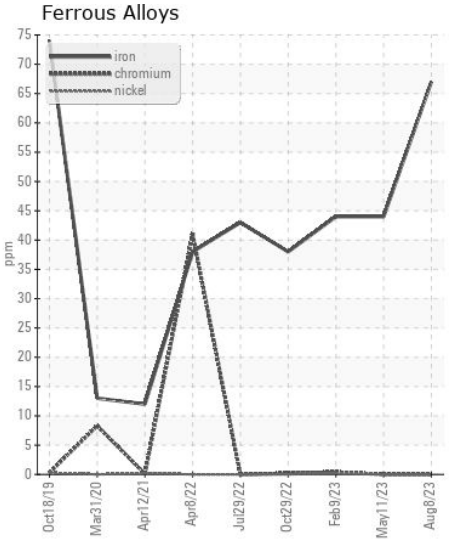
Acid Number



Viscosity @ 40°C



Ferrous Alloys



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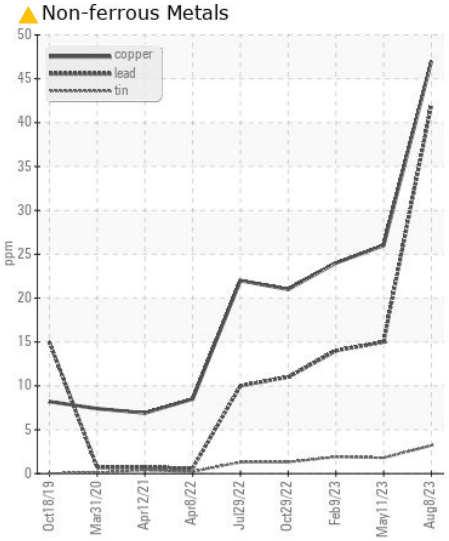
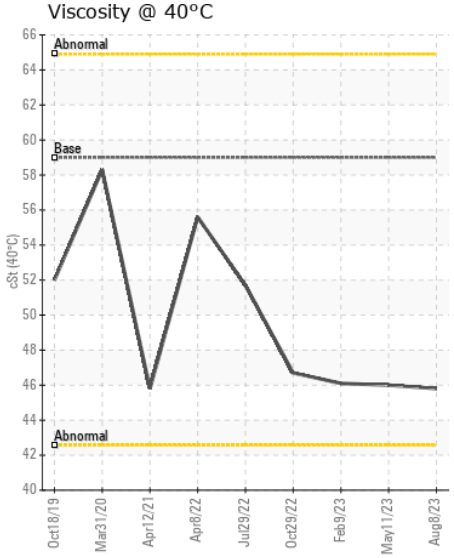


Viscosity @ 40°C



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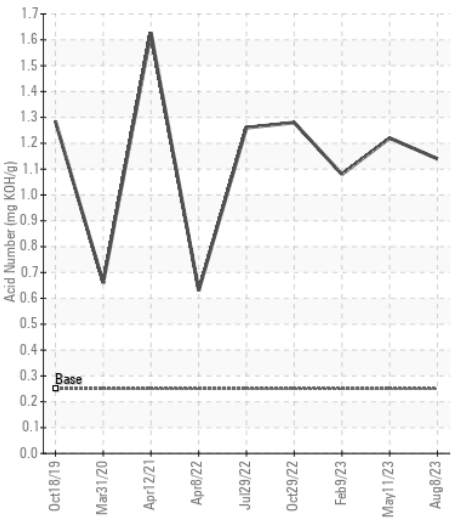

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0815006
Lab Number : 05935301
Unique Number : 10620572
Test Package : CONST

Received : 25 Aug 2023
Tested : 28 Aug 2023
Diagnosed : 28 Aug 2023 - Don Baldridge

Certificate L2367

SHIMMICK CONSTRUCTION
5535 TRAILHEAD DRIVE
CHATTANOOGA, TN
US 37415
Contact: DANIEL LISELLA
daniel.lisella@shimmick.com
T:
F:

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)