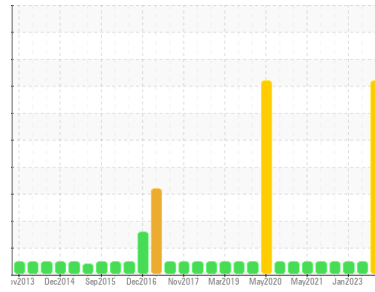




PROBLEM SUMMARY

Area
CHEATHAM ANNEX
 Machine Id
2B 2BLL CRANE 2B (S/N 62510227)
 Component
Gearbox
 Fluid
MOBIL MOBILGEAR 600 XP 220 (--- GAL)

Sample Rating Trend

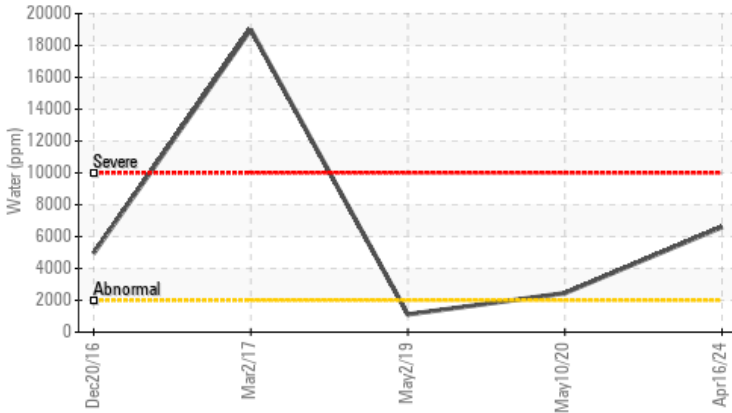


WATER



COMPONENT CONDITION SUMMARY

▲ Water (KF)



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Water	%	ASTM D6304	>0.2	▲ 0.660	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 6600	---	---
Free Water	scalar	*Visual		▲ 2.0	NEG	NEG

Customer Id: CARPORMAC
 Sample No.: WC0925635
 Lab Number: 06151272
 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
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Water Drain-off	---	---	?	We advise that you follow the water drain-off procedure for this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

NORMAL



01 Oct 2023 Diag: Don Baldrige

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



NORMAL



22 Jan 2023 Diag: Jonathan Hester

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



NORMAL



24 Apr 2022 Diag: Don Baldrige

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

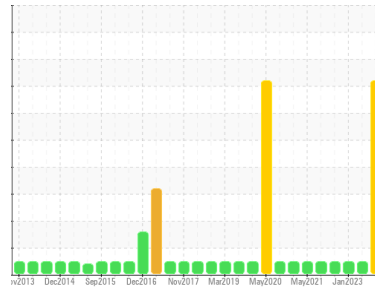
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
CHEATHAM ANNEX
 Machine Id
2B 2BL CRANE 2B (S/N 62510227)
 Component
Gearbox
 Fluid
MOBIL MOBILGEAR 600 XP 220 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

Appearance is unacceptable Free water present. There is a moderate concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0925635	WC0752694	WC0752730
Sample Date	Client Info		16 Apr 2024	01 Oct 2023	22 Jan 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			SEVERE	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	10	2	2
Chromium	ppm	ASTM D5185m >15	<1	0	<1
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	4	0
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	0	0	2
Barium	ppm	ASTM D5185m	0	0	12
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m	1	3	2
Calcium	ppm	ASTM D5185m	8	4	9
Phosphorus	ppm	ASTM D5185m	291	290	317
Zinc	ppm	ASTM D5185m	87	89	88
Sulfur	ppm	ASTM D5185m	17608	17235	17678

CONTAMINANTS

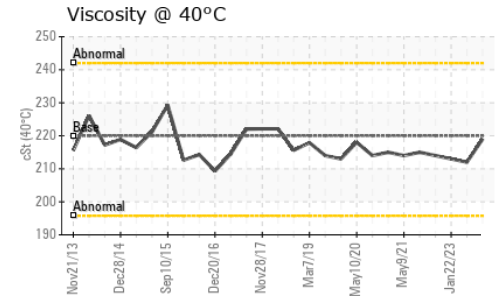
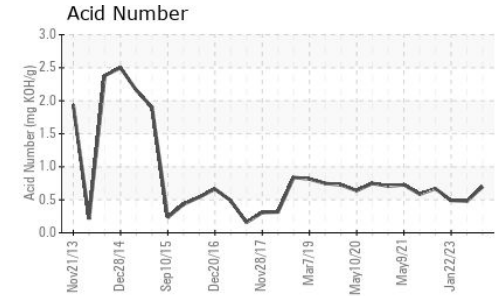
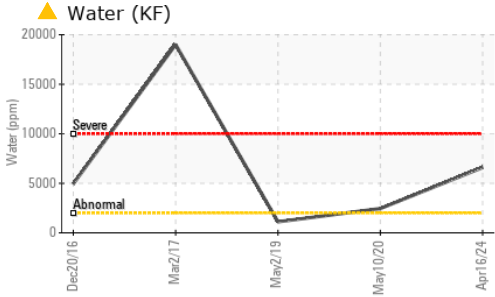
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	4	<1	<1
Sodium	ppm	ASTM D5185m	0	0	<1
Potassium	ppm	ASTM D5185m >20	1	0	0
Water	%	ASTM D6304 >0.2	▲ 0.660	---	---
ppm Water	ppm	ASTM D6304 >2000	▲ 6600	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.48	0.49



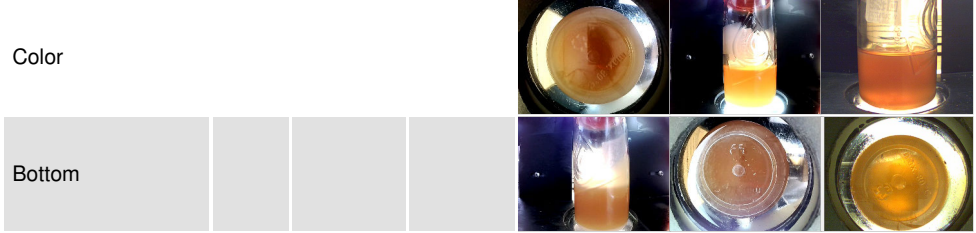
OIL ANALYSIS REPORT



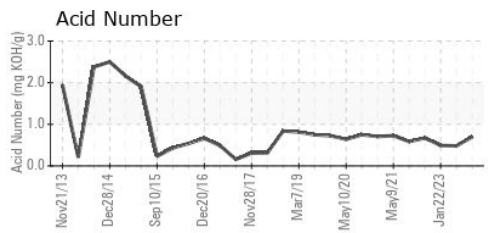
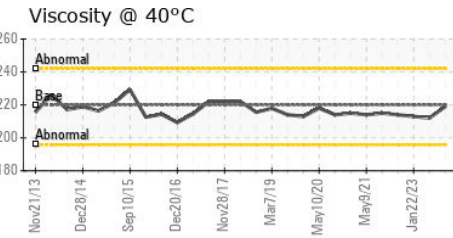
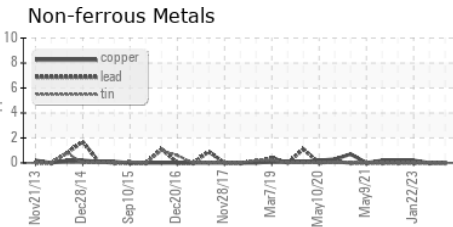
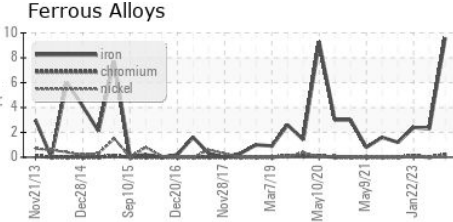
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● MILKY	NORML
Odor	scalar	*Visual	NORML	● NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	● 0.2%	NEG
Free Water	scalar	*Visual		▲ 2.0	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	219	212	213

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0925635 **Received** : 16 Apr 2024
Lab Number : 06151272 **Tested** : 19 Apr 2024
Unique Number : 10981350 **Diagnosed** : 19 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

CARGOTEC MARINE - MACGREGOR
 525 BYRON ST, SUITE B
 CHESAPEAKE, VA
 US 23320
 Contact: TARMO MAGI
 tarmo.magi@macgregor.com
 T: (757)558-4584
 F: (757)558-4581

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

* - 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)