

PROBLEM SUMMARY

Sample Rating Trend

2014 April April 120 April

WEAR

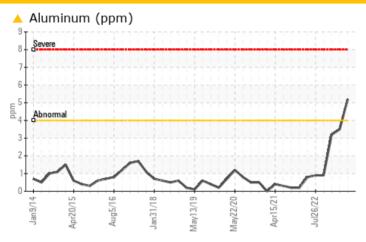
Area **8** Machine Id

8-301-MC FM#1 Trunion - Discharge End

Journal Bearing

MOBIL MOBILGEAR SHC 460 (350 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC T	EST RE	SULTS				
Sample Status				MARGINAL	NORMAL	NORMAL
Aluminum	ppm	ASTM D5185(m)	>4	<u> </u>	4	3

Customer Id: STMBOW Sample No.: WC0869929 Lab Number: 02602012 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample			?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

14 Sep 2023 Diag: Bill Quesnel

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



17 May 2023 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. An increase in the aluminum level is noted. An increase in the tin level is noted. All other component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

View report

16 Nov 2022 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



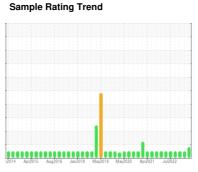


OIL ANALYSIS REPORT

8-301-MC FM#1 Trunion - Discharge End

Journal Bearing

MOBIL MOBILGEAR SHC 460 (350 LTR)





DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition.

Wear

Aluminum ppm levels are marginal. All other component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

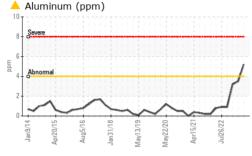
Fluid Condition

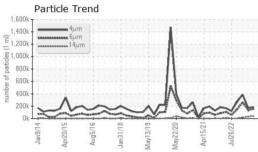
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

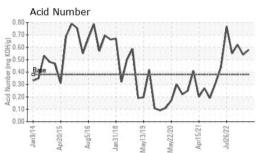
		12014 Apr201	15 Aug2016 Jan2018	May2019 May2020 Apr2021 .	JUIZUZZ	
SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0869929	WC0842768	WC0818200
Sample Date		Client Info		29 Nov 2023	14 Sep 2023	17 May 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				MARGINAL	NORMAL	NORMAL
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>60	11	7	6
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>4	<u>^</u> 5	4	3
Lead	ppm	ASTM D5185(m)	>250	3	1	2
Copper	ppm	ASTM D5185(m)	>125	3	2	2
Tin	ppm	ASTM D5185(m)	>80	35	17	17
Antimony	ppm	ASTM D5185(m)		5	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
_						_
Boron	ppm	ASTM D5185(m)	5.7	6	4	7
	ppm ppm	ASTM D5185(m) ASTM D5185(m)	5.7 0.0	6 <1	0	7
Barium		. ,				
Barium Molybdenum	ppm	ASTM D5185(m)	0.0	<1	0	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0.0	<1 0	0	0
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0.0 0.0 0.0	<1 0 0	0 0 0	0 0 0
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0.0 0.0 0.0 0.0	<1 0 0 3	0 0 0 2	0 0 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0	<1 0 0 3 94	0 0 0 2 65	0 0 0 1 39
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 0.0	<1 0 0 3 94 319	0 0 0 2 65 368	0 0 0 1 39 361
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180	<1 0 0 3 94 319	0 0 0 2 65 368 2	0 0 0 1 39 361
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180	<1 0 0 3 94 319 1 5190	0 0 0 2 65 368 2 5481	0 0 0 1 39 361 1 4775
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270	<1 0 0 3 94 319 1 5190	0 0 0 2 65 368 2 5481	0 0 0 1 39 361 1 4775
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270	<1 0 0 3 94 319 1 5190 <1	0 0 0 2 65 368 2 5481 <1	0 0 0 1 39 361 1 4775 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270	<1 0 0 3 94 319 1 5190 <1 current	0 0 0 2 65 368 2 5481 <1 history1	0 0 0 1 39 361 1 4775 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base	<1 0 0 3 94 319 1 5190 <1 current 14	0 0 0 2 65 368 2 5481 <1 history1	0 0 0 1 39 361 1 4775 <1 history2 8
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50	<1 0 0 3 94 319 1 5190 <1 current 14 <1	0 0 0 2 65 368 2 5481 <1 history1 10 <1 2	0 0 0 1 39 361 1 4775 <1 history2 8 <1 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50	<1 0 0 3 94 319 1 5190 <1 current 14 <1 4 current	0 0 0 2 65 368 2 5481 <1 history1	0 0 0 1 39 361 1 4775 <1 history2 8 <1 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) method ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50 limit/base	<1 0 0 3 94 319 1 5190 <1 current 14 <1 4 current 183048	0 0 0 2 65 368 2 5481 <1 history1 10 <1 2 history1 172817	0 0 0 1 39 361 1 4775 <1 history2 8 <1 2 history2 387161
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Ptulio CLEANLINE Particles >4µm Particles >6µm	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) METHOD METHOD ASTM D5185(m)	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50 >20 limit/base	<1 0 0 3 94 319 1 5190 <1 current 14 <1 4 current 183048 154334	0 0 0 2 65 368 2 5481 <1 history1 10 <1 2 history1 172817 140145	0 0 1 39 361 1 4775 <1 history2 8 <1 2 history2 387161 262127
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm Particles >14µm	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50 >20 limit/base >320000 >160000	<1 0 0 3 94 319 1 5190 <1 current 14 <1 4 current 183048 154334 37911	0 0 0 2 65 368 2 5481 <1 history1 10 <1 2 history1 172817 140145 30181	0 0 0 1 39 361 1 4775 <1 history2 8 <1 2 history2 387161 262127 16296
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >14µm Particles >21µm	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) METHOD METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50 >20 limit/base >320000 >160000 >40000	<1 0 0 3 94 319 1 5190 <1 current 14 <1 4 current 183048 154334 37911 3840	0 0 0 2 65 368 2 5481 <1 history1 10 <1 2 history1 172817 140145 30181 3653	0 0 0 1 39 361 1 4775 <1 history2 8 <1 2 history2 387161 262127 16296 687
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >14µm Particles >21µm Particles >38µm	pppm pppm pppm pppm pppm pppm pppm ppp	ASTM D5185(m) METHOD METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0.0 0.0 0.0 0.0 0.0 180 0.8 4270 limit/base >50 >20 limit/base >320000 >160000 >40000 >10000	<1 0 0 3 94 319 1 5190 <1 current 14 <1 4 current 183048 154334 37911 3840 3	0 0 0 2 65 368 2 5481 <1 history1 10 <1 2 history1 172817 140145 30181 3653 3	0 0 0 1 39 361 1 4775 <1 history2 8 <1 2 history2 387161 262127 16296 687 0

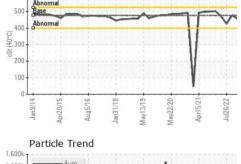


OIL ANALYSIS REPORT



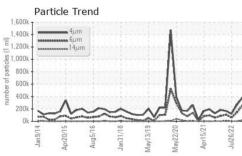


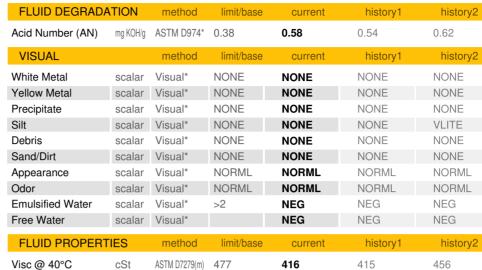




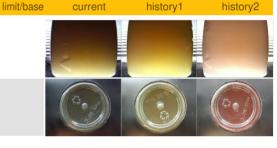
Viscosity @ 40°C

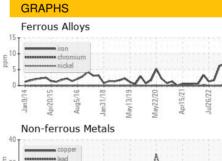
600

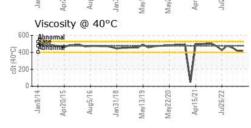




SAMPLE IMAGES method Color



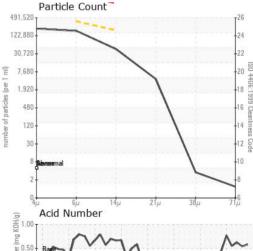




: 08 Dec 2023

: 11 Dec 2023

: Kevin Marson





CALA ISO 17025:2017

Accredited

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0869929

Bottom

Received : 02602012 Diagnosed

: 5695097 Diagnostician Test Package : IND 2 (Additional Tests: TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

ST. MARYS CEMENT CO. 400 BOWMANVILLE AVENUE BOWMANVILLE, ON **CA L1C 7B5**

Contact: Lou Traiforos lou.traiforos@vcimentos.com

T: (905)440-5874 F: (905)623-4695