

Machine Id KAWASAKI 85Z7B L-4 (S/N 85C6-5012) Diesel Engine

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

JUHN DEERE ENGINE UIL PLUS 50 II 15W40 (GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0196443	JR0160815	JR0121723
	Sample Date		Client Info		12 Feb 2024	03 May 2023	09 Dec 2022
	Machine Age	hrs	Client Info		4699	4157	3637
	Oil Age	hrs	Client Info		542	520	653
	Filter Age	hrs	Client Info		542	520	653
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	23	19	25
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	1	1	2
	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	5	5	6
	Lead	ppm	ASTM D5185m	>40	0	0	0
	Copper	ppm	ASTM D5185m	>330	1	0	2
	Tin	ppm	ASTM D5185m	>15	0	0	<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	>25	12	10	13
	Potassium	ppm	ASTM D5185m	>20	2	<1	<1
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.5	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	9.6	8.8	10.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	21.7	26.2
	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	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0	1	2
	Boron	ppm	ASTM D5185m		158	171	128
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		13	0	0
	Molybdenum	ppm	ASTM D5185m		275	255	256
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		859	882	804
	Calcium	ppm	ASTM D5185m		1384	1491	1429
	Phosphorus	ppm	ASTM D5185m		970	882	833
	Zinc	ppm	ASTM D5185m		1103	1097	1014
	Sulfur	ppm	ASTM D5185m		3528	3529	3264
	Oxidation	Abs/.1mm	*ASTM D7414		17.7	17.0	19.6
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.4	6.8	8.8
	Vier @ 10000	- 0+		454	40.0	10.0	110

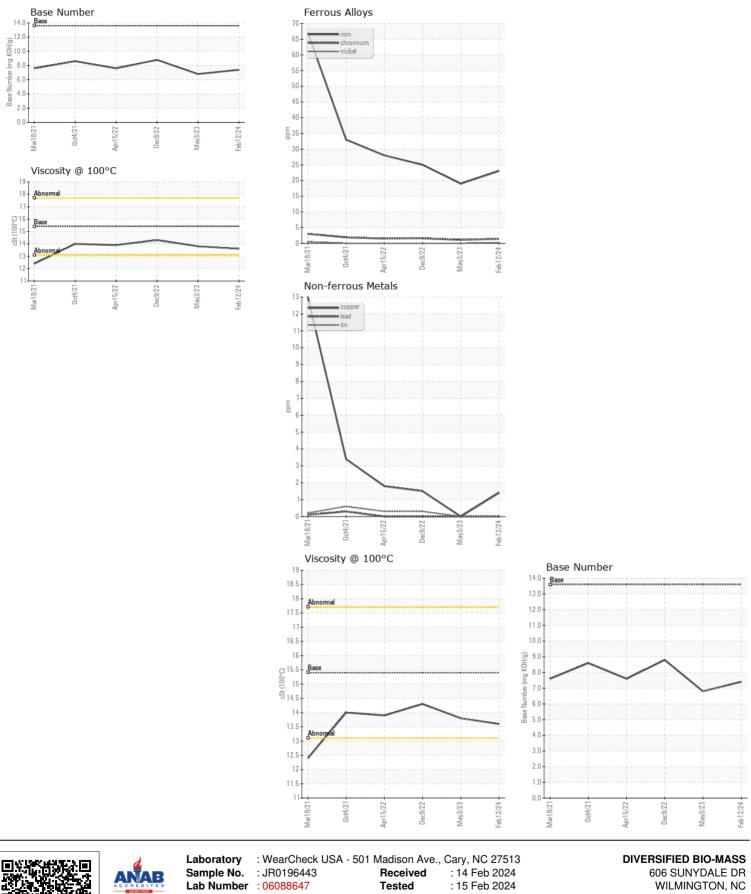
Visc @ 100°C cSt

ASTM D445 15.4

13.8

13.6

14.3



 Unique Number
 : 10876092
 Diagnosed
 : 15 Feb 2024 - Wes Davis

 Certificate 12367
 Test Package
 : CONST (Additional Tests: TBN)
 Con

 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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