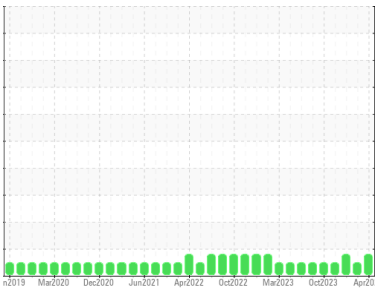
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
JOHN DEERE 744K 047-0043
Component
Diesel Engine
Fluid
SCHAEFFER SUPREME 7000 (9 GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Schaeffer's 15w-40… hours 16184)

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0903847**	WC0903838	WC0868345
Sample Date		Client Info		**18 Apr 2024**	16 Feb 2024	05 Feb 2024
Machine Age	hrs	Client Info		**16184**	15794	15718
Oil Age	hrs	Client Info		**15794**	0	0
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	**<1.0**	<1.0	<1.0
Water		WC Method	>0.21	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	▲ **56**	12	▲ 71
Chromium	ppm	ASTM D5185m	>11	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**0**	<1	1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>31	**4**	4	5
Lead	ppm	ASTM D5185m	>26	**0**	<1	<1
Copper	ppm	ASTM D5185m	>26	**<1**	<1	0
Tin	ppm	ASTM D5185m	>4	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**62**	93	62
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m	50	**76**	79	73
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1000	**29**	13	30
Calcium	ppm	ASTM D5185m	1400	**2190**	2266	2126
Phosphorus	ppm	ASTM D5185m	985	**1007**	1124	1087
Zinc	ppm	ASTM D5185m	1060	**1246**	1278	1272
Sulfur	ppm	ASTM D5185m	4000	**5825**	5949	5228

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	**4**	6	6
Sodium	ppm	ASTM D5185m	>31	**2**	1	2
Potassium	ppm	ASTM D5185m	>20	**4**	2	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.2**	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**8.7**	7.4	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.6**	17.5	18.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.4**	13.6	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	10	**6.1**	6.8	6.4

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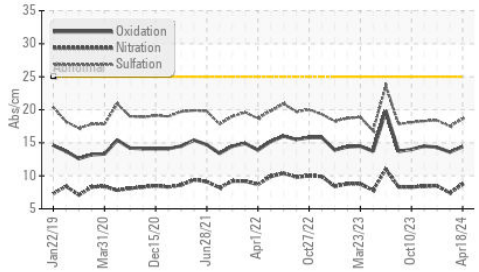
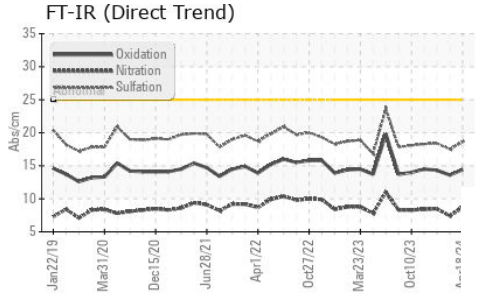
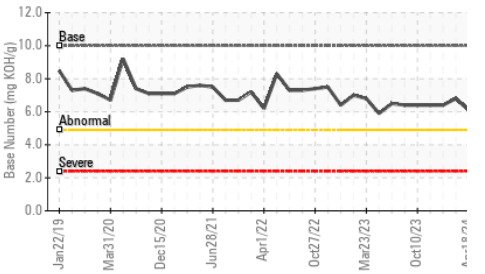
FT-IR (Direct Trend)



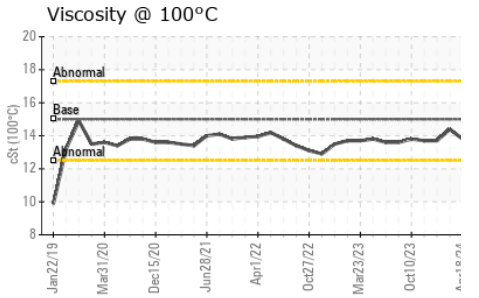
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

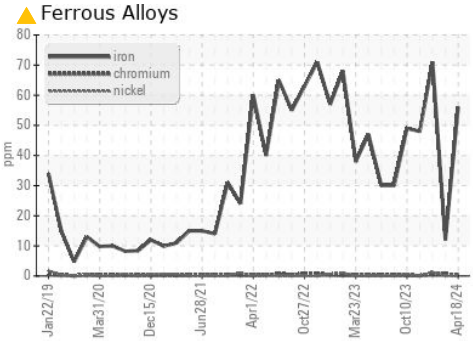


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

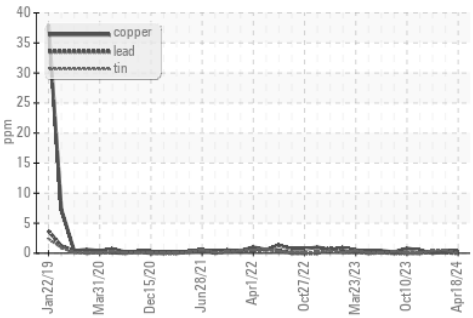
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	**13.8**	14.4	13.7

GRAPHS

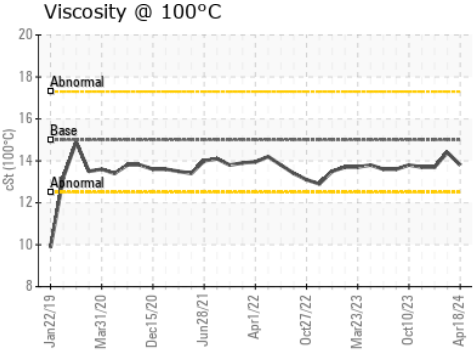
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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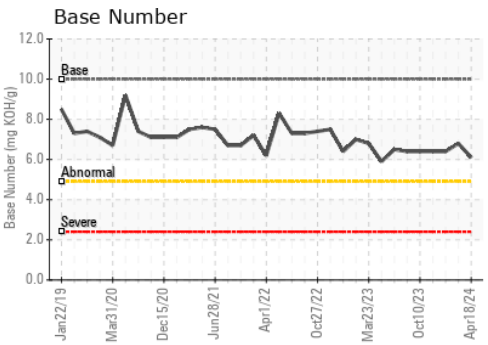

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0903847 **Received** : 23 Apr 2024
Lab Number : 06157497 **Tested** : 24 Apr 2024
Unique Number : 10992920 **Diagnosed** : 25 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

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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Report Id: AECCHATN [WUSCAR] 06157497 (Generated: 04/25/2024 17:42:33) Rev: 1

Submitted By: TECH TECHNICIAN