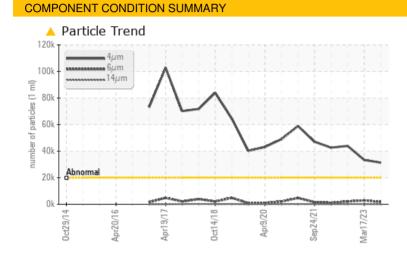


Sample Rating Trend



RECOMMENDATION

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

SHELL OMALA S2 G 220 (13 GAL)

PROBLEMATIC TEST RESULTS							
Sample Status		ATTENTION	ATTENTION	ABNORMAL			
Particles >4µm	ASTM D7647 >20000	0 🔺 31370	▲ 33393	4 3951			
Oil Cleanliness	ISO 4406 (c) >21/19/	/16 🔺 22/18/13	🔺 22/19/14	🔺 23/18/14			

Customer Id: LUBGAS Sample No.: WC0855199 Lab Number: 05965329 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 <u>jhester@wearcheckusa.com</u>

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

17 Mar 2023 Diag: Doug Bogart



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



20 Sep 2022 Diag: Don Baldridge

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN

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



15 Mar 2022 Diag: Don Baldridge



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Area ACRYLIC Machine Id PMX I - AGITATOR Component

Gearbox Fluid

SHELL OMALA S2 G 220 (13 GAL)

DIAGNOSIS

A Recommendation

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

Wear

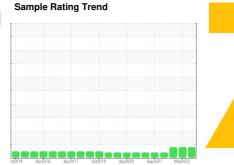
All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

Fluid Condition

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



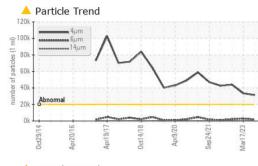


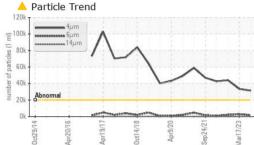
ISO

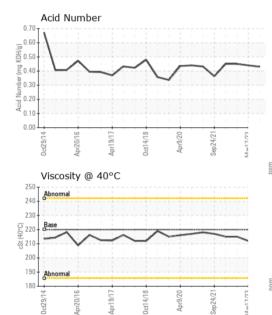
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0855199	WC0771453	WC0741889
Sample Date		Client Info		18 Sep 2023	17 Mar 2023	20 Sep 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		9936	9691	9623
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	7	7	6
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	0	<1
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	0	0	<1
Tin	ppm	ASTM D5185m	>25	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	4.4	5	7	6
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	0	2	0	0
Calcium	ppm	ASTM D5185m	0	22	25	24
Phosphorus	ppm	ASTM D5185m	215	305	325	298
Zinc	ppm	ASTM D5185m	0	0	0	8
Sulfur	ppm	ASTM D5185m	7039	11581	15003	14257
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	1	2	3
Sodium	ppm	ASTM D5185m		<1	<1	0
Potassium	ppm	ASTM D5185m	>20	0	2	0
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	A 31370	▲ 33393	4 3951
Particles >6µm		ASTM D7647	>5000	1757	2918	2119
Particles >14µm		ASTM D7647	>640	74	152	116
Particles >21µm		ASTM D7647	>160	15	24	29
Particles >38µm		ASTM D7647	>40	0	0	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	A 22/18/13	2 2/19/14	▲ 23/18/14
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.43	0.44	0.45



OIL ANALYSIS REPORT

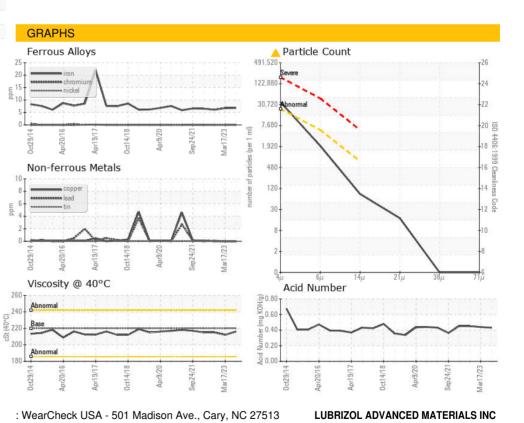






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	216	212	215
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color				•		





Laboratory Sample No. : WC0855199 Received : 29 Sep 2023 207 TELEGRAPH DR Lab Number : 05965329 Diagnosed : 04 Oct 2023 GASTONIA, NC Unique Number : 10671880 Diagnostician : Jonathan Hester US 28056 Test Package : IND 2 (Additional Tests: PrtCount) Contact: TIMOTHY DAVIS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. timothy.davis@lubrizol.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (704)915-4131 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

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Contact/Location: TIMOTHY DAVIS - LUBGAS