

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# TOSHIBA A-02 (S/N 744703)

Hydraulic System

### AW HYDRAULIC OIL ISO 46 (124 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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.

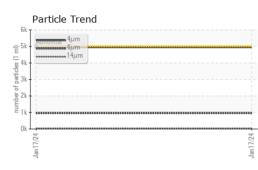
				Jan2024		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0534540		
Sample Date		Client Info		17 Jan 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	5		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	20		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m	20	0		
Cadmium	ppm	ASTM D5185m		0		
	ppm			-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0		
Barium	ppm	ASTM D5185m	5	0		
Molybdenum	ppm	ASTM D5185m	5	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	25	15		
Calcium	ppm	ASTM D5185m	200	62		
Phosphorus	ppm	ASTM D5185m	300	418		
Zinc	ppm	ASTM D5185m	370	509		
Sulfur	ppm	ASTM D5185m	2500	1599		
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2		
Sodium	ppm	ASTM D5185m		2		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	4948		
Particles >6µm		ASTM D7647	>1300	953		
Particles >14µm		ASTM D7647	>160	51		
Particles >21µm		ASTM D7647	>40	12		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13		
Oil Cleanliness FLUID DEGRADA		ISO 4406 (c) method	>19/17/14 limit/base	19/17/13 current	 history1	 history2
	TION mg KOH/g	( )				

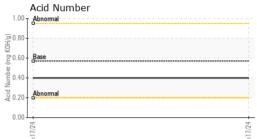
Report Id: NIAERI [WUSCAR] 06064275 (Generated: 01/21/2024 10:01:08) Rev: 1

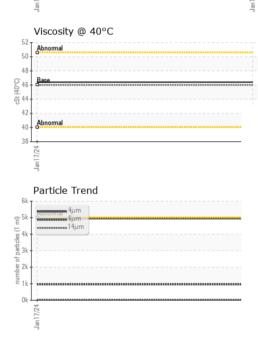
Contact/Location: JOE SANDERS - NIAERI



## **OIL ANALYSIS REPORT**







					nistory i	nistory2
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	>0.05	NEG		
Free Water	scalar	*Visual	>0.05	NEG		
			Pare 1 de la colo	_		
FLUID PROPERTI		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.4		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys				Particle Count		
iron			491,520			T <sup>26</sup>
non chromium			122,880			-24
1			20.720	Severe		
-			30,720	1 may 1		-22
L				Abnormal		-20
Jan 17/24			Jan 17/24 (per 1 ml)			
Jan1			(Jan 1,920) s (ber )			-18
Non-ferrous Metals	5		- 480	1		-16
copper 1			er of p		· ·	-18 -16 -14
copper			Jan 17/24 1300 17/24 1001 17/24			-14
- tin			30			-12
			8		/	-10
7/24			42/2			-8
Jan 17/24			Jan17/24			
Viscosity @ 40°C			-0- 4	u 6ju	14µ 21µ	38µ 71µ
 T			_ 1.00	Acid Number		
Abnormal			BHO 0.80	1		
			Ĕ 0.60	Base		
Abnormal			(0,100) (0,10) (0,100)			
- O			N p 0.20	Abnormal		
4			0.00	4		٩
Jan 17/24			Jan 17/24	Jan 17/24		1011
WearCheck USA - 50 WC0534540 F 06064275 E	Recieved Diagnose	i :18. ed :21.			<b>GARA PLASTIC</b> 7090 E	

\* - 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)

To discuss this sample report,

Certificate L2367

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Laboratory

Sample No.

Lab Number **Unique Number Test Package** 

Contact/Location: JOE SANDERS - NIAERI

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