



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W8934]
 Machine Id
JOHN DEERE 850K 1T0850KXJJF343226
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (27 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W8934)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196949	JR0194266	JR0166177
Sample Date		Client Info		28 May 2024	12 Dec 2023	21 Apr 2023
Machine Age	hrs	Client Info		5559	4896	4488
Oil Age	hrs	Client Info		5151	0	493
Filter Age	hrs	Client Info		0	0	493
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	33	31	30
Chromium	ppm	ASTM D5185m	>11	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	2	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	1	0	0
Aluminum	ppm	ASTM D5185m	>31	6	6	4
Lead	ppm	ASTM D5185m	>26	1	<1	0
Copper	ppm	ASTM D5185m	>26	8	9	6
Tin	ppm	ASTM D5185m	>4	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

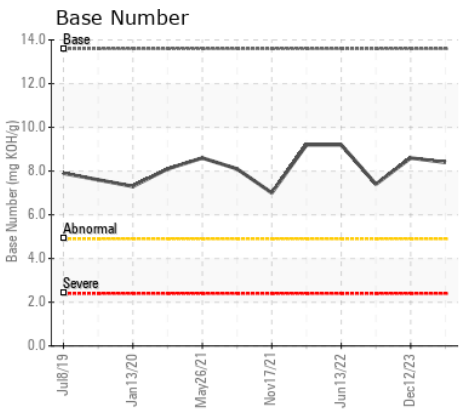
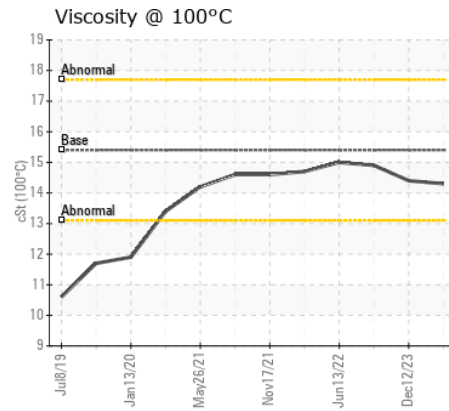
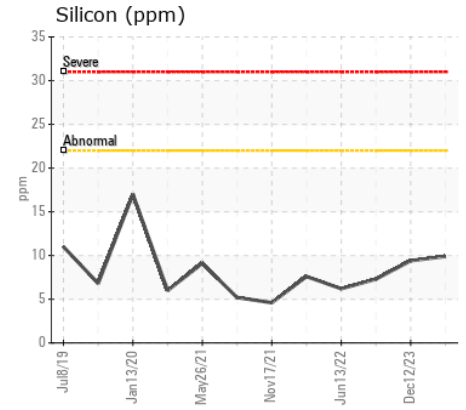
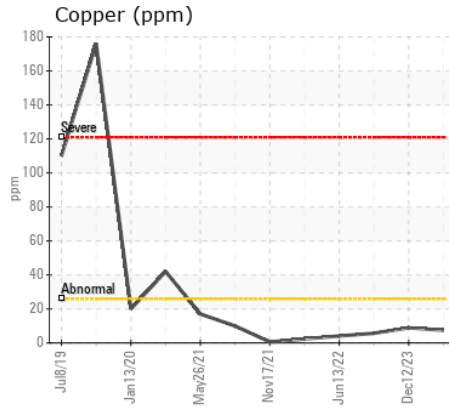
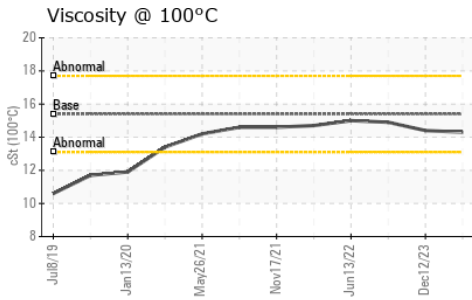
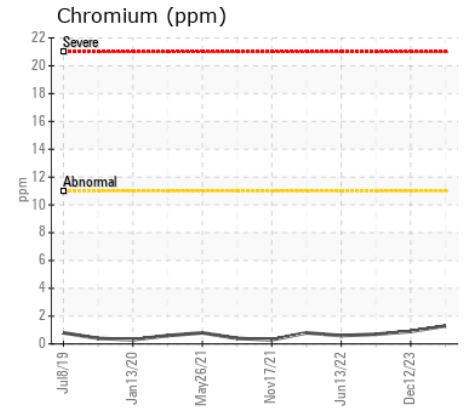
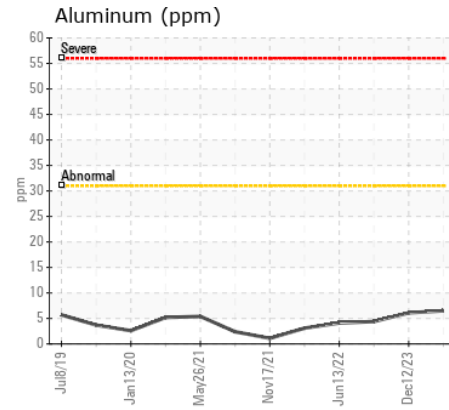
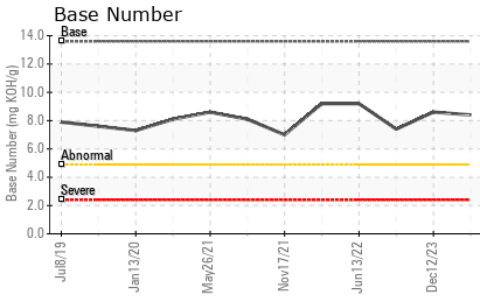
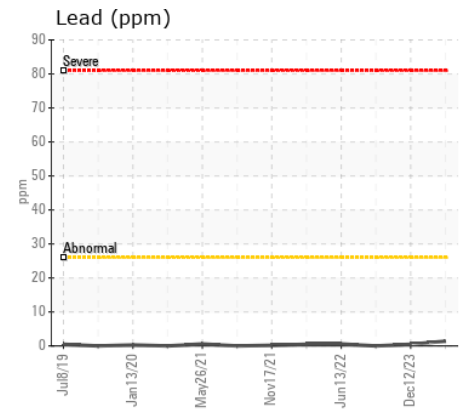
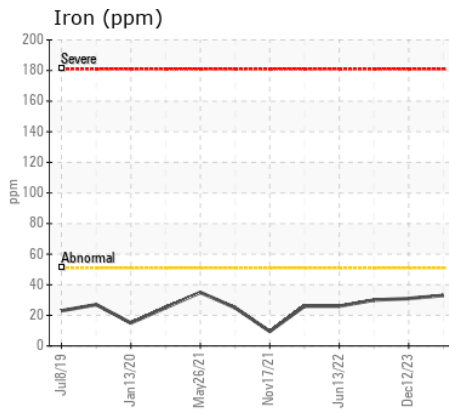
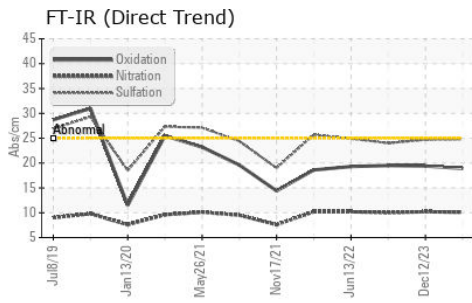
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	10	9	7
Potassium	ppm	ASTM D5185m	>20	4	4	<1
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	0.7	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.1	10.2	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	24.7	24.0
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	3	1	4
Boron	ppm	ASTM D5185m		158	159	134
Barium	ppm	ASTM D5185m		0	12	0
Molybdenum	ppm	ASTM D5185m		253	265	254
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		839	831	845
Calcium	ppm	ASTM D5185m		1512	1498	1573
Phosphorus	ppm	ASTM D5185m		953	869	897
Zinc	ppm	ASTM D5185m		1171	1119	1136
Sulfur	ppm	ASTM D5185m		3565	3275	3423
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	19.4	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4	8.6	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	14.4	14.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196949
Lab Number : 06193609
Unique Number : 11050361
Test Package : MOBCE (Additional Tests: TBN)

Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Sean Felton

JRE - HOPE MILLS/FAYETTEVILLE
 5039 HWY 301 SOUTH
 HOPE MILLS, NC
 US 28348

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; panastasio@wearcheck.com

* - 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)