



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

[16W16050]

Machine Id

JOHN DEERE 524P 1DW524PAVMLZ10365

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 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: 16W16050)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0207092	JR0196589	JR0185604
Sample Date		Client Info		16 Apr 2024	12 Dec 2023	05 Sep 2023
Machine Age	hrs	Client Info		5955	5452	4996
Oil Age	hrs	Client Info		503	456	476
Filter Age	hrs	Client Info		503	456	476
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	11	7	8
Chromium	ppm	ASTM D5185m	>11	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	4	3	2
Lead	ppm	ASTM D5185m	>26	1	0	0
Copper	ppm	ASTM D5185m	>26	2	<1	5
Tin	ppm	ASTM D5185m	>4	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

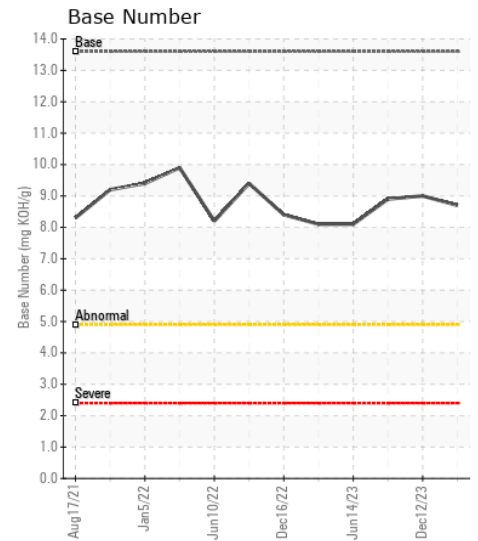
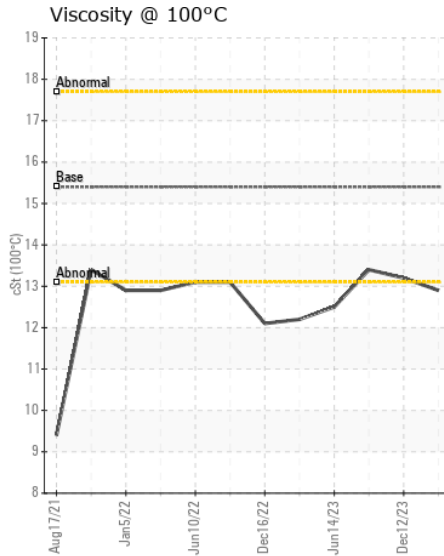
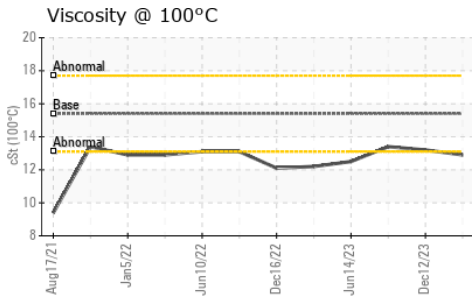
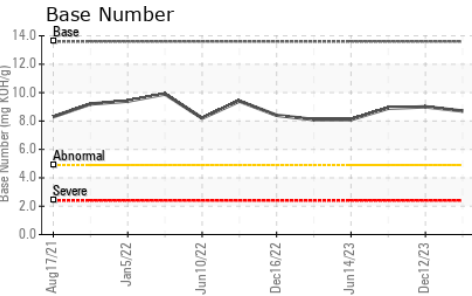
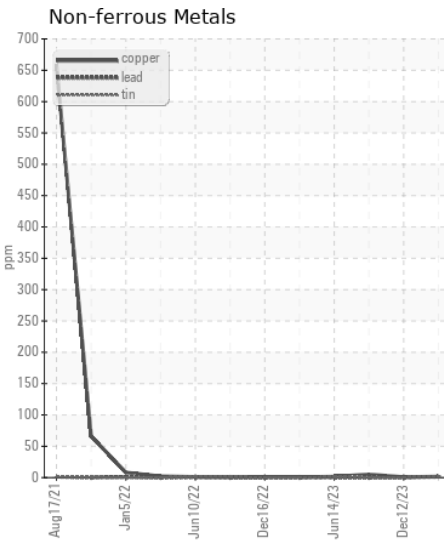
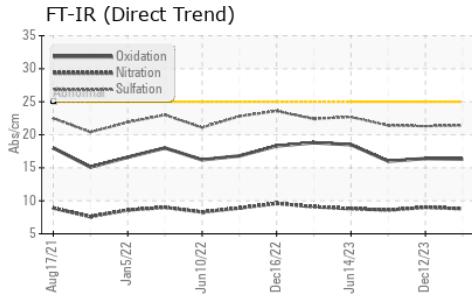
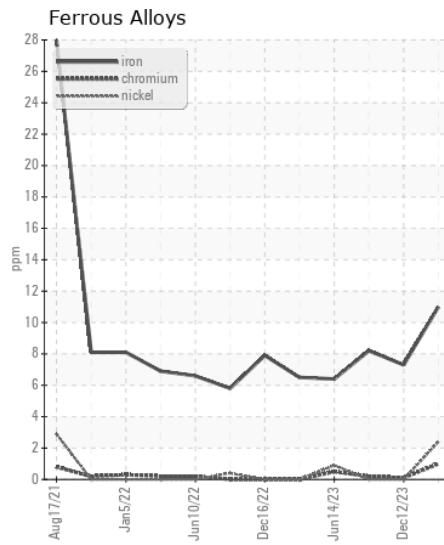
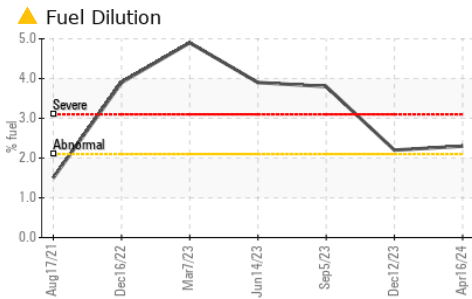
Light fuel dilution occurring.

Silicon	ppm	ASTM D5185m	>22	8	6	6
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Fuel	%	ASTM D3524	>2.1	▲ 2.3	▲ 2.2	▲ 3.8
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.8	9.0	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	21.3	21.4
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	1	3
Boron	ppm	ASTM D5185m		261	223	270
Barium	ppm	ASTM D5185m		<1	0	2
Molybdenum	ppm	ASTM D5185m		247	231	254
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		773	804	862
Calcium	ppm	ASTM D5185m		1347	1268	1427
Phosphorus	ppm	ASTM D5185m		951	815	903
Zinc	ppm	ASTM D5185m		1052	1038	1063
Sulfur	ppm	ASTM D5185m		3379	2747	3436
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	16.4	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	9.0	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	13.2	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0207092 **Received** : 18 Apr 2024
Lab Number : 06152883 **Tested** : 22 Apr 2024
Unique Number : 10982961 **Diagnosed** : 22 Apr 2024 - Sean Felton
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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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