

## JOHN DEERE 672GP 1DW672GPVNF716224

Diesel Engine

onen

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: W62607 )	Sample Number		Client Info		JR0189316	JR0171667	JR0162656
	Sample Date		Client Info		20 Dec 2023	11 Sep 2023	28 Apr 2023
	Machine Age	hrs	Client Info		1489	1113	503
	Oil Age	hrs	Client Info		376	610	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>51	6	16	23
	Chromium	ppm	ASTM D5185m		0	<1	<1
The copper level has decreased, but is still abnormal. All other component wear rates are normal.	Nickel	ppm	ASTM D5185m		2	6	6
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>31	4	4	0
	Lead	ppm	ASTM D5185m	>26	0	3	2
	Copper	ppm	ASTM D5185m	>26	<b>A</b> 32	<b>A</b> 227	<b>2</b> 32
	Tin	ppm	ASTM D5185m	>4	<1	<1	2
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>_</u> 22	6	7	7
CONTAMINATION	Potassium	ppm	ASTM D5185m		1	2	9
There is no indication of any contamination in the oil.	Fuel	ррш	WC Method	>2.1	- <1.0	<1.0	0.2
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.21	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.4	0.2	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	9.5	7.6	7.2
	Sulfation	Abs/.1mm	*ASTM D7415		23.9	21.0	19.2
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORMI
	Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	<u>_</u> Q1	0	3	5
T LOID CONDITION	Boron	ppm	ASTM D5185m	201	251	233	219
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		244	252	231
	Manganese	ppm	ASTM D5185m		<1	1	2
	Magnesium	ppm	ASTM D5185m		822	883	777
	Calcium	ppm	ASTM D5185m		1315	1526	1388
	Phosphorus	ppm	ASTM D5185m		941	902	890
	Zinc	ppm	ASTM D5185m		1050	1124	1089
	Sulfur	ppm	ASTM D5185m		2951	3526	2858
	Ovidation	Abc/1mm	*ASTM D7/1/	> 25	10.8	15 /	15.2

Oxidation

Visc @ 100°C cSt

15.4

8.2

13.3

15.3

7.8

10.6

19.8

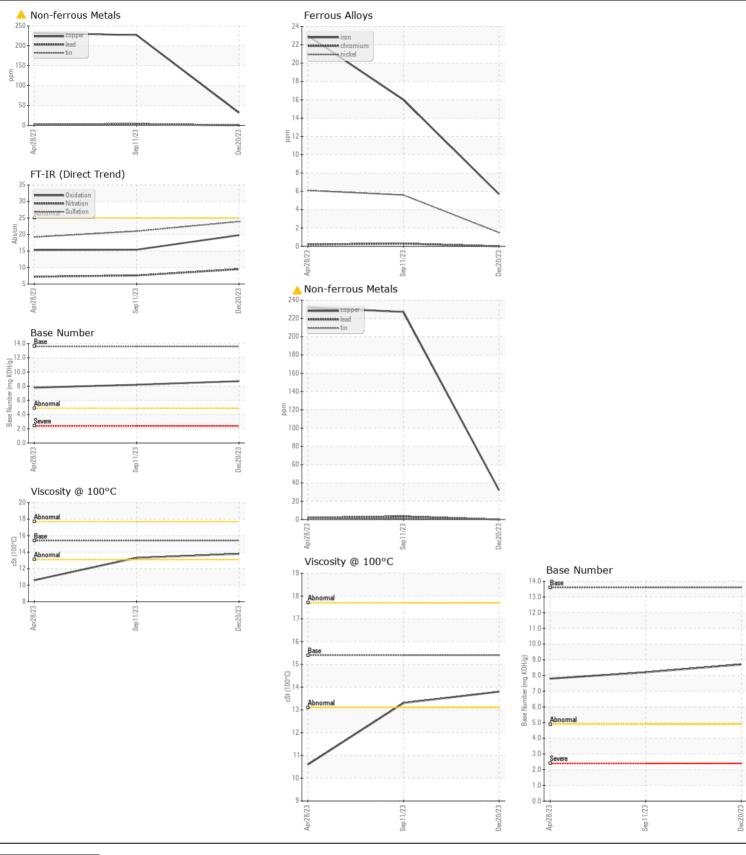
8.7

13.8

Abs/.1mm \*ASTM D7414 >25

ASTM D445 15.4

Base Number (BN) mg KOH/g ASTM D2896 13.6



CARLTON'S BACKHOE Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0189316 Received 9550 STATESVILLE ROAD : 26 Dec 2023 Lab Number : 06044392 Tested CHARLOTTE, NC : 27 Dec 2023 Unique Number : 10805000 Diagnosed : 27 Dec 2023 - Don Baldridge US 28269 Test Package : CONST (Additional Tests: TBN) Contact: LEO Certificate L2367 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. T: (704)547-0211 

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: Mike Young - CHARLOTTE SHOP Page 2 of 2