



# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id

## MACK GR64B R07 (S/N 1198832)

Component

Rear Differential

Fluid

GEAR OIL SAE 75W90 (--- QTS)

### DIAGNOSIS

#### ▲ Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### ▲ Contamination

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			TR06133547	---	---
Sample Date	Client Info			04 Mar 2024	---	---
Machine Age	mls	Client Info		176811	---	---
Oil Age	mls	Client Info		0	---	---
Oil Changed	Client Info			Changed	---	---
Sample Status				ABNORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>.2	NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>1200	323	---	---
Chromium	ppm	ASTM D5185m	>8	2	---	---
Nickel	ppm	ASTM D5185m	>20	14	---	---
Titanium	ppm	ASTM D5185m	>4	0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>30	1	---	---
Lead	ppm	ASTM D5185m	>25	0	---	---
Copper	ppm	ASTM D5185m	>50	2	---	---
Tin	ppm	ASTM D5185m	>5	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

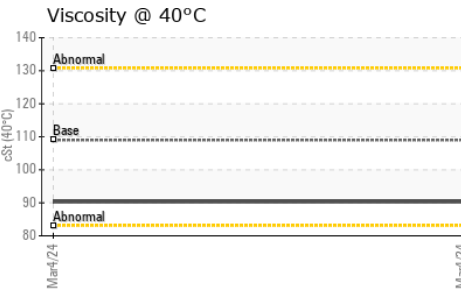
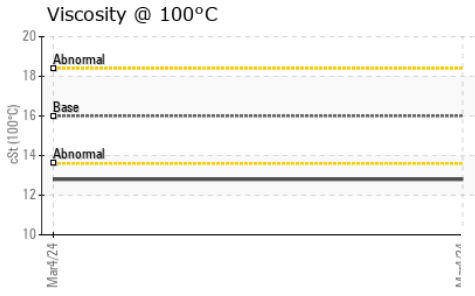
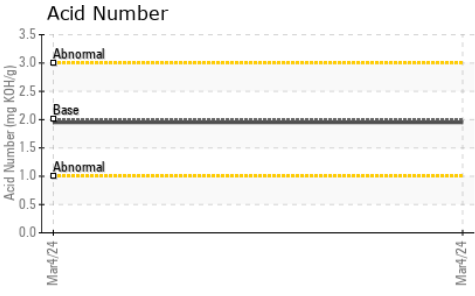
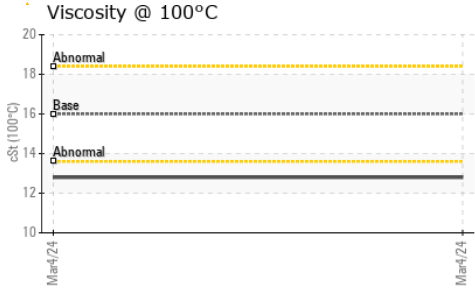
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	173	---	---
Barium	ppm	ASTM D5185m	200	0	---	---
Molybdenum	ppm	ASTM D5185m	12	0	---	---
Manganese	ppm	ASTM D5185m		5	---	---
Magnesium	ppm	ASTM D5185m	12	0	---	---
Calcium	ppm	ASTM D5185m	150	7	---	---
Phosphorus	ppm	ASTM D5185m	1650	1376	---	---
Zinc	ppm	ASTM D5185m	125	6	---	---
Sulfur	ppm	ASTM D5185m	22500	27202	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>230	▲ 274	---	---
Sodium	ppm	ASTM D5185m		7	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	1.95	---	---



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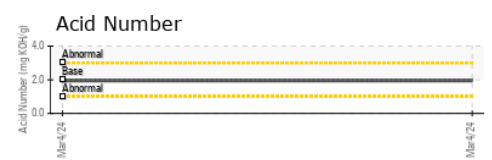
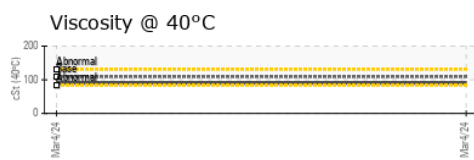
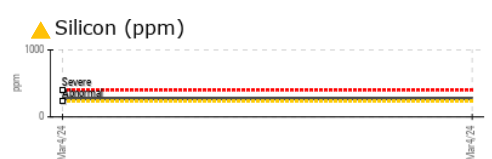
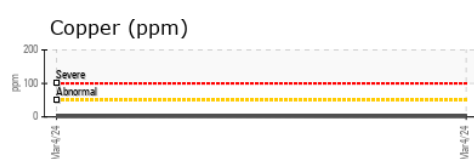
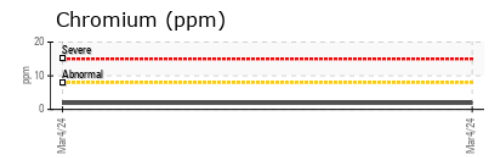
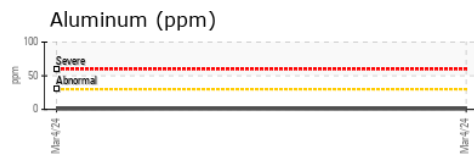
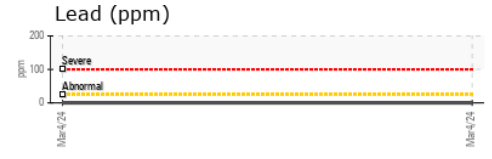
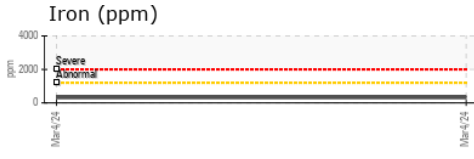


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	90.3	---
Visc @ 100°C	cSt	ASTM D445	16.0	12.8	---
Viscosity Index (VI)	Scale	ASTM D2270	157	139	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06133547      **Received** : 29 Mar 2024  
**Lab Number** : 06133547      **Tested** : 01 Apr 2024  
**Unique Number** : 10953012      **Diagnosed** : 03 Apr 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**NORTHWEST REFUSE SERVICE**  
 2001 WINDSOR AVE  
 BALTIMORE, MD  
 US 21217  
 Contact: JASON

To discuss this sample report, contact Customer Service at 1-800-827-0711.

\* - 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)