

## **OIL ANALYSIS REPORT**

### Area LCAC-81 **LCAC-81 MAIN ENGINES**

2 Lube System Fluid MILITARY MIL-L-23699D (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please note that this is a corrected copy for diagnostic comment updates. Please note that this is a corrected copy for diagnostic comment updates.

#### Wear

All component wear rates are normal.

#### Contamination

Discrete particle counts [100 ml] 5-15µm = 82400, 15-25μm = 5000, 25-50μm = 1400, 50-100μm = 100, >100µm = 100. Class 8 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.



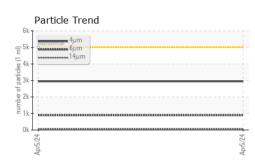
Sample Rating Trend

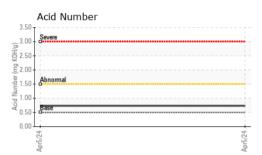


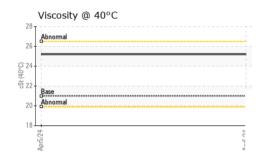
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0865251		
Sample Date		Client Info		05 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	<1		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	<1		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	nnm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
	ppm	ASTM D5185m		0		
Manganese Magnesium	ppm	ASTM D5185m		2		
Calcium	ppm	ASTM D5185m		2		
	ppm	ASTM D5185m		3 1460		
Phosphorus	ppm					
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		3		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	<1		
Water	%	ASTM D6304	>0.05	NEG		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	2940		
Particles >6µm		ASTM D7647	>1300	890		
Particles >14µm		ASTM D7647	>160	66		
Particles >21µm		ASTM D7647	>40	16		
Particles >38µm		ASTM D7647	>10	2		
Particles >71µm		ASTM D7647	>3	1		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.5	0.73		

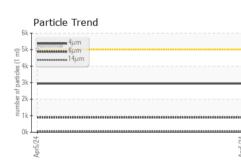


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 VISUAL		method	limit/base	current	history1	history
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	LIGHT		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.05	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPER	TIES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D445	21.0	25.2		
SAMPLE IMAGE	S	method	limit/base	current	history1	history
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys				Particle Count	t	
10 iron			491,520	I		
o toronium			122,880	-		
Ed 4			30,720	Severe		
2						
				Abnormal		
Apr5/24			Apr5/24 . per 1 ml)			
			cles (p	1		
Non-ferrous Met	31S		+2/2/21de (ber 1 ml)			
8 - copper			jage 120			
			2 30			
ā 4-						
2						
Apr5/24			5/24			
Apri			Apr5/24			
Viscosity @ 40°C	;		ž	4µ 6µ Acid Number	14µ 21µ	38µ 71
Abnormal			€ 4.00			
26				- Severe		
ට 24 භේ 22 ස් <sup>22</sup> Base			ັ <u></u> ຍ 2.00	Abnormal		
20 Abnormal			4.00 3.00 2.00 9.00 Primper 1.00 View 9.00 View	Dees		
18			Acid	Uiase D		
Apr5/24			Apr5/24	Apr5/24		
Api			Api	Ap		
: WearCheck USA - 5 : WC0865251 : 06148631 : 10978709	Rece Teste	ived :15 ed :18	r, NC 27513 5 Apr 2024 3 Apr 2024 Apr 2024 - Ange			<b>L &amp; MARINE</b> ICKINLEY A DNAL CITY, US 91

Certificate 12367 

Test Package : PLANT 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)

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