



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
JOHN DEERE 848H 1DW848HXPDD652323
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. (Customer Sample Comment: Engine ser# SE6068L130213)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0227014	JR0000217	JRMC442000
Sample Date		Client Info		11 Jul 2024	09 Oct 2019	18 Nov 2017
Machine Age	hrs	Client Info		16250	11480	8422
Oil Age	hrs	Client Info		8422	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	5	13	22
Chromium	ppm	ASTM D5185m	>11	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	2	4
Lead	ppm	ASTM D5185m	>26	<1	<1	3
Copper	ppm	ASTM D5185m	>26	2	<1	1
Tin	ppm	ASTM D5185m	>4	<1	0	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

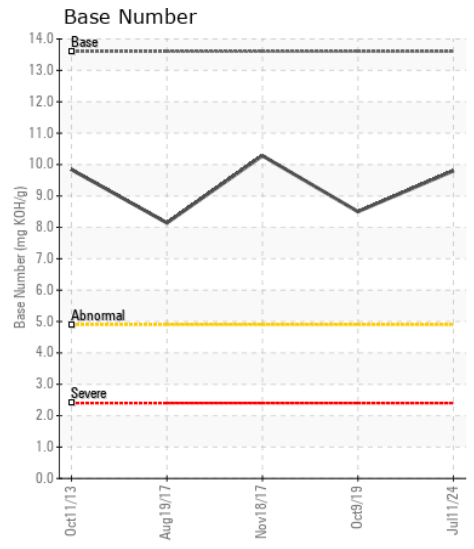
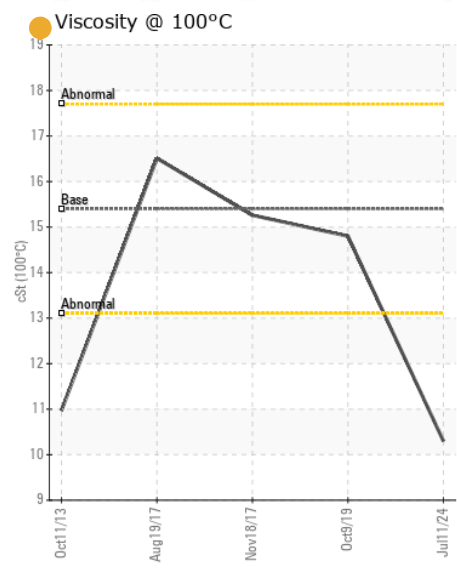
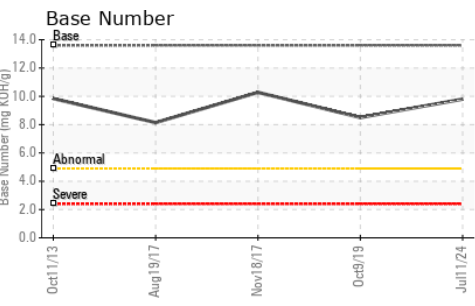
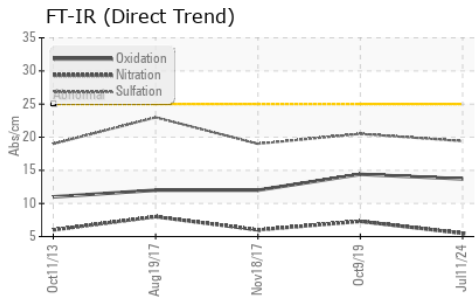
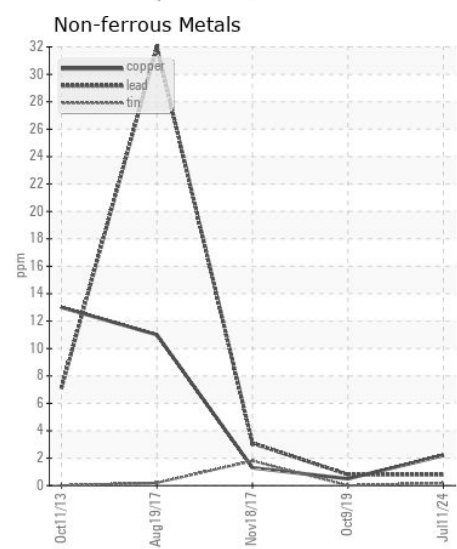
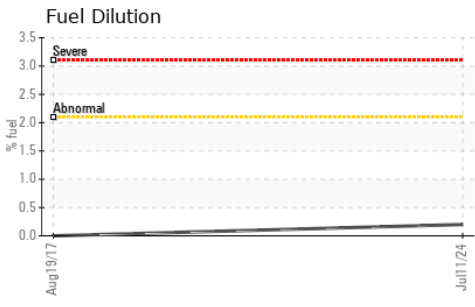
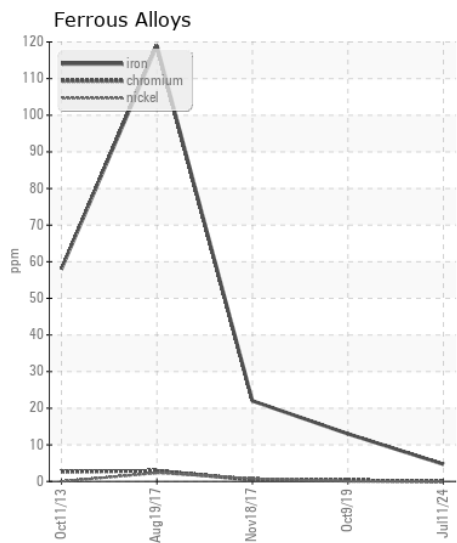
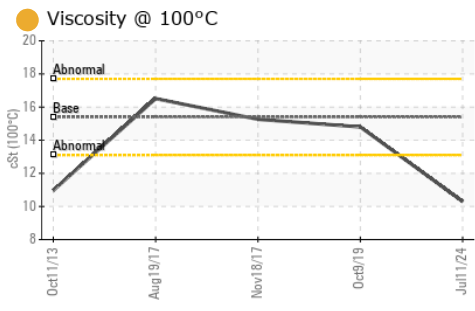
Fuel content negligible. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>22	9	4	6
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel	%	ASTM D3524	>2.1	0.2	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	1.1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	5.5	7.3	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	20.5	19.
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	6	0	9
Boron	ppm	ASTM D5185m		281	51	164
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		232	44	198
Manganese	ppm	ASTM D5185m		<1	0	2
Magnesium	ppm	ASTM D5185m		739	325	715
Calcium	ppm	ASTM D5185m		1470	1759	1670
Phosphorus	ppm	ASTM D5185m		918	835	1010
Zinc	ppm	ASTM D5185m		1033	1096	1061
Sulfur	ppm	ASTM D5185m		3518	2815	992
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	14.4	12.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.8	8.5	10.28
Visc @ 100°C	cSt	ASTM D445	15.4	● 10.3	14.8	15.26



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0227014 **Received** : 15 Jul 2024
Lab Number : 06235331 **Tested** : 16 Jul 2024
Unique Number : 11124165 **Diagnosed** : 16 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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)