



PROBLEM SUMMARY

Sample Rating Trend

DIRT



Area

3

Machine Id

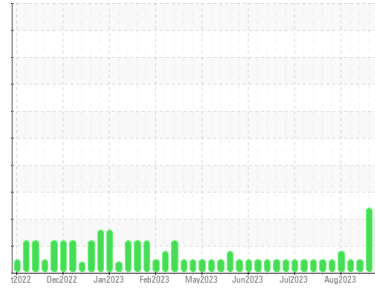
3-101-MG Primary

Component

Crusher

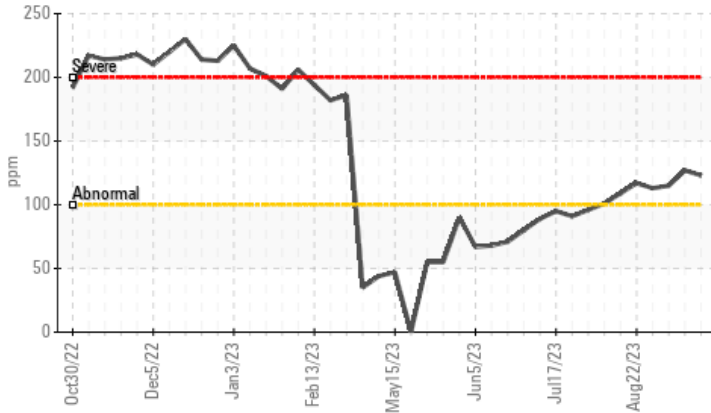
Fluid

MOBIL MOBILGEAR 600 XP 320 (2900 LTR)

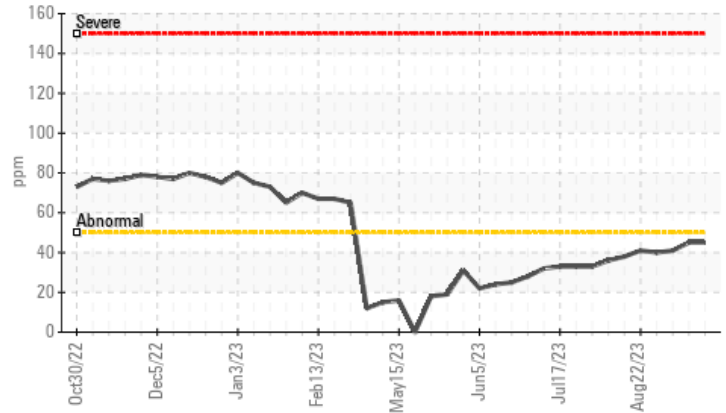


COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



RECOMMENDATION

We advise that you check all areas where dirt 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. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	NORMAL
Aluminum	ppm	ASTM D5185(m) >50	▲ 45	▲ 45	41
Silicon	ppm	ASTM D5185(m) >100	▲ 123	▲ 127	115

Customer Id: STMBOW
Sample No.: WC0851469
Lab Number: 02586190
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
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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	---	---	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Please contact your representative for information regarding the proper sampling kits for your service.
Alert	---	---	?	NOTE: We recommend using IND 3 test kits,
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 dirt 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

18 Sep 2023 Diag: Bill Quesnel

DIRT



We advise that you check all areas where dirt 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. We recommend an early resample to monitor this condition. Aluminum ppm levels are noted. All other component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. 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



11 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 water content is negligible. 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



28 Aug 2023 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. Component wear rates appear to be normal (unconfirmed). 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.

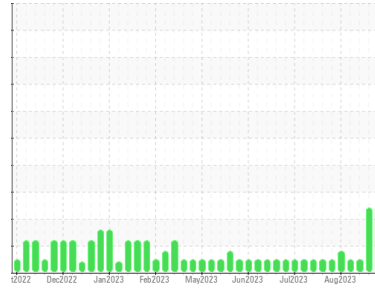
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



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 dirt 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. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

Wear

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

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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		WC0851469	WC0842652	WC0842785
Sample Date	Client Info		26 Sep 2023	18 Sep 2023	11 Sep 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			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	71	75	66
Chromium	ppm	ASTM D5185(m)	>15	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>15	<1	1	<1
Titanium	ppm	ASTM D5185(m)		2	3	2
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>50	▲ 45	▲ 45	41
Lead	ppm	ASTM D5185(m)	>100	16	15	14
Copper	ppm	ASTM D5185(m)	>200	56	55	52
Tin	ppm	ASTM D5185(m)	>15	6	6	5
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	<1	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	10	10	9
Barium	ppm	ASTM D5185(m)	0.0	<1	0	0
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	21	22	20
Calcium	ppm	ASTM D5185(m)	42	442	456	405
Phosphorus	ppm	ASTM D5185(m)	399	299	322	317
Zinc	ppm	ASTM D5185(m)	13	4	4	4
Sulfur	ppm	ASTM D5185(m)	13649	10491	10625	10529
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>100	▲ 123	▲ 127	115
Sodium	ppm	ASTM D5185(m)		3	3	3
Potassium	ppm	ASTM D5185(m)	>20	18	19	18

FLUID CLEANLINESS

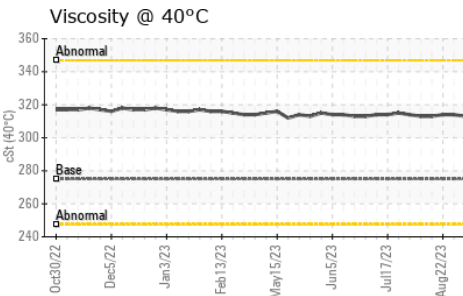
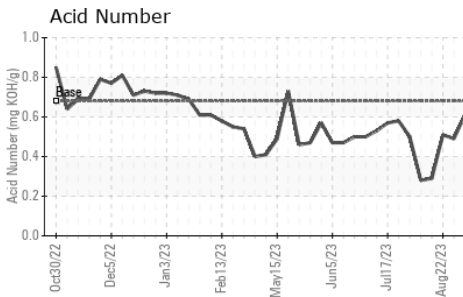
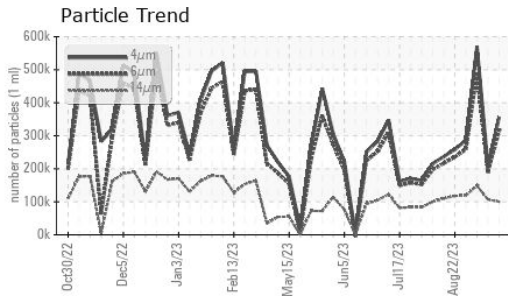
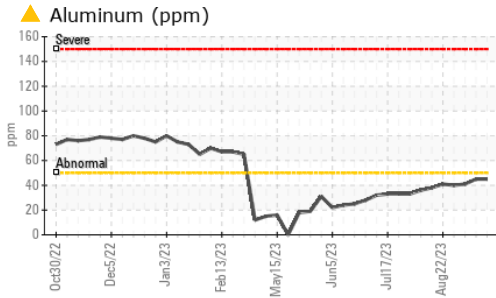
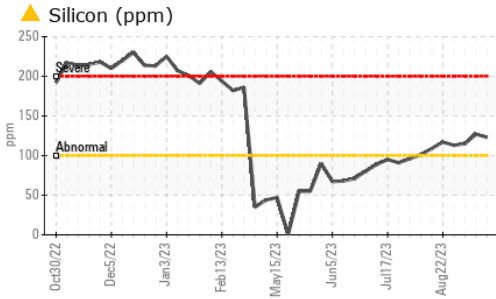
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		356410	205395	569040
Particles >6µm	ASTM D7647	>320000	313125	190495	489649
Particles >14µm	ASTM D7647	>160000	100145	106869	148227
Particles >21µm	ASTM D7647	>40000	11856	48980	22669
Particles >38µm	ASTM D7647	>10000	1	53	4
Particles >71µm	ASTM D7647	>2500	0	1	0
Oil Cleanliness	ISO 4406 (c)	>25/24	25/24	25/24	26/24

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.68	0.64	0.63	0.61



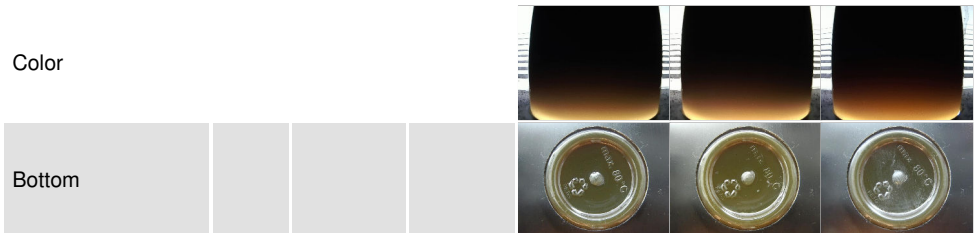
OIL ANALYSIS REPORT



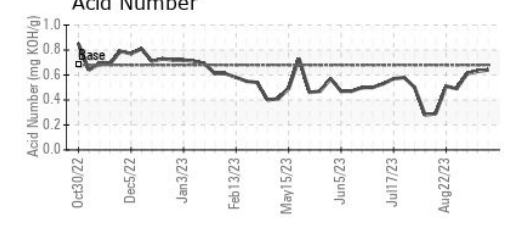
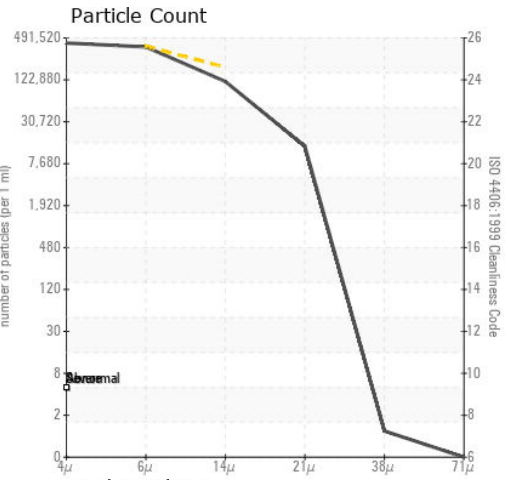
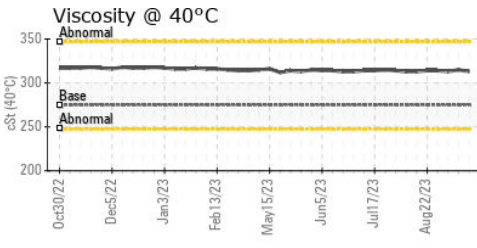
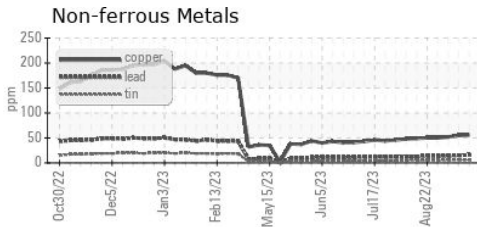
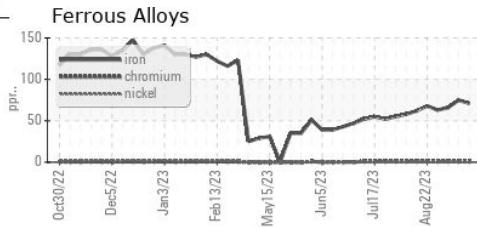
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	275	313	315

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0851469 **Received** : 02 Oct 2023
Lab Number : 02586190 **Diagnosed** : 04 Oct 2023
Unique Number : 5655256 **Diagnostician** : Kevin Marson
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.

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