

Area  
**MIXERS**  
Machine Id  
**[MIXERS] M217**  
Component  
**Diesel Engine**  
Fluid  
**KENDALL 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0109789</b>	LP0000663	LP0000190
Sample Date		Client Info		<b>19 Feb 2024</b>	13 Oct 2023	20 Jul 2023
Machine Age	hrs	Client Info		<b>5882</b>	5447	4903
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>600</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>3</b>	6	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

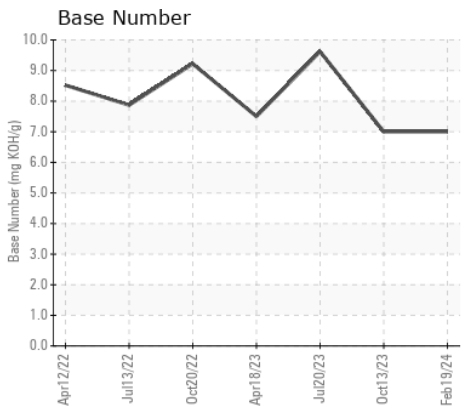
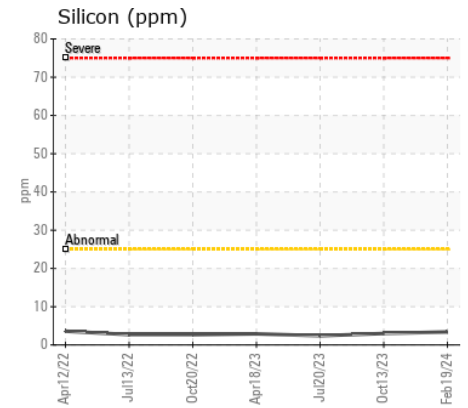
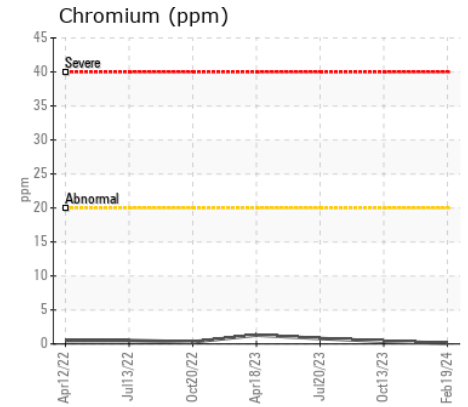
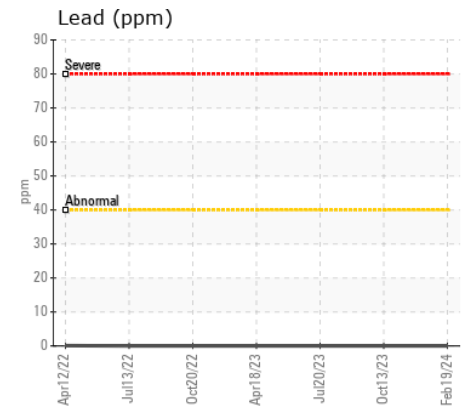
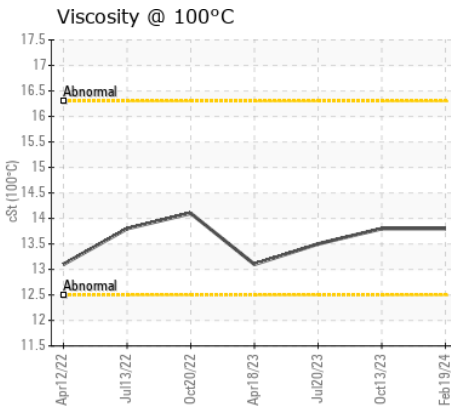
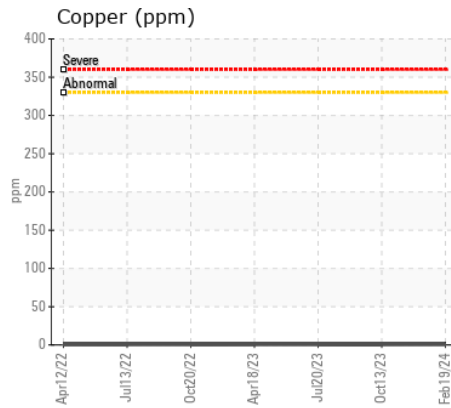
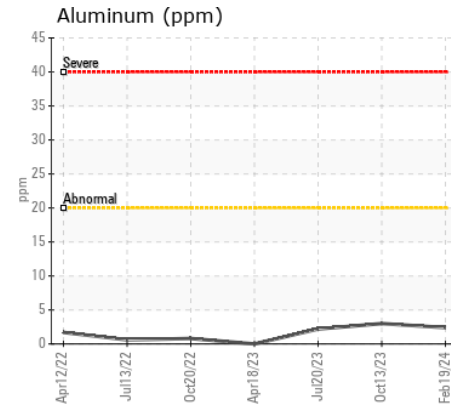
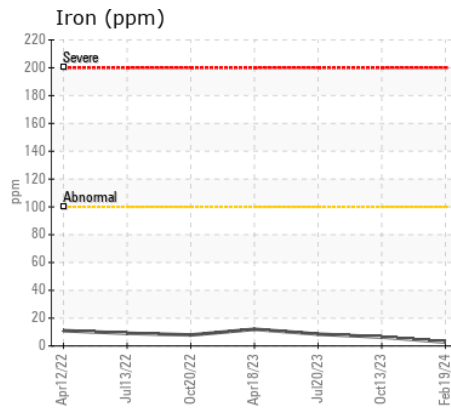
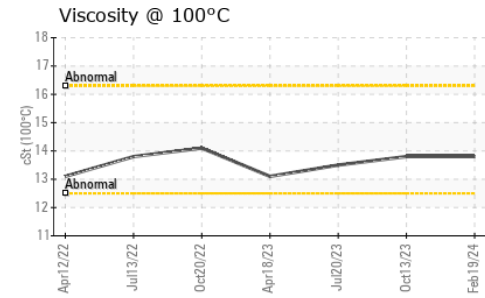
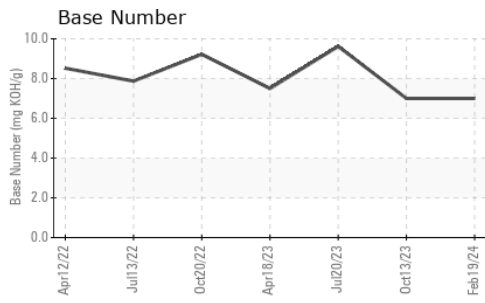
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	8.3	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.2</b>	18.4	19.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	4
Boron	ppm	ASTM D5185m	6.3	<b>48</b>	38	35
Barium	ppm	ASTM D5185m	0.6	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.4	<b>78</b>	85	79
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	277	<b>112</b>	210	305
Calcium	ppm	ASTM D5185m	1514	<b>1972</b>	2001	1990
Phosphorus	ppm	ASTM D5185m	634	<b>1005</b>	966	1049
Zinc	ppm	ASTM D5185m	743	<b>1187</b>	1224	1283
Sulfur	ppm	ASTM D5185m	2592	<b>3551</b>	3914	4374
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.5</b>	13.4	14.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.0</b>	7.0	9.62
Visc @ 100°C	cSt	ASTM D445		<b>13.8</b>	13.8	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0109789 **Received** : 29 Feb 2024  
**Lab Number** : 06105097 **Tested** : 01 Mar 2024  
**Unique Number** : 10903327 **Diagnosed** : 01 Mar 2024 - Wes Davis  
**Test Package** : MOB 2

**CONSTRUCTION SERVICES**  
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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)