



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



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

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample
Comment: Engine oil sample. 16335 hours)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868371	WC0904089	WC0903847
Sample Date		Client Info		18 May 2024	25 Apr 2024	18 Apr 2024
Machine Age	hrs	Client Info		16335	16233	16184
Oil Age	hrs	Client Info		16184	16184	15794
Filter Age	hrs	Client Info		0	0	15718
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	42	16	▲ 56
Chromium	ppm	ASTM D5185m	>11	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	1	4
Lead	ppm	ASTM D5185m	>26	<1	<1	0
Copper	ppm	ASTM D5185m	>26	<1	0	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	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

There is no indication of any contamination in the oil.

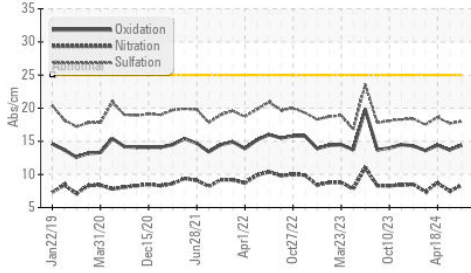
Silicon	ppm	ASTM D5185m	>22	4	4	4
Potassium	ppm	ASTM D5185m	>20	4	0	4
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.3	7.5	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.7	18.6
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

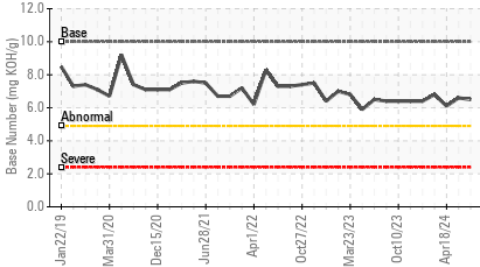
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	17	0	2
Boron	ppm	ASTM D5185m		74	98	62
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m	50	72	77	76
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	1000	10	56	29
Calcium	ppm	ASTM D5185m	1400	2119	2434	2190
Phosphorus	ppm	ASTM D5185m	985	1120	1118	1007
Zinc	ppm	ASTM D5185m	1060	1214	1407	1246
Sulfur	ppm	ASTM D5185m	4000	5773	6767	5825
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	13.7	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.5	6.6	6.1
Visc @ 100°C	cSt	ASTM D445	15	14.2	14.6	13.8

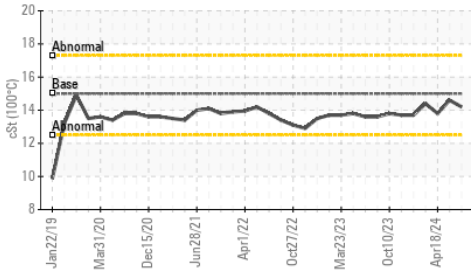
FT-IR (Direct Trend)



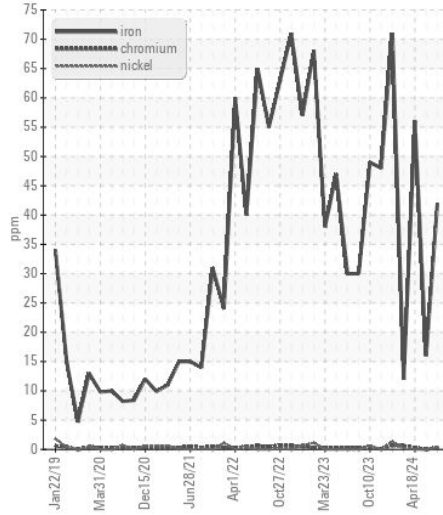
Base Number



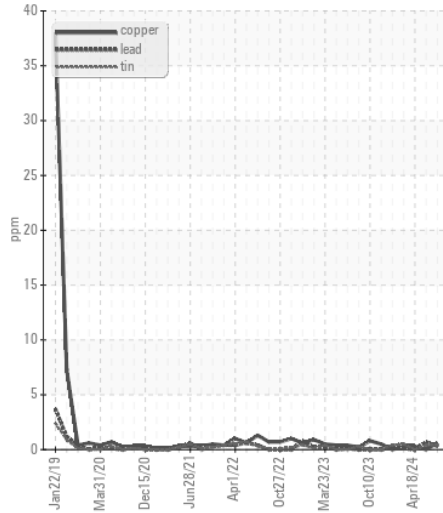
Viscosity @ 100°C



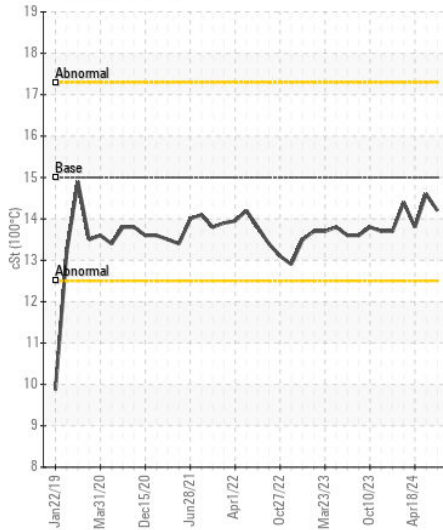
Ferrous Alloys



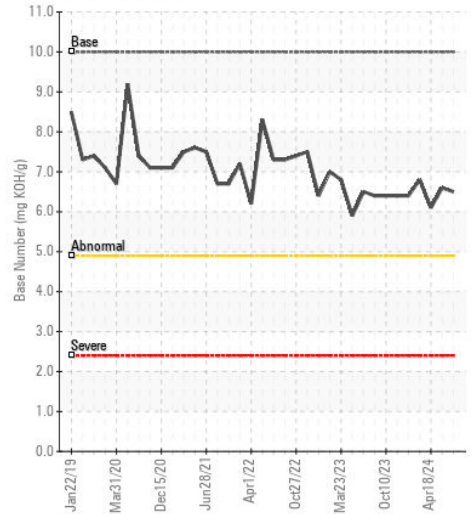
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868371 **Received** : 22 May 2024
Lab Number : 06187406 **Tested** : 31 May 2024
Unique Number : 11044158 **Diagnosed** : 31 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

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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