



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



Machine Id  
**MACK RD688S V78**  
Component  
**Transmission (Manual)**  
Fluid  
**GEAR OIL SAE 80W140 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0219620</b>	JR0206779	JR0144844
Sample Date		Client Info		<b>27 Jun 2024</b>	27 Mar 2024	24 Oct 2023
Machine Age	hrs	Client Info		<b>7586</b>	7245	0
Oil Age	hrs	Client Info		<b>2654</b>	2313	1797
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>95	<b>22</b>	14	9
Iron	ppm	ASTM D5185m	>200	<b>15</b>	11	29
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>7	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>225	<b>1</b>	2	7
Tin	ppm	ASTM D5185m	>10	<b>0</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

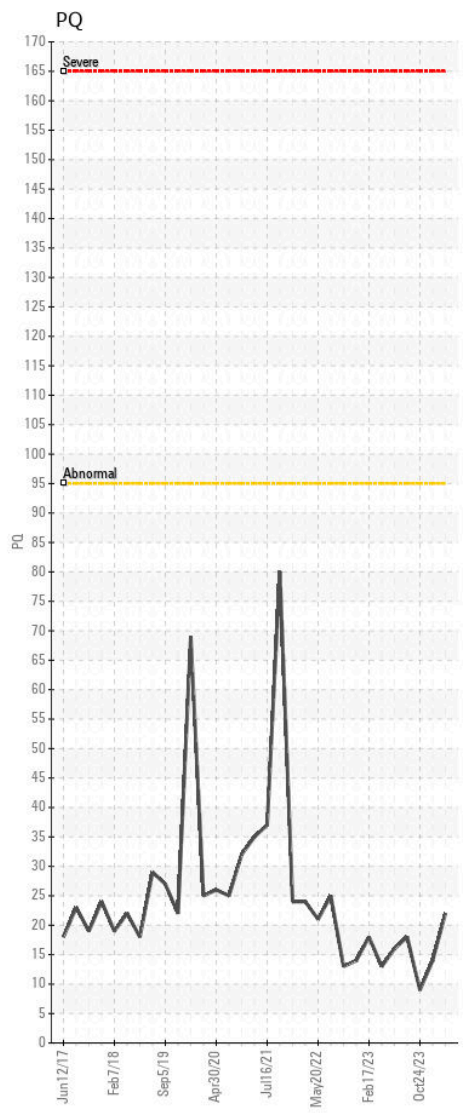
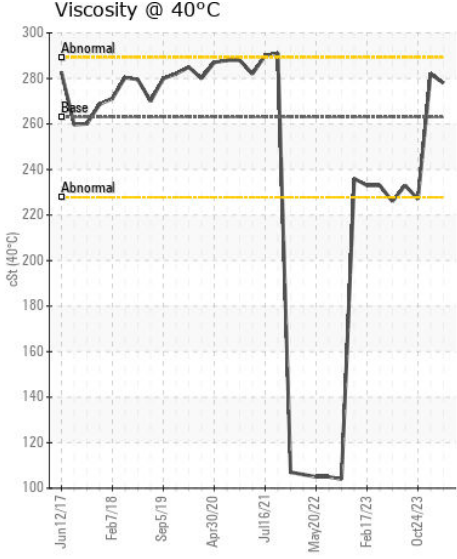
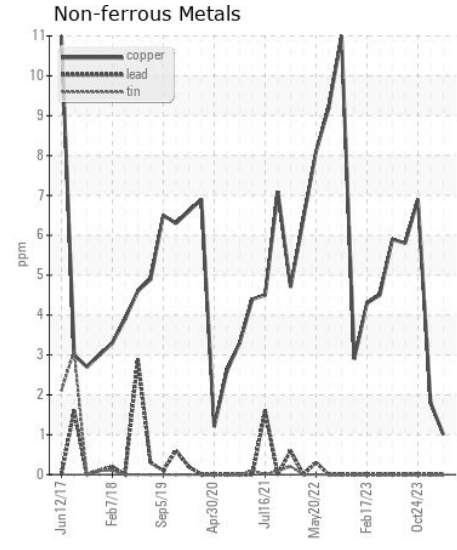
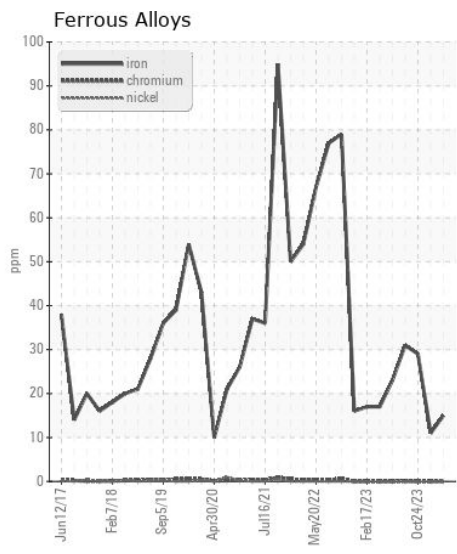
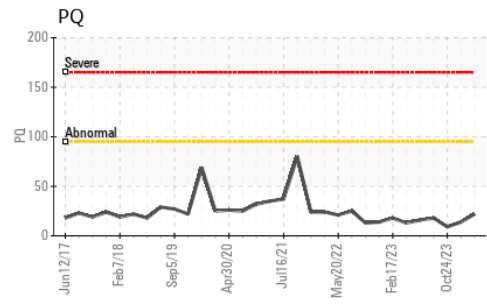
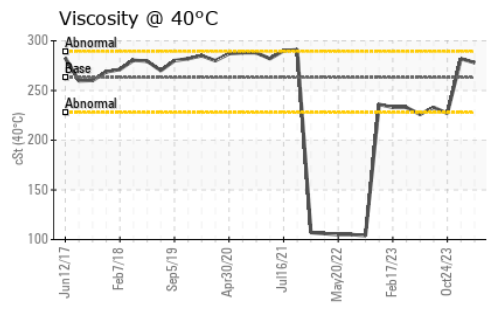
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>125	<b>4</b>	3	10
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
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	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>2</b>	<1	2
Boron	ppm	ASTM D5185m	400	<b>252</b>	266	257
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	12	<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m	150	<b>4</b>	5	4
Phosphorus	ppm	ASTM D5185m	1650	<b>1059</b>	1036	1051
Zinc	ppm	ASTM D5185m	125	<b>0</b>	0	6
Sulfur	ppm	ASTM D5185m	22500	<b>21570</b>	21032	16221
Visc @ 40°C	cSt	ASTM D445	263	<b>278</b>	282	227



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0219620 **Received** : 02 Jul 2024  
**Lab Number** : 06226487 **Tested** : 03 Jul 2024  
**Unique Number** : 11109980 **Diagnosed** : 03 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**MATTHEWS CONSTRUCTION**  
 127 GRAYSON RD  
 ROCK HILL, SC  
 US 29732  
 Contact: Tad Clinton  
 tclinton@matthewsconstructionco.com  
 T: (803)207-5607  
 F:

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)