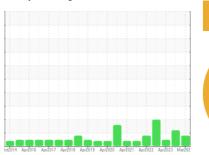


OIL ANALYSIS REPORT

Sample Rating Trend





COMPOUND MT L - AGITATOR

Gearbox

SHELL OMALA S2 G 220 (9 GAL)

Recommendation

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

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

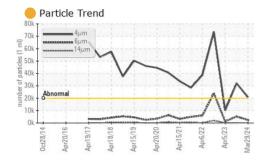
Fluid Condition

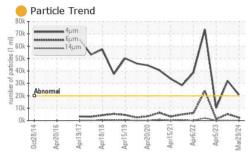
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

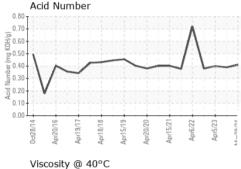
				19 Aprž020 Aprž021 Aprž022 Ap		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0915925	WC0813297	WC0802658
Sample Date		Client Info		29 Mar 2024	02 Oct 2023	05 Apr 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	7	1	2
Chromium	ppm	ASTM D5185m	>15	<1	<1	0
Nickel	ppm	ASTM D5185m	>15	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	0
Lead	ppm	ASTM D5185m	>100	<1	0	<1
Copper	ppm	ASTM D5185m	>200	2	<1	0
Tin	ppm	ASTM D5185m	>25	1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
		mounoa		ourion	Thotory	
Boron	ppm	ASTM D5185m	4.4	4	<1	1
	ppm ppm					
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	4.4	4	<1	1
Boron Barium	ppm	ASTM D5185m ASTM D5185m	4.4 0.0	4 0	<1 0	1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0	4 0 1	<1 0 0	1 0 1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0 0	4 0 1 <1	<1 0 0 0	1 0 1 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0 0	4 0 1 <1 <1	<1 0 0 0 0 <1	1 0 1 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0 0	4 0 1 <1 <1 19	<1 0 0 0 0 <1 14	1 0 1 0 1 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0 0 0 0 0 215	4 0 1 <1 <1 19 508	<1 0 0 0 0 <1 14 223	1 0 1 0 1 1 13 277
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0 0 0 0 215	4 0 1 <1 <1 19 508 28	<1 0 0 0 0 <1 14 223 <1	1 0 1 0 1 13 277
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4.4 0.0 0 0 0 215 0 7039	4 0 1 <1 <1 19 508 28 20146	<1 0 0 0 0 <1 14 223 <1 8631	1 0 1 0 1 13 277 9 10826
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	4.4 0.0 0 0 0 0 215 0 7039	4 0 1 <1 <1 19 508 28 20146 current	<1 0 0 0 <1 14 223 <1 8631 history1	1 0 1 0 1 13 277 9 10826 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	4.4 0.0 0 0 0 0 215 0 7039	4 0 1 <1 <1 19 508 28 20146 current	<1 0 0 0 0 <1 14 223 <1 8631 history1	1 0 1 0 1 13 277 9 10826 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	4.4 0.0 0 0 0 215 0 7039 limit/base	4 0 1 <1 <1 19 508 28 20146 current 5 2	<1 0 0 0 <1 14 223 <1 8631 history1 2	1 0 1 0 1 1 3 277 9 10826 history2 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	4.4 0.0 0 0 0 215 0 7039 limit/base >50	4 0 1 <1 <1 19 508 28 20146 current 5 2	<1 0 0 0 <1 14 223 <1 8631 history1 2 0	1 0 1 0 1 13 277 9 10826 history2 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	4.4 0.0 0 0 0 215 0 7039 limit/base >50 	4 0 1 <1 <1 19 508 28 20146 current 5 2	<1 0 0 0 <1 14 223 <1 8631 history1 2 0 1	1 0 1 0 1 13 277 9 10826 history2 2 0 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	4.4 0.0 0 0 0 215 0 7039 limit/base >50 limit/base	4 0 1 <1 <1 19 508 28 20146 current 5 2 2 2	<1 0 0 0 <1 14 223 <1 8631 history1 2 0 1 history1	1 0 1 0 1 13 277 9 10826 history2 2 0 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	4.4 0.0 0 0 0 215 0 7039 limit/base >50 >20 limit/base	4 0 1 <1 <1 19 508 28 20146 current 5 2 2 current 20848 2393	<1 0 0 0 0 <1 14 223 <1 8631 history1 2 0 1 history1 32002 5196	1 0 1 0 1 1 3 277 9 10826 history2 2 0 1 history2 10175 1249
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	4.4 0.0 0 0 215 0 7039 limit/base >50 >20 limit/base >20000 >5000 >640	4 0 1 <1 <1 19 508 28 20146 current 5 2 2 current 20848 2393 218	<1 0 0 0 0 <1 14 223 <1 8631 history1 2 0 1 history1 32002 5196 207	1 0 1 0 1 1 3 277 9 10826 history2 2 0 1 history2 10175 1249 33
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	4.4 0.0 0 0 0 215 0 7039 limit/base >50 >20 limit/base >5000 >640 >160	4 0 1 <1 <1 19 508 28 20146 current 5 2 2 current 20848 2393 218 26	<1 0 0 0 0 <1 14 223 <1 8631 history1 2 0 1 history1 32002 5196 207 47	1 0 1 0 1 1 3 277 9 10826 history2 2 0 1 1 history2 10175 1249 33 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	4.4 0.0 0 0 0 215 0 7039 limit/base >50 >20 limit/base >20000 >5000 >640 >40	4 0 1 <1 <1 19 508 28 20146 current 5 2 2 current 20848 2393 218 26 1	<1 0 0 0 1 14 223 <1 8631 history1 2 0 1 history1 32002 5196 207 47 2	1 0 1 0 1 1 1 3 277 9 10826 history2 2 0 1 history2 10175 1249 33 5 0

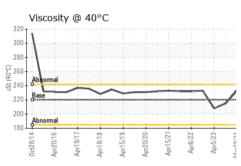


OIL ANALYSIS REPORT





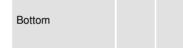




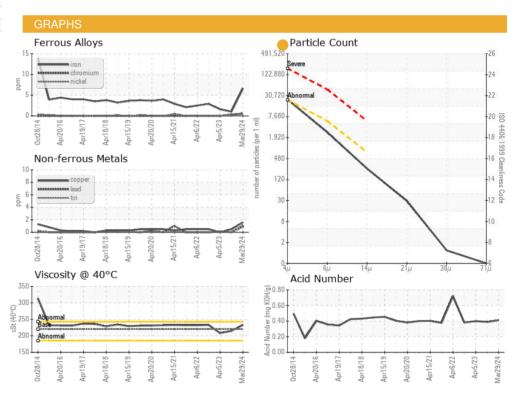
VISUAL						
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2

Visc @ 40°C	cSt	ASTM D445	220	233	215	208
SAMPLE IMAGE	ES					

Color











Certificate 12367

Laboratory Sample No.

Lab Number : 06136339

: WC0915925 Unique Number : 10955804

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 02 Apr 2024

Tested Diagnosed Test Package : IND 2 (Additional Tests: PrtCount)

: 04 Apr 2024 : 04 Apr 2024 - Don Baldridge

207 TELEGRAPH DR GASTONIA, NC US 28056

LUBRIZOL ADVANCED MATERIALS INC

Contact: TIMOTHY DAVIS timothy.davis@lubrizol.com T: (704)915-4131

* - 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)

Contact/Location: TIMOTHY DAVIS - LUBGAS

F: x: