



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



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

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)

Test	UOM	Method	Limit/Abn	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
Filter Age	hrs	Client Info		15718	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

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

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
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

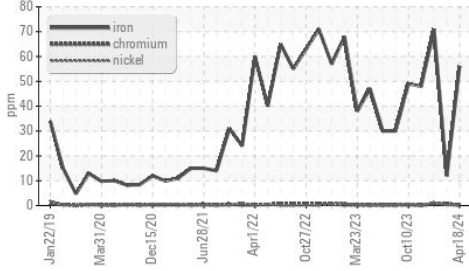
Silicon	ppm	ASTM D5185m	>22	4	6	6
Potassium	ppm	ASTM D5185m	>20	4	2	4
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.7	7.4	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	17.5	18.4
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

FLUID CONDITION

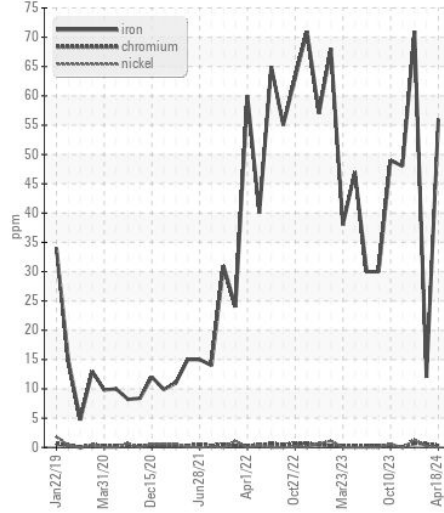
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	2	1	2
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
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
Visc @ 100°C	cSt	ASTM D445	15	13.8	14.4	13.7

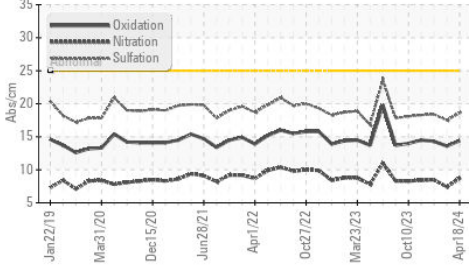
▲ Ferrous Alloys



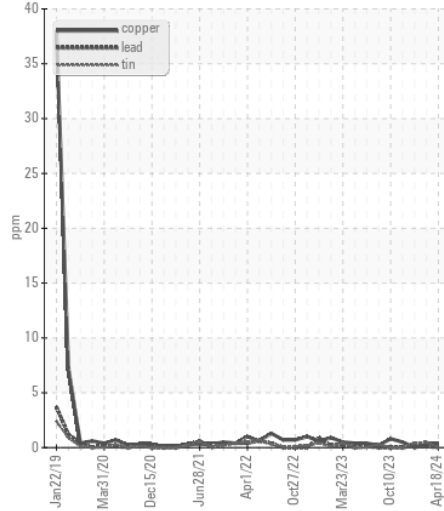
▲ Ferrous Alloys



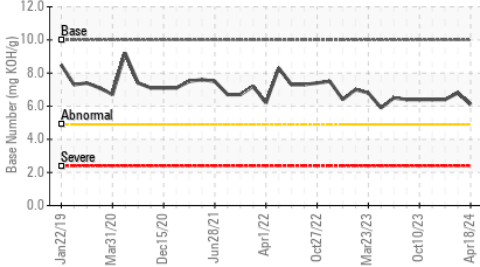
FT-IR (Direct Trend)



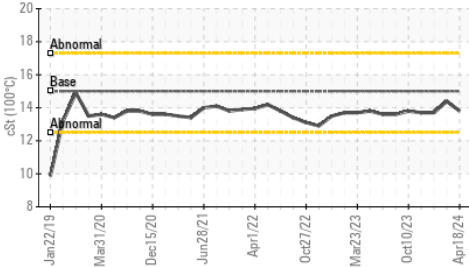
Non-ferrous Metals



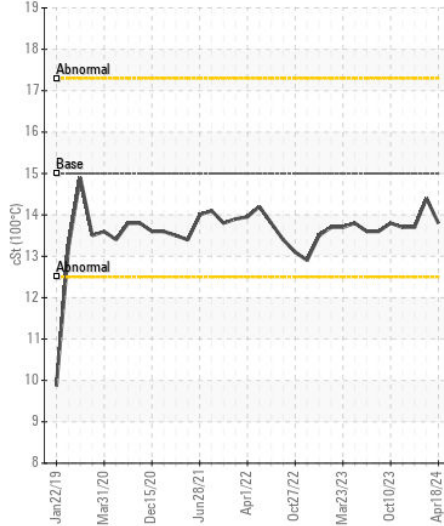
Base Number



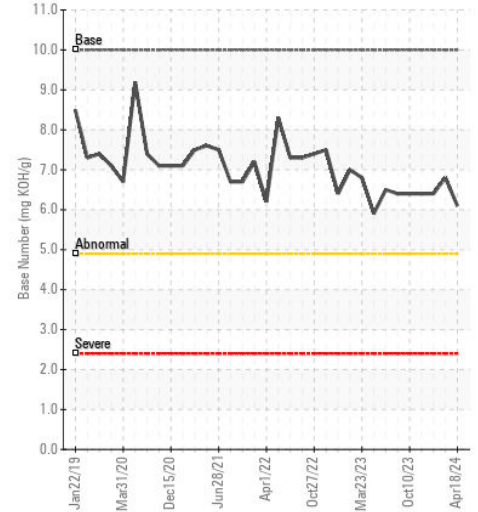
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0903847
Lab Number : 06157497
Unique Number : 10992920
Test Package : CONST (Additional Tests: TBN)

Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 25 Apr 2024 - Jonathan Hester

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

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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