

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## MIXERS Machine Id [MIXERS] M223

Diesel Engine

## KENDALL 15W40 (9 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PCA0098497	PCA0109794	LP0001112
	Sample Date		Client Info		24 Jun 2024	08 Apr 2024	16 Nov 2023
	Machine Age	hrs	Client Info		3624	3042	2392
	Oil Age	hrs	Client Info		600	600	600
	Filter Age	hrs	Client Info		600	600	600
	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	6	10	10
	Chromium	ppm	ASTM D5185m	>20	0	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0	<1	0
	Titanium	ppm	ASTM D5185m		<1	1	1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	3	3	2
	Lead	ppm	ASTM D5185m	>40	0	<1	0
	Copper	ppm	ASTM D5185m	>330	0	<1	<1
	Tin	ppm	ASTM D5185m	>15	0	<1	0
	Vanadium	ppm	ASTM D5185m		0	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	5	3
	Potassium	ppm	ASTM D5185m		<1	2	<1
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.4	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.2	9.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	19.0	19.3
	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	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	1	4
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	6.3	45	50	37
	Barium	ppm	ASTM D5185m	0.6	0	0	0
	Molybdenum	ppm	ASTM D5185m	0.4	83	97	83
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		41	108	161
	Calcium	ppm	ASTM D5185m		2189	2383	1992
	Phosphorus	ppm	ASTM D5185m		1007	1127	993
	Zinc	ppm	ASTM D5185m		1202	1308	1291
	Sulfur	ppm	ASTM D5185m		4082	4202	3761
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.4	15.0

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

8.96

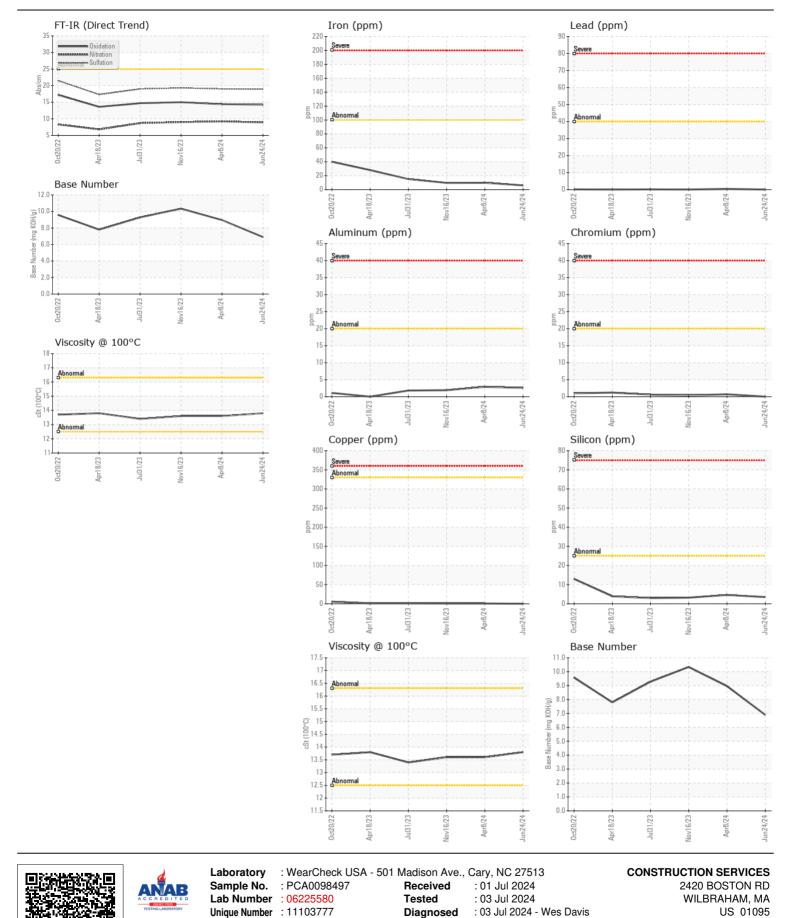
13.6

10.34

13.6

6.9

13.8



 Certificate L2367
 Test Package : MOB 2
 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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