WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

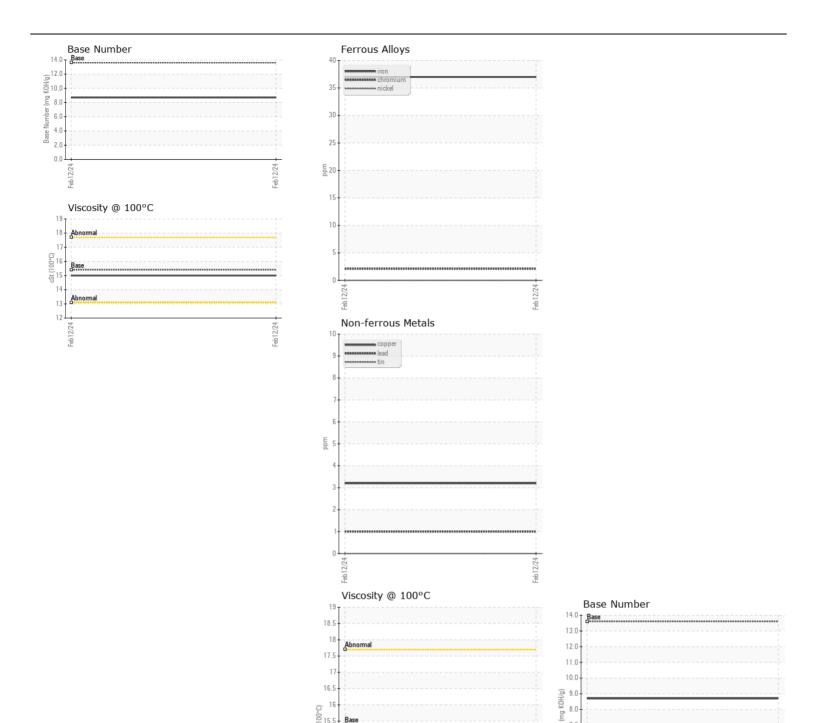
Machine Id

EDGE MS80 CC-1 (S/N 14MS804815)

Component Diesel Engine

JOHN DEFRE ENGINE OIL 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		JR0196448		
	Sample Date		Client Info		12 Feb 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		540		
	Filter Age	hrs	Client Info		540		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	37		
	Chromium	ppm	ASTM D5185m		2		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		5		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m	>330	3		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		9		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	0	NEG		
	Soot %	%	*ASTM D7844		1.1		
	Nitration	Abs/cm	*ASTM D7624	>20	10.6		
	Sulfation Silt	Abs/.1mm	*ASTM D7415 *Visual		23.9 NONE		
	Debris	scalar scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185m		0		
	Boron	ppm	ASTM D5185m		259		
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		
	Molybdenum	ppm	ASTM D5185m		302		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		925		
	Calcium	ppm	ASTM D5185m		1462		
	Phosphorus	ppm	ASTM D5185m		986		
	Zinc	ppm	ASTM D5185m		1156		
	Sulfur	ppm	ASTM D5185m		3475		
	Oxidation	Abs/.1mm	*ASTM D7414		18.2		
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7		
	Visc @ 100°C	cSt	ASTM D445	15.4	15.0		







Laboratory Sample No.

Lab Number : 06088643 Unique Number : 10876088

: JR0196448

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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13.5

12.5 12 Feb12/24

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 Feb 2024 **Tested**

Diagnosed Test Package : CONST (Additional Tests: TBN)

: 15 Feb 2024

: 15 Feb 2024 - Wes Davis

Feb12/24

6.0

WILMINGTON, NC US 28412 Contact: CHRIS DAWSON chris@tubgrinding.com T: (914)279-6817

DIVERSIFIED BIO-MASS

606 SUNYDALE DR

F: (910)793-6227

* - 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)