

# **PROBLEM SUMMARY**

### Sample Rating Trend

# VISCOSITY



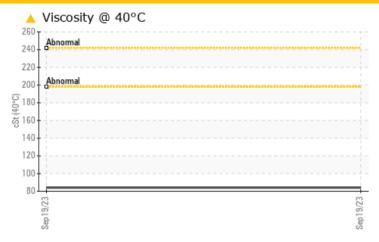
# TWIN DISC RH BEYMER

Component

**Port Gearbox** 

KENDALL D3 40WT (--- GAL)

### COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status			ATTENTION				
Visc @ 40°C	cSt	ASTM D445	<u></u> <b>▲ 84.1</b>				

Customer Id: SUPCHEOH
Sample No.: WC0843979
Lab Number: 05966739
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

### RECOMMENDED ACTIONS

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**

### Sample Rating Trend

### VISCOSITY



# TWIN DISC RH BEYMER

Component

**Port Gearbox** 

KENDALL D3 40WT (--- 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 oil viscosity is lower than normal. The condition of the oil is acceptable for the time in service.

						\
				Sep 2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0843979		
Sample Date		Client Info		19 Sep 2023		
Machine Age	hrs	Client Info		32019		
Oil Age	hrs	Client Info		1000		
Oil Changed		Client Info		Not Changd		
Sample Status				ATTENTION		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	5		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		32		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>25	2		
Lead	ppm	ASTM D5185m	>50	<1		
Copper	ppm	ASTM D5185m	>200	0		
Tin	ppm	ASTM D5185m	>10	0		
.,	nnm	ASTM D5185m		<1		
Vanadium	ppm	AO HVI DO TOOTH				
Vanadium Cadmium	ppm	ASTM D5185m		0		
			limit/base			
Cadmium		ASTM D5185m	limit/base	0		
Cadmium  ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	history1	history2
Cadmium  ADDITIVES  Boron	ppm	ASTM D5185m  method  ASTM D5185m	limit/base	current 84	history1	history2
Cadmium  ADDITIVES  Boron  Barium	ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m	limit/base	0 current 84 0	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum	ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m	limit/base	0 current 84 0 26	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese	ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 84 0 26 <1	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	limit/base	0 current 84 0 26 <1 174	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium	ppm ppm ppm ppm ppm ppm	Method ASTM D5185m	limit/base	0 current 84 0 26 <1 174 2337	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus	ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m Method ASTM D5185m	limit/base	0 current 84 0 26 <1 174 2337 1000	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm	Method  ASTM D5185m	limit/base	0 current 84 0 26 <1 174 2337 1000 1140	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	ppm	Method ASTM D5185m Method ASTM D5185m		0 current 84 0 26 <1 174 2337 1000 1140 3951	history1	history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS	ppm	Method  ASTM D5185m  Method  ASTM D5185m	limit/base	0 current 84 0 26 <1 174 2337 1000 1140 3951 current	history1 history1	history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon	ppm	Method ASTM D5185m Method ASTM D5185m	limit/base	0 current  84 0 26 <1 174 2337 1000 1140 3951 current 3	history1 history1	history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium	ppm	Method ASTM D5185m Method ASTM D5185m	limit/base >50	0 current  84 0 26 <1 174 2337 1000 1140 3951 current  3 3	history1 history1	history2 history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium	ppm	Method ASTM D5185m Method ASTM D5185m	limit/base >50 >20	0 current 84 0 26 <1 174 2337 1000 1140 3951 current 3 3 <1	history1 history1 history1	history2 history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  VISUAL	ppm	ASTM D5185m  method  ASTM D5185m  MSTM D5185m  ASTM D5185m	limit/base >50 >20 limit/base	0	history1 history1 history1	history2 history2 history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  VISUAL  White Metal	ppm	Method ASTM D5185m Method ASTM D5185m  Method ASTM D5185m	limit/base >50 >20 limit/base NONE	0	history1 history1 history1 history1	history2 history2 history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  VISUAL  White Metal  Yellow Metal	ppm	Method ASTM D5185m Method ASTM D5185m Method ASTM D5185m	limit/base >50 >20 limit/base NONE	0	history1 history1 history1 history1	history2 history2 history2 history2
Cadmium  ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  VISUAL  White Metal  Yellow Metal  Precipitate	ppm	method ASTM D5185m Method ASTM D5185m method ASTM D5185m Wethod *Visual	limit/base >50 >20 limit/base NONE NONE NONE	0	history1 history1 history1 history1	history2 history2 history2 history2

Visc @ 40°C

Appearance

Free Water

**Emulsified Water** 

**FLUID PROPERTIES** 

Odor

cSt

scalar

scalar

method ASTM D445

\*Visual

\*Visual

scalar \*Visual

scalar \*Visual

NORML NORML

limit/base

>0.2

**A** 84.1

**NORML** 

**NORML** 

current

**NEG** 

**NEG** 

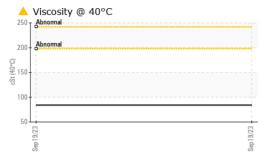
history1

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history2

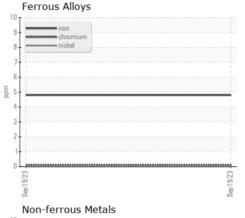


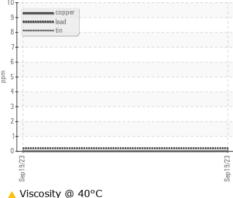
## **OIL ANALYSIS REPORT**

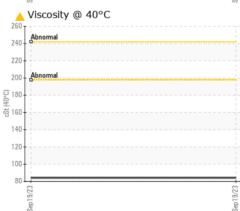




#### **GRAPHS**











Certificate L2367

Laboratory Sample No. Lab Number

: WC0843979 : 05966739 Unique Number : 10673290 Test Package : FLEET

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

: 02 Oct 2023 : 04 Oct 2023 Diagnostician : Don Baldridge **SUPERIOR MARINE** 201 KELLY LANE

CHESAPEAKE, OH US 45619

Contact: DARRELL KEARNS

To discuss this sample report, contact Customer Service at 1-800-237-1369.

darrellkearns@superiormarineinc.com T:

\* - 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)

Report Id: SUPCHEOH [WUSCAR] 05966739 (Generated: 10/04/2023 14:34:12) Rev: 2

Contact/Location: DARRELL KEARNS - SUPCHEOH

F: