



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**MIXERS**  
Machine Id  
**[MIXERS] M291**  
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>LP0001277</b>	LP0001119	LP0000432
Sample Date		Client Info		<b>03 Jul 2024</b>	22 Nov 2023	15 Aug 2023
Machine Age	hrs	Client Info		<b>10356</b>	9585	9048
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>18</b>	17	17
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	2
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	3	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

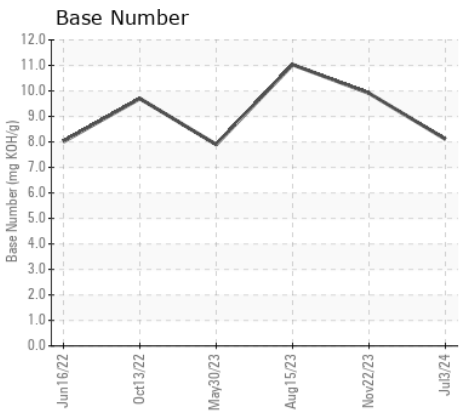
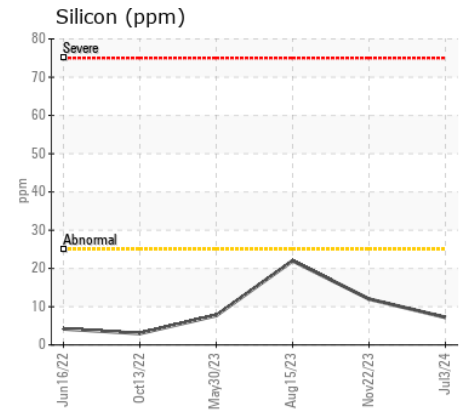
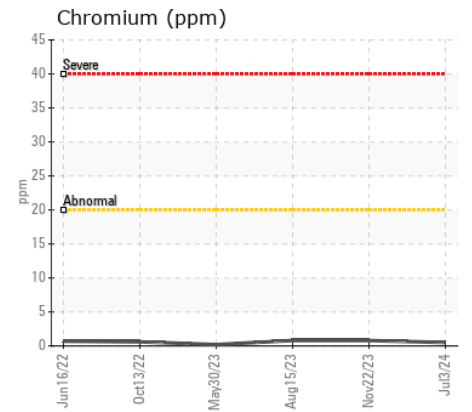
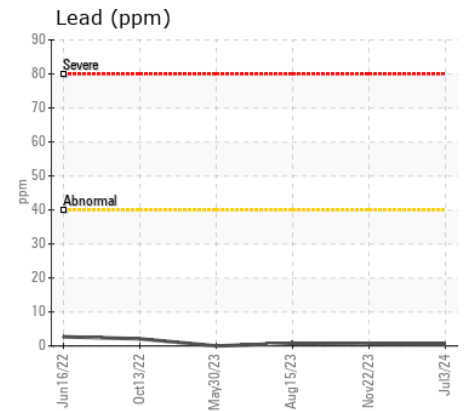
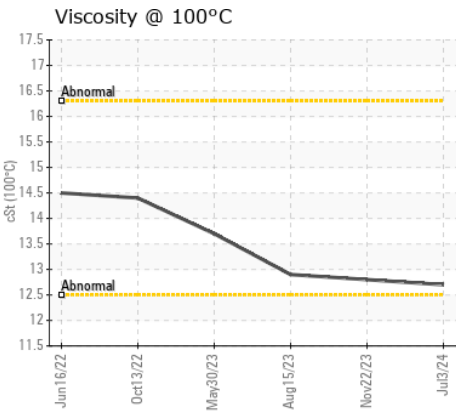
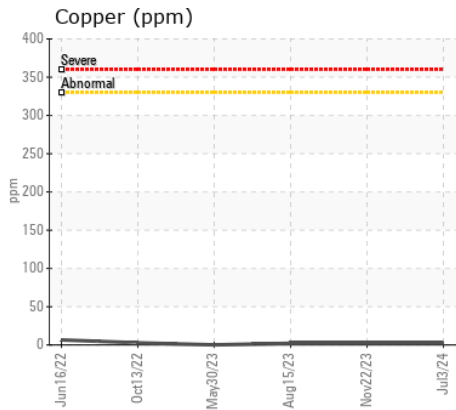
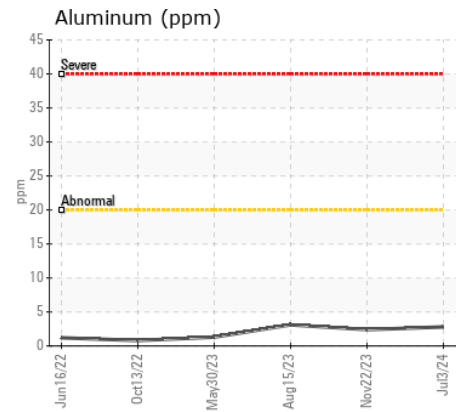
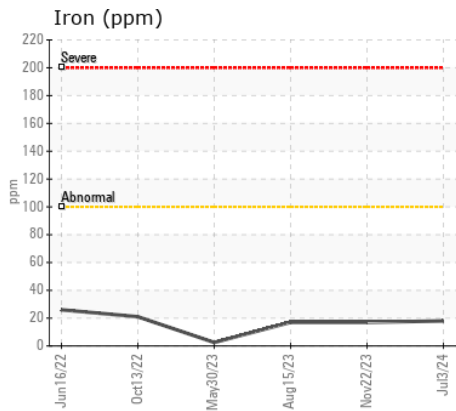
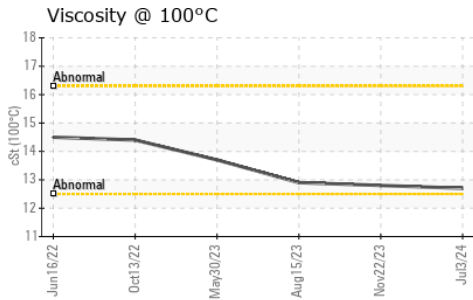
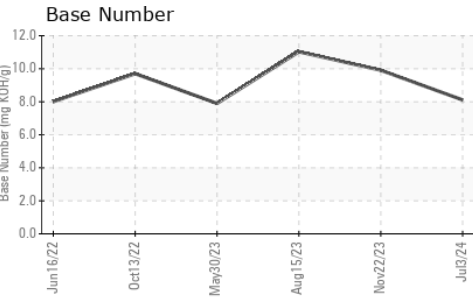
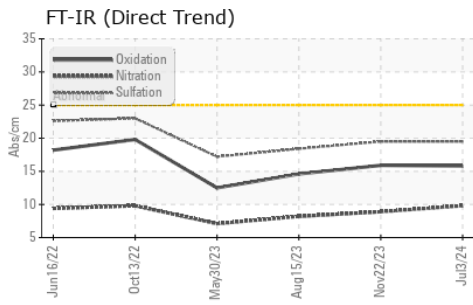
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	12	22
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	5
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>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	8.9	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	19.5	18.4
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>3</b>	4	9
Boron	ppm	ASTM D5185m	6.3	<b>43</b>	42	72
Barium	ppm	ASTM D5185m	0.6	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	0.4	<b>86</b>	82	122
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	277	<b>108</b>	149	285
Calcium	ppm	ASTM D5185m	1514	<b>2148</b>	1975	2910
Phosphorus	ppm	ASTM D5185m	634	<b>1035</b>	871	1412
Zinc	ppm	ASTM D5185m	743	<b>1229</b>	1161	1705
Sulfur	ppm	ASTM D5185m	2592	<b>3541</b>	4073	5527
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	15.9	14.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.11</b>	9.91	11.03
Visc @ 100°C	cSt	ASTM D445		<b>12.7</b>	12.8	12.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LP0001277  
**Lab Number** : 06237067  
**Unique Number** : 11125901  
**Test Package** : MOB 2  
**Received** : 15 Jul 2024  
**Tested** : 17 Jul 2024  
**Diagnosed** : 17 Jul 2024 - Wes Davis

**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)