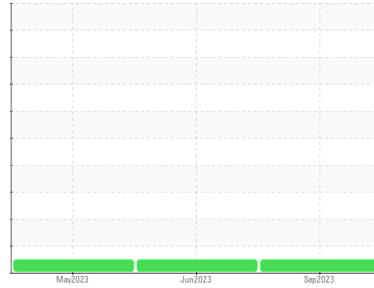




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
FLIGHT SIMULATOR DORNIER 328
 Component
Hydraulic System
 Fluid
SHELL TELLUS 46 (400 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

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			PH0000187	PH0000542	PH0000553
Sample Date	Client Info			18 Sep 2023	26 Jun 2023	12 May 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	0
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	0
Lead	ppm	ASTM D5185m	>20	4	2	1
Copper	ppm	ASTM D5185m	>20	<1	<1	<1
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

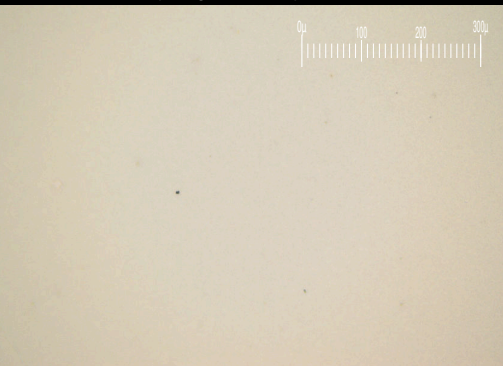
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0.0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	11	5	6	0
Calcium	ppm	ASTM D5185m	35	34	38	38
Phosphorus	ppm	ASTM D5185m	266	251	275	250
Zinc	ppm	ASTM D5185m	276	300	325	273
Sulfur	ppm	ASTM D5185m	1847	1425	1756	1481

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	0	0
Sodium	ppm	ASTM D5185m		0	<1	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	244	63	140
Particles >6µm		ASTM D7647	>320	56	30	51
Particles >14µm		ASTM D7647	>40	6	6	9
Particles >21µm		ASTM D7647	>10	2	1	1
Particles >38µm		ASTM D7647	>3	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/12	15/13/10	13/12/10	14/13/10

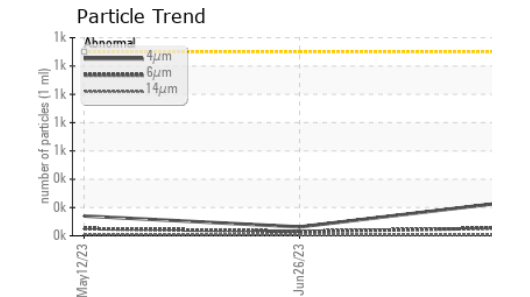
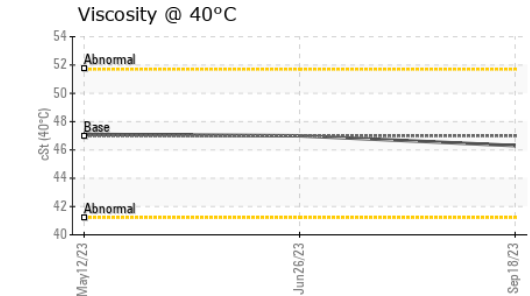
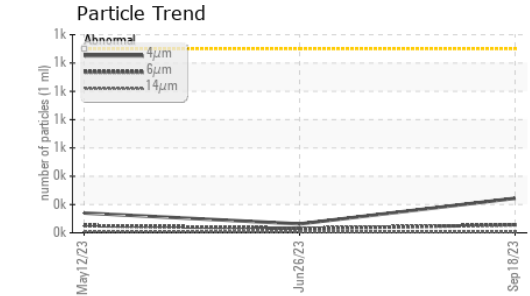
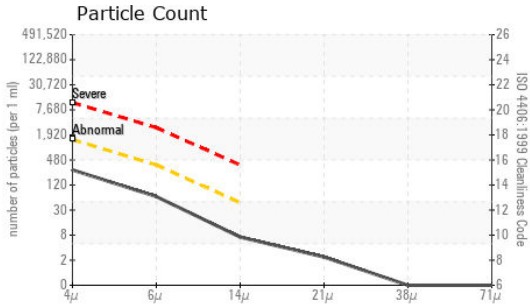
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.36	0.30	0.34	0.29

Particle Filter (Magn: 200 x)





OIL ANALYSIS REPORT



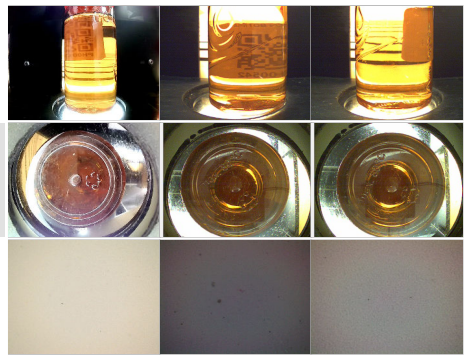
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0000187 **Received** : 22 Sep 2023
Lab Number : 05959064 **Diagnosed** : 28 Sep 2023
Unique Number : 10660277 **Diagnostician** : Doug Bogart
Test Package : PLANT (Additional Tests: PrtFilter)

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)

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.99	46.3	47.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					



GRAPHS

