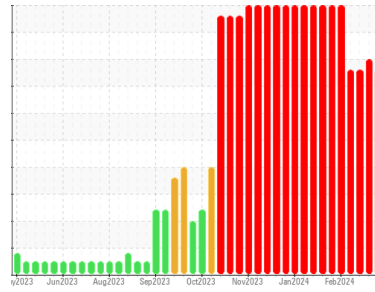




PROBLEM SUMMARY

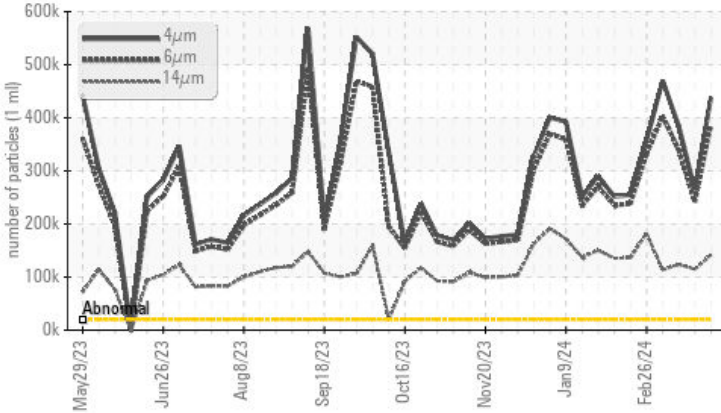
Area
3
 Machine Id
3-101-MG Primary
 Component
Crusher
 Fluid
MOBIL MOBILGEAR 600 XP 320 (2900 LTR)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	SEVERE
Particles >4µm	ASTM D7647	>20000	▲ 438286	▲ 264959	▲ 384727
Particles >6µm	ASTM D7647	>5000	▲ 386715	▲ 241324	▲ 339411
Particles >14µm	ASTM D7647	>640	▲ 141651	▲ 114653	▲ 123899
Particles >21µm	ASTM D7647	>160	▲ 27733	▲ 35826	▲ 23900
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 26/26/24	▲ 25/25/24	▲ 26/26/24

Customer Id: STMBOW
 Sample No.: WC0873669
 Lab Number: 02641524
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca


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
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS


ISO




03 Jun 2024 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. Calcium and/or magnesium levels higher than normal indicating possible lime contamination, advise investigate. The water content is negligible. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

view report




ISO




29 May 2024 Diag: Wes Davis

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report




ISO



13 May 2024 Diag: Wes Davis

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

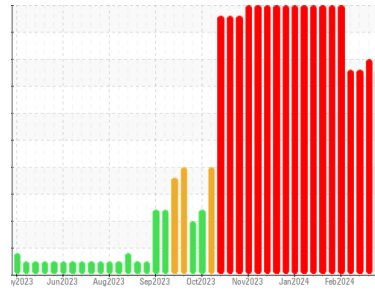
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

3

Machine Id

3-101-MG Primary

Component

Crusher

Fluid

MOBIL MOBILGEAR 600 XP 320 (2900 LTR)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0873669	WC0902000	WC0925310
Sample Date	Client Info		10 Jun 2024	03 Jun 2024	29 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			SEVERE	SEVERE	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	48	49	43
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		2	2	2
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>50	34	35	31
Lead	ppm	ASTM D5185(m)	>100	7	7	6
Copper	ppm	ASTM D5185(m)	>200	38	38	35
Tin	ppm	ASTM D5185(m)	>15	4	4	3
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
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

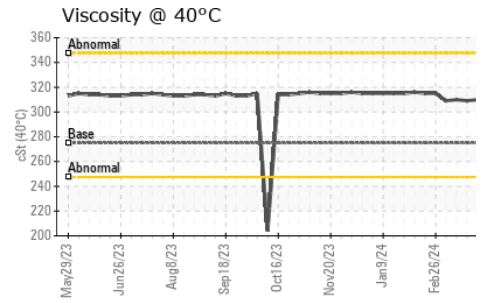
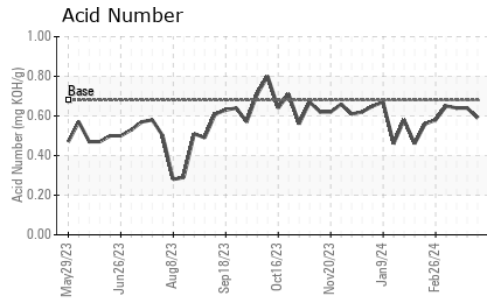
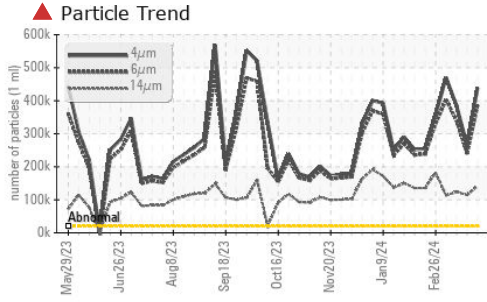
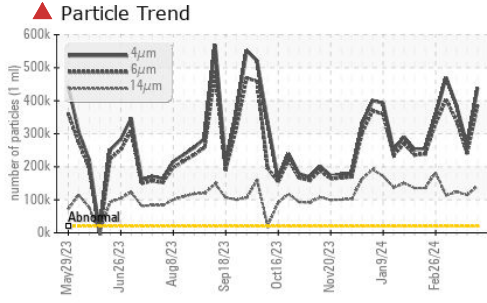
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	57	25	25	26
Barium	ppm	ASTM D5185(m)	0.0	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	2.0	0	0	0
Manganese	ppm	ASTM D5185(m)	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	0.0	16	16	15
Calcium	ppm	ASTM D5185(m)	42	330	324	298
Phosphorus	ppm	ASTM D5185(m)	399	309	329	306
Zinc	ppm	ASTM D5185(m)	13	6	7	6
Sulfur	ppm	ASTM D5185(m)	13649	14237	14518	14242
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>100	92	92	86
Sodium	ppm	ASTM D5185(m)		4	4	4
Potassium	ppm	ASTM D5185(m)	>20	14	15	14

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 438286	▲ 264959	▲ 384727
Particles >6µm	ASTM D7647	>5000	▲ 386715	▲ 241324	▲ 339411
Particles >14µm	ASTM D7647	>640	▲ 141651	▲ 114653	▲ 123899
Particles >21µm	ASTM D7647	>160	▲ 27733	▲ 35826	▲ 23900
Particles >38µm	ASTM D7647	>40	18	52	19
Particles >71µm	ASTM D7647	>10	1	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 26/26/24	▲ 25/25/24	▲ 26/26/24

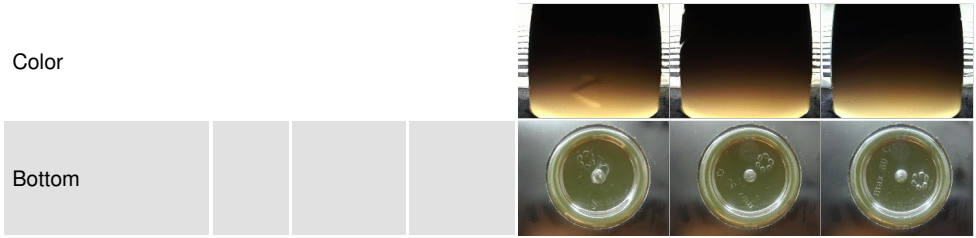


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.68	0.59	0.64	0.64

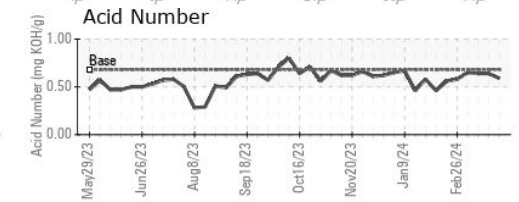
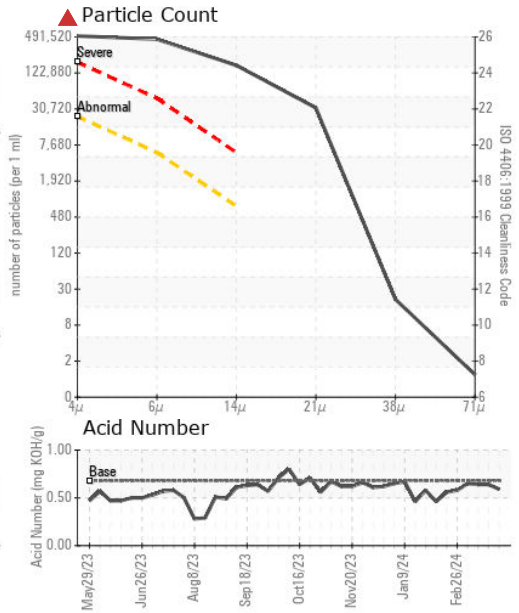
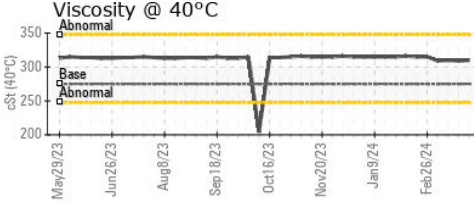
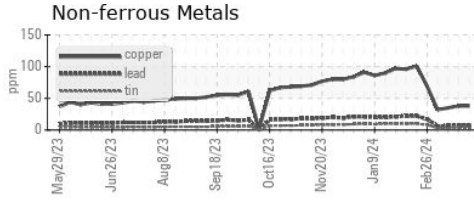
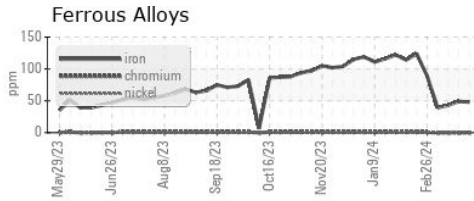
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	HAZY	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	275	310	309	310

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0873669 **Received** : 12 Jun 2024
Lab Number : **02641524** **Tested** : 14 Jun 2024
Unique Number : 5799063 **Diagnosed** : 14 Jun 2024 - Wes Davis
Test Package : IND 2

ST. MARYS CEMENT CO.
 400 BOWMANVILLE AVENUE
 BOWMANVILLE, ON
 CA L1C 7B5
 Contact: Carlos Barberi
 carlos.barberi@vcimentos.com
 T: (905)623-3341
 F: (905)623-4695

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.