



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 368
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0217844	JR0139627	JR0117151
Sample Date		Client Info		11 Jun 2024	04 Aug 2022	14 Jan 2022
Machine Age	hrs	Client Info		5947	2356	1382
Oil Age	hrs	Client Info		500	0	485
Filter Age	hrs	Client Info		500	0	485
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

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

Iron	ppm	ASTM D5185m	>51	▲ 97	▲ 60	50
Chromium	ppm	ASTM D5185m	>11	<1	1	1
Nickel	ppm	ASTM D5185m	>5	<1	8	▲ 12
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>31	2	5	4
Lead	ppm	ASTM D5185m	>26	<1	1	2
Copper	ppm	ASTM D5185m	>26	1	▲ 35	3
Tin	ppm	ASTM D5185m	>4	<1	1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

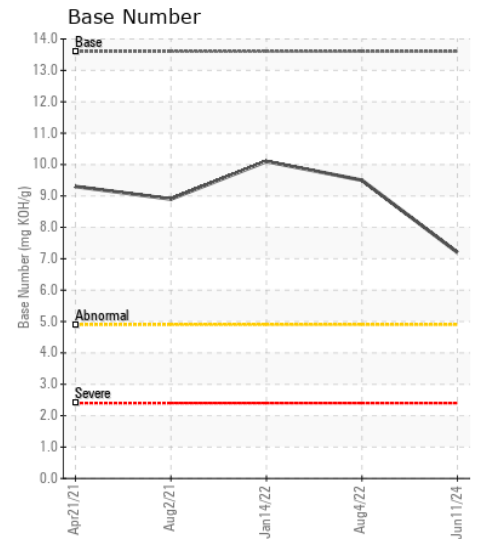
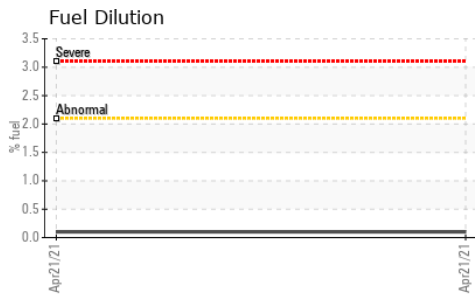
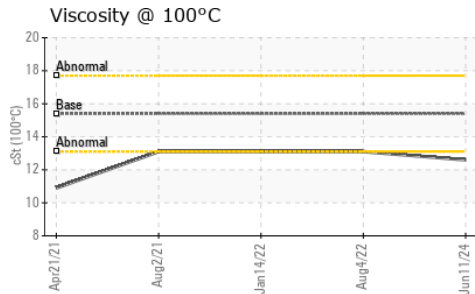
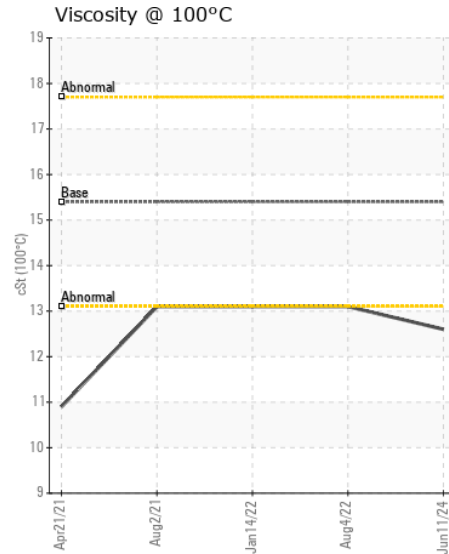
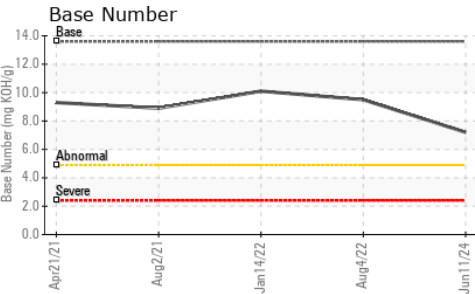
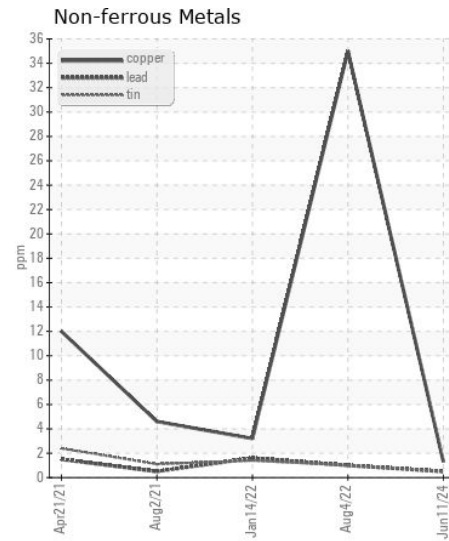
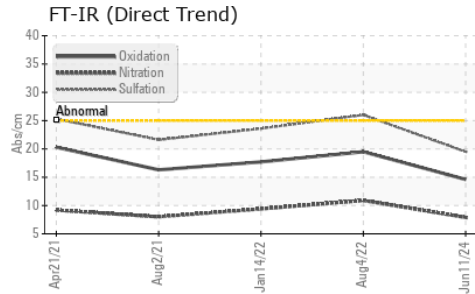
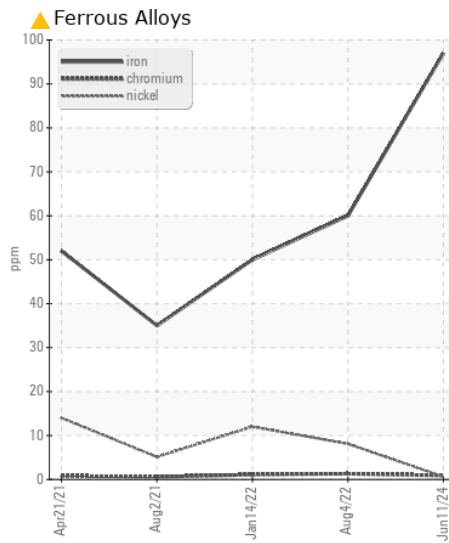
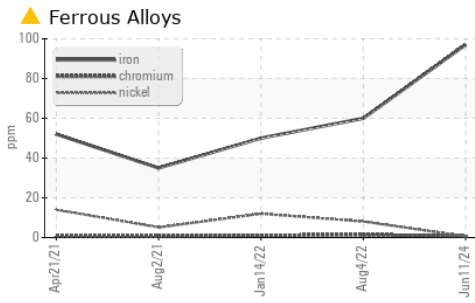
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	12	7	8
Potassium	ppm	ASTM D5185m	>20	3	3	3
Fuel	%	ASTM D3524	>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	0.4	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.9	10.9	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	26.0	23.6
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	2	2	2
Boron	ppm	ASTM D5185m		72	106	191
Barium	ppm	ASTM D5185m		0	3	0
Molybdenum	ppm	ASTM D5185m		24	285	254
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m		131	835	823
Calcium	ppm	ASTM D5185m		2324	1513	1475
Phosphorus	ppm	ASTM D5185m		973	894	869
Zinc	ppm	ASTM D5185m		1204	1175	1087
Sulfur	ppm	ASTM D5185m		4065	2844	2985
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	19.5	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	9.5	10.1
Visc @ 100°C	cSt	ASTM D445	15.4	12.6	13.1	13.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217844
Lab Number : 06224300
Unique Number : 11102497
Test Package : CONST (Additional Tests: FuelDilution, KV40, TBN)

TOTAL DEVELOPMENT SOLUTIONS LLC
 7805 PROGRESS CT
 GAINESVILLE, VA
 US 20155
 Contact: JOE SEALE

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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