

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend



# TOWER 15P (S/N 002161436-1-1)

Left Gearbox

Fluid SHELL MORLINA S4 B 220 (18 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

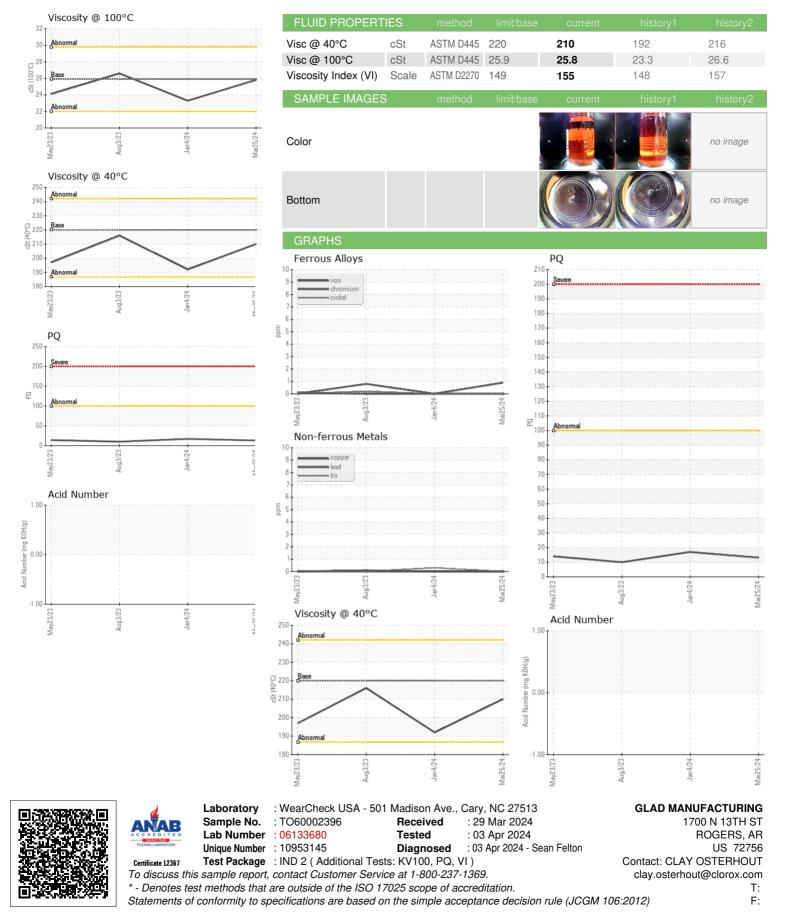
#### Fluid Condition

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

SAMPLE INFORM Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATION Water	ATION hrs hrs	method Client Info Client Info Client Info Client Info	limit/base	current TO60002396 25 Mar 2024	history1 TO60001394 04 Jan 2024	history2 TO60001115 03 Aug 2023
Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATION Water		Client Info Client Info				
Machine Age Oil Age Oil Changed Sample Status CONTAMINATION Water		Client Info		25 Mar 2024	04 Jan 2024	03 Aug 2023
Oil Age Oil Changed Sample Status CONTAMINATION Water				20 11101 2021		0071092020
Oil Changed Sample Status CONTAMINATION Water	hrs	Client Info		0	0	0
Sample Status CONTAMINATION Water				0	0	0
CONTAMINATION		Client Info		N/A	N/A	N/A
Water				NORMAL	NORMAL	NORMAL
	I	method	limit/base	current	history1	history2
		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		13	17	10
Iron	ppm	ASTM D5185m	>200	<1	0	<1
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>200	0	0	<1
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m	20	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
	ppm			-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	3	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		294	247	291
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m		734	931	725
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	1	2	11
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	1
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	scalar	*Visual	>0.2	NEG	NEG	NEG
Emulsified Water	Jouran				INLG	NLG



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Page 2 of 2