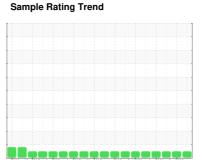


OIL ANALYSIS REPORT





Machine Id JOHN DEERE 624K 1DW624KZVDE652841 Component Diesel Engine Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

PLUS 50 II 159940 (GAL)	un2014 Mar20	115 Apr2016 Apr2017 Ma	ar2018 Jan2019 Feb2020 Aug2021	Dec2022	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		JR0151024	JR0151357	JR0118994
Sample Date		Client Info		22 Sep 2023	04 Dec 2022	04 May 2022
Machine Age	hrs	Client Info		9621	9021	8245
Oil Age	hrs	Client Info		605	500	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	19	15	16
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	1
Aluminum	ppm	ASTM D5185m	>31	2	2	2
Lead	ppm	ASTM D5185m	>26	0	<1	<1
Copper	ppm	ASTM D5185m	>26	1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		133	126	117
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		247	207	187
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		850	863	924
Calcium	ppm	ASTM D5185m		1528	1385	1373
Phosphorus	ppm	ASTM D5185m		883	925	955
Zinc	ppm	ASTM D5185m		1067	1152	1138
Sulfur	ppm	ASTM D5185m		3707	3690	2782
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	7	4	5
Sodium	ppm	ASTM D5185m	>31	6	3	3
Potassium	ppm	ASTM D5185m	>20	3	0	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.4	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	24.5	24.5
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	17.8	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	9.5	9.9

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

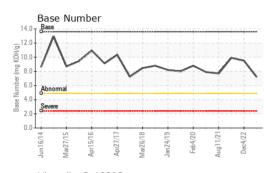
There is no indication of any contamination in the oil.

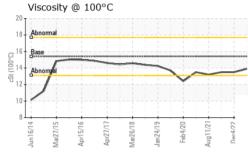
Fluid Condition

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



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.5	13.5
GRAPHS						

Ferrous Alloys

50

40

30 -20 -10 -

400

