

OIL ANALYSIS REPORT



Machine Id **CTG-200** mponent **Reservoir Turbine** Fluid MOBIL SHC 824 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

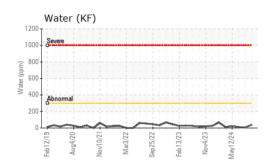
Fluid Condition

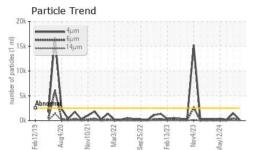
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

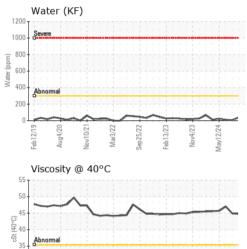
12019 Aug2020 Nov2021 Mar2022 Sap2022 Feb2023 Nov2023 Nav2024									
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2			
Sample Number		Client Info		RP0043313	RP0043285	RP0043286			
Sample Date		Client Info		24 Jun 2024	04 Jun 2024	13 May 2024			
Machine Age	hrs	Client Info		0	0	0			
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	0	1	0			
Chromium	ppm	ASTM D5185m	>4	0	0	0			
Nickel	ppm	ASTM D5185m	>2	<1	0	<1			
Titanium	ppm	ASTM D5185m		0	0	0			
Silver	ppm	ASTM D5185m		0	0	0			
Aluminum	ppm	ASTM D5185m	>10	0	0	<1			
Lead	ppm	ASTM D5185m		0	0	0			
Copper	ppm	ASTM D5185m	>5	0	<1	0			
Tin	ppm	ASTM D5185m	>5	0	0	<1			
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			
Barium	ppm	ASTM D5185m		0	0	<1			
Molybdenum	ppm	ASTM D5185m		0	0	0			
Manganese	ppm	ASTM D5185m		<1	0	<1			
Magnesium	ppm	ASTM D5185m		0	<1	3			
Calcium	ppm	ASTM D5185m		0	0	<1			
Phosphorus	ppm	ASTM D5185m		1177	1010	1088			
Zinc	ppm	ASTM D5185m		0	1	0			
CONTAMINANTS		method	limit/base	current	history1	history2			
Silicon	ppm	ASTM D5185m	>15	<1	<1	0			
Sodium	ppm	ASTM D5185m		2	<1	2			
Potassium	ppm	ASTM D5185m	>20	1	0	2			
Water	%	ASTM D6304	>0.03	0.003	0.001	0.001			
ppm Water	ppm	ASTM D6304	>300	40	7	9			
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2			
Particles >4µm		ASTM D7647	>2500	91	1454	202			
Particles >6µm		ASTM D7647	>640	35	462	48			
Particles >14µm		ASTM D7647	>80	8	50	6			
Particles >21µm		ASTM D7647	>20	4	12	1			
Particles >38µm		ASTM D7647	>4	0	0	0			
Particles >71µm		ASTM D7647	>3	0	0	0			
Oil Cleanliness		ISO 4406 (c)	>18/16/13	14/12/10	18/16/13	15/13/10			
FLUID DEGRADA	TION	method	limit/base	current	history1	history2			
Acid Number (AN)	mg KOH/g	ASTM D8045	0.5	0.045	0.18	0.172			

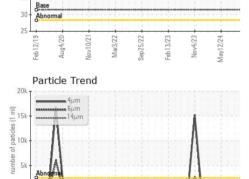


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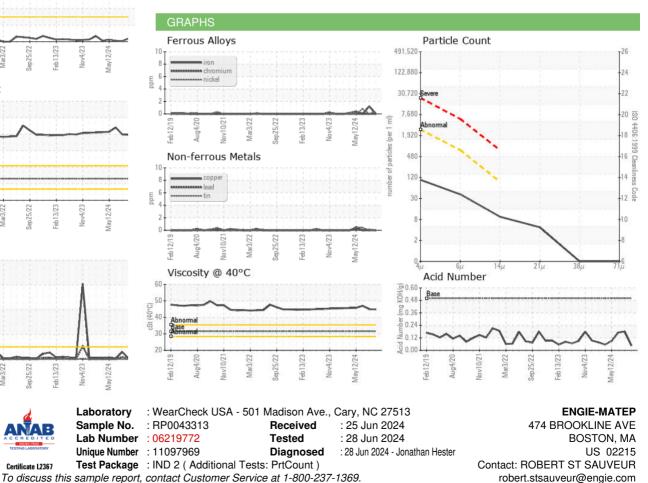


Aar3/23

Feb12/19

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
Emulsified Water	scalar	*Visual	>0.03	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	31.5	44.8	44.9	47.0
SAMPLE IMAGES m		method	limit/base	current	history1	history2
Color						
00101						
				-		

Bottom



* - 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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Certificate 12367

Feb 13/23

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