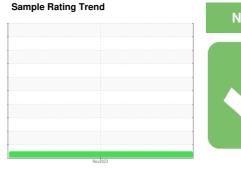


# **OIL ANALYSIS REPORT**

# [BOSTON] **ALSTOM 2014**

Component Rear Right Gearbox

**TOTAL CARTER SH 220 (--- GAL)** 





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

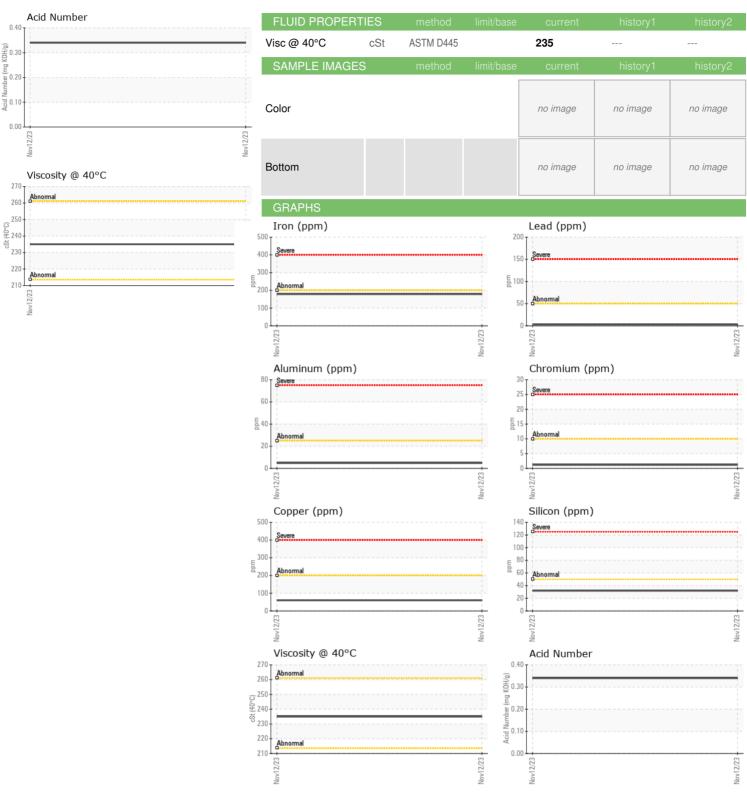
### **Fluid Condition**

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

				Nov2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0649713		
Sample Date		Client Info		12 Nov 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	179		
Chromium	ppm	ASTM D5185m	>10	1		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	5		
Lead	ppm	ASTM D5185m	>50	3		
Copper	ppm	ASTM D5185m	>200	60		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m	710	0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m		1		
Calcium	ppm	ASTM D5185m		11		
Phosphorus	ppm	ASTM D5185m		398		
Zinc	ppm	ASTM D5185m		120		
Sulfur	ppm	ASTM D5185m		3782		
CONTAMINANTS		method	limit/base	current	hictory1	hictory2
					history1	history2
Silicon	ppm	ASTM D5185m	>50	32		
Sodium	ppm	ASTM D5185m		47		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.34		
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	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
·58·58) Rev: 1			C	ntact/Location	MICHAEL POE	TED AMTDA



## **OIL ANALYSIS REPORT**





Certificate L2367

Laboratory Sample No. Lab Number

**Unique Number** Test Package : MOB 2

: WC0649713 : 06011049 : 10750193

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: 17 Nov 2023 : 20 Nov 2023 Diagnostician : Wes Davis

**AMTRAK** 1401 W STREET NE, HIGH SPEED RAIL 2ND FLOOR

WASHINGTON, DC US 20018

Contact: MICHAEL PORTER michael.porter@amtrak.com T: (202)870-1399

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.

Contact/Location: MICHAEL PORTER - AMTRAK

F: