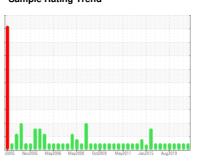


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



Machine Id

14

Component

Turbine

Fluid

**R&O OIL ISO 68 (--- QTS)** 

### 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. The amount and size of particulates present in the system are acceptable.

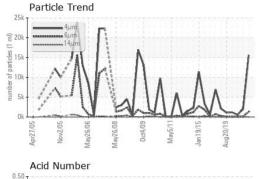
## **Fluid Condition**

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

c2005 New2005 May2006 May2006 Occ2009 May2011 Jan2015 Aug2019						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0813277	WC0700728	WC0577550
Sample Date		Client Info		13 Aug 2023	14 Sep 2022	16 Nov 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	5	3	3
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>5	1	<1	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	<1	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	5	6	<1	0
Calcium	ppm	ASTM D5185m	5	0	0	0
Phosphorus	ppm	ASTM D5185m	100	3	0	2
Zinc	ppm	ASTM D5185m	25	32	13	6
Sulfur	ppm	ASTM D5185m	1500	19	31	108
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	3	<1	1
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	0	1	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4μm		ASTM D7647		15598	2011	556
Particles >6µm		ASTM D7647	>1300	1299	111	61
Particles >14μm		ASTM D7647	>160	23	4	3
Particles >21µm		ASTM D7647	>40	4	1	2
Particles >38μm		ASTM D7647	>10	0	0	0
Particles >71μm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/17/14	21/17/12	18/14/9	16/13/9
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.08	0.093	0.06	0.069



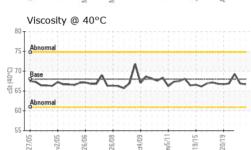
## **OIL ANALYSIS REPORT**



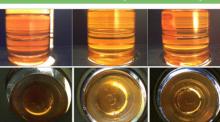
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.03	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

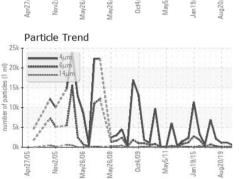
- 61 61

FLUID PROPERTIES		method			history1	history	
Visc @ 40°C	cSt	ASTM D445	68	66.7	66.9	69.31	









Ferrous Alloys	Particle Count	
	491,520	
iron	122,880 +	
nickel	122,000	
	30,720	+
1000	7,680	
Apr27/05 Nov2/05 May26/06 May26/08 Oct4/09 Jan19/15	Aug20/19	
Apr2 May2 Oct Mar	1,920 bed 1,920	
Non-ferrous Metals	Aug20/19 1,920 1941 1970 1970 1970 1970 1970 1970 1970 197	
<u> </u>	5 120	
copper	120	
sessesses til	30	-
<b>\</b> ~ \ \ . / \	8 Shrasemal	
MAN MANNE	Borbella	
Apr27/05 Nov2/05 Nay26/06 May26/08 Oct4/09 Jan19/15	Z- 2-	
Apr May May Jan	0	38μ 71
Viscosity @ 40°C	4μ 6μ 14μ 21μ Acid Number	30μ / 1
Abnormal	Abnormal  Abnormal  Abnormal  Abnormal	
Δ.	20.40	
Base	E 0.30 Abnormal	
Abnormal	8 0 10 Bas A	/\_
nov2.05 nov2.05 nov2.05 nov2.06 nov2.06 nov2.07 nov2.0	B 0 00 Abnormal	an 19/15 ug 20/19

: 14 Aug 2023

: 15 Aug 2023





Certificate L2367

Laboratory Sample No.

Lab Number

: 05923405 Unique Number : 10603352

Color

**Bottom** 

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0813277 Received Diagnosed

Diagnostician : Don Baldridge

Test Package : IND 2 (Additional Tests: KF) 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) **AURIA SOLUTIONS** 

P.O. Box 580 Albemarle, NC US 28001

Contact: STEPHEN MOSS smoss@iacna.com

T: (704)983-8334 F: (704)983-8372

Report Id: COLALB [WUSCAR] 05923405 (Generated: 08/15/2023 12:50:49) Rev: 1

Contact/Location: STEPHEN MOSS - COLALB