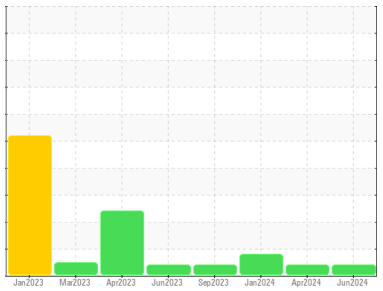
OIL ANALYSIS REPORT

Sample Rating Trend



INSOLUBLES

Machine Id
CATES FG1
Component
Compressor
Fluid
MOBIL SHC 627 (--- 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
MPC (Membrane Patch Colorimetry) test indicates a light concentration of varnish present. The amount and size of particulates present in the system are acceptable.

Fluid Condition
Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil. 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		**WC0896679**	WC0896684	WC0896669
Sample Date		Client Info		**20 Jun 2024**	30 Apr 2024	16 Jan 2024
Machine Age	hrs	Client Info		**121000**	121000	121000
Oil Age	hrs	Client Info		**121000**	230000	121000
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

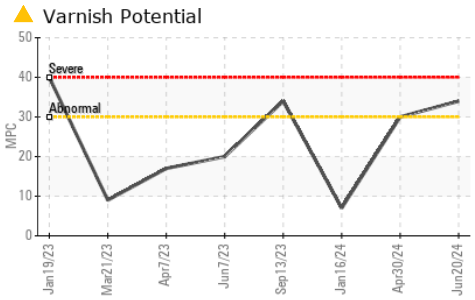
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	<1	0
Chromium	ppm	ASTM D5185m	>5	**<1**	<1	<1
Nickel	ppm	ASTM D5185m		**<1**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>15	**3**	1	2
Lead	ppm	ASTM D5185m	>65	**<1**	<1	0
Copper	ppm	ASTM D5185m	>65	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>10	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

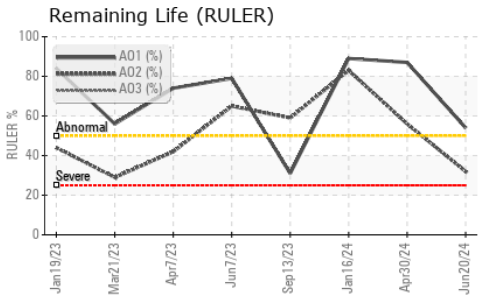
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m		**<1**	<1	0
Calcium	ppm	ASTM D5185m		**0**	23	0
Phosphorus	ppm	ASTM D5185m		**136**	156	149
Zinc	ppm	ASTM D5185m		**2**	12	0
Sulfur	ppm	ASTM D5185m		**457**	329	255

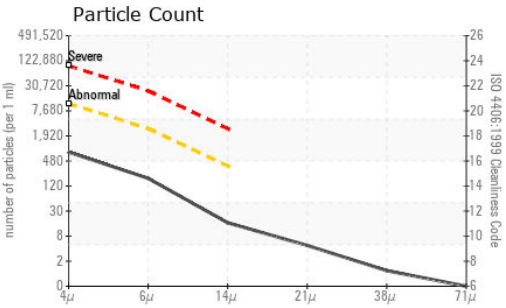
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	**<1**	<1	0
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**1**	<1	<1
Water	%	ASTM D6304	>0.1	**0.084**	0.001	0.003
ppm Water	ppm	ASTM D6304	>1000	**840**	9	31

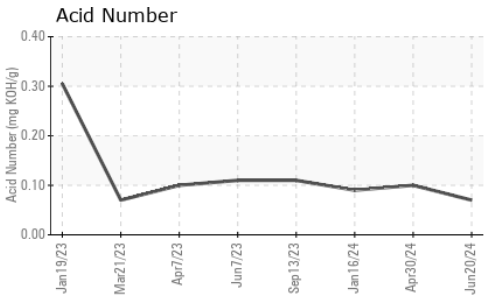
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**687**	749	10608
Particles >6µm		ASTM D7647	>2500	**162**	149	2456
Particles >14µm		ASTM D7647	>320	**14**	11	157
Particles >21µm		ASTM D7647	>80	**4**	3	33
Particles >38µm		ASTM D7647	>20	**1**	0	1
Particles >71µm		ASTM D7647	>4	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**17/15/11**	17/14/11	21/18/14

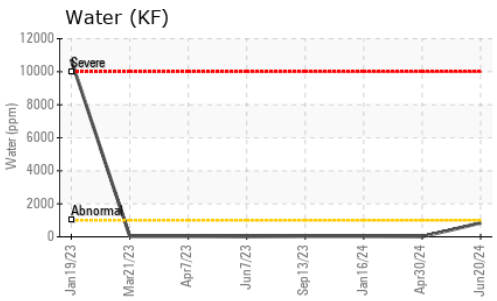
OIL ANALYSIS REPORT









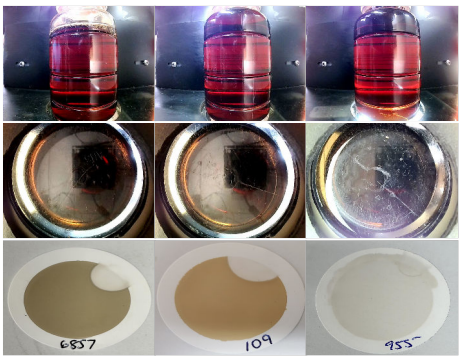


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.07**	0.10	0.09
Anti-Oxidant 1	%	ASTM D6971	<25	**54**	87	89
Anti-Oxidant 2	%	ASTM D6971	<25	**32**	56	83
MPC Varnish Potential	Scale	ASTM D7843	>15	▲ **34**	▲ 30	7

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	>0.1	**0.2%**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	99.1	**120**	123	118

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



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0896679 **Received** : 21 Jun 2024
Lab Number : 06216857 **Tested** : 10 Jul 2024
Unique Number : 11089721 **Diagnosed** : 10 Jul 2024 - Jonathan Hester
Test Package : AOM 1 (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)

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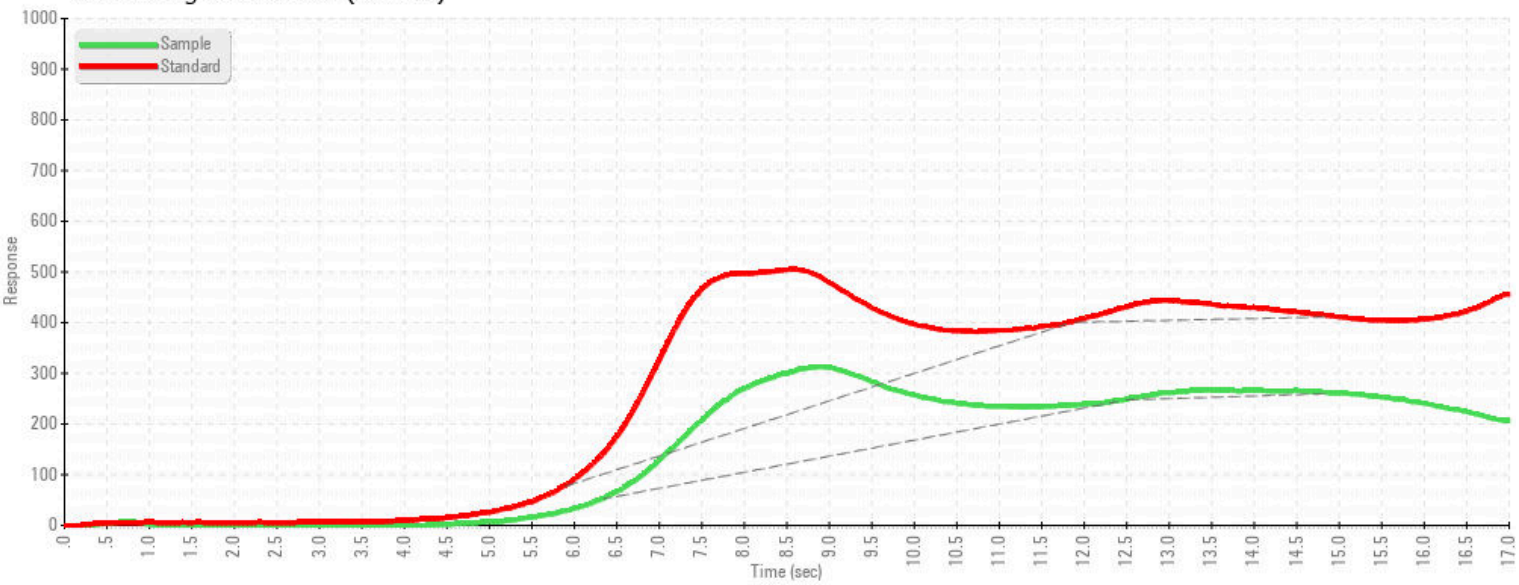
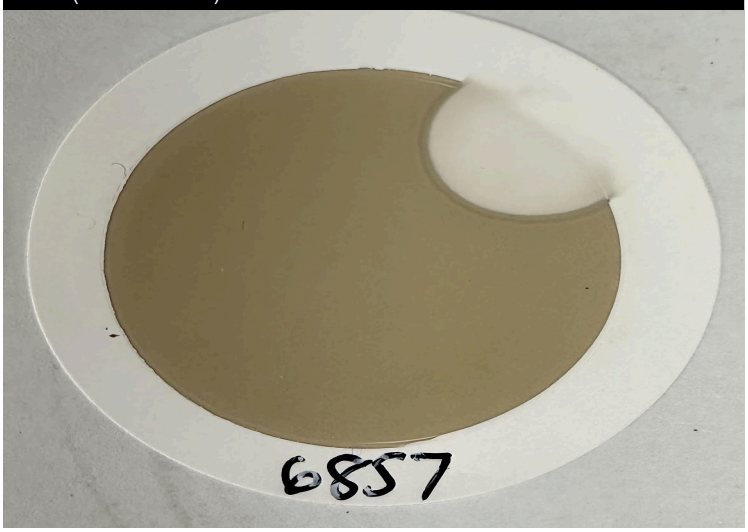
Remaining Useful Life (RULER)



MPC (Varnish Test)



Sample Color & Clarity

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