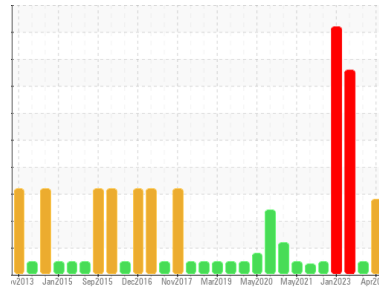




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**CHEATHAM ANNEX**  
 Machine Id  
**1A 1ALL CRANE 1A (S/N 62510224)**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL MOBILGEAR 600 XP 220 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

Appearance is milky. There is a high concentration of water present in the oil. High level of insolubles 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		<b>WC0752644</b>	WC0752652	WC0752688
Sample Date	Client Info		<b>16 Apr 2024</b>	01 Oct 2023	22 Apr 2023
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	SEVERE

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>54</b>	3	22
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	1	<1
Lead	ppm	ASTM D5185m >100	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	5	0
Barium	ppm	ASTM D5185m	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	3	20
Calcium	ppm	ASTM D5185m	<b>9</b>	3	2
Phosphorus	ppm	ASTM D5185m	<b>317</b>	342	281
Zinc	ppm	ASTM D5185m	<b>57</b>	19	76
Sulfur	ppm	ASTM D5185m	<b>17182</b>	15314	20189

## CONTAMINANTS

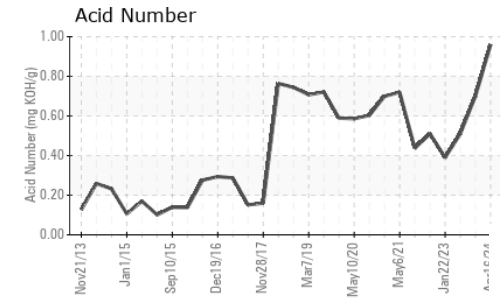
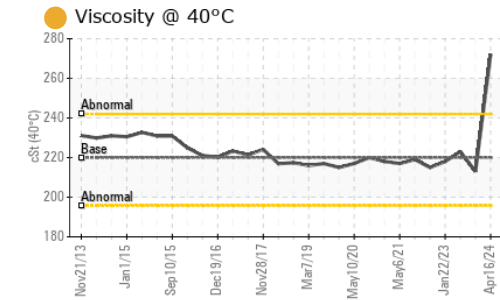
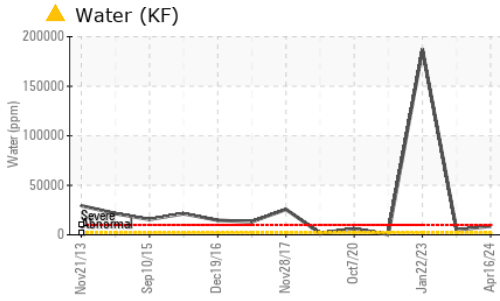
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>7</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	0
Water	%	ASTM D6304 >0.2	<b>▲ 0.883</b>	---	▲ 0.486
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 8830</b>	---	▲ 4860

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.96</b>	0.70	0.51



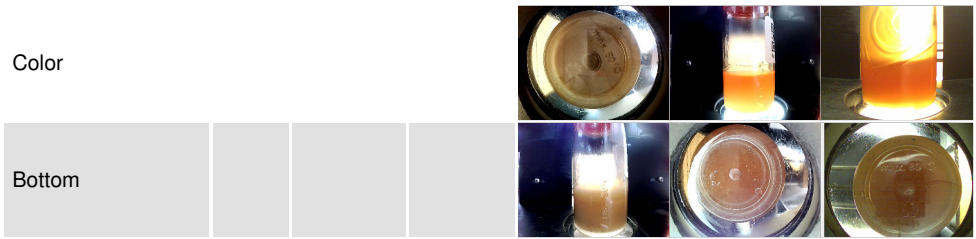
# OIL ANALYSIS REPORT



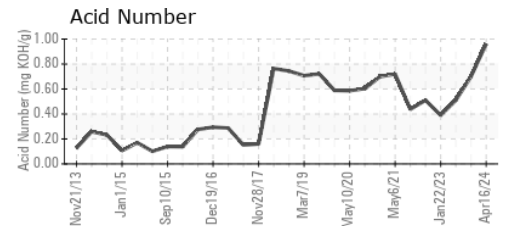
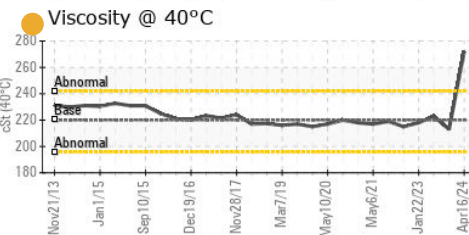
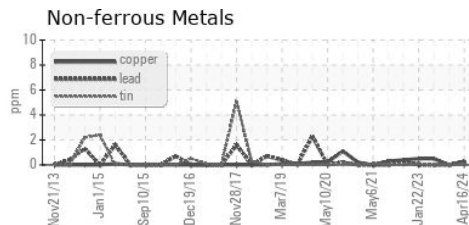
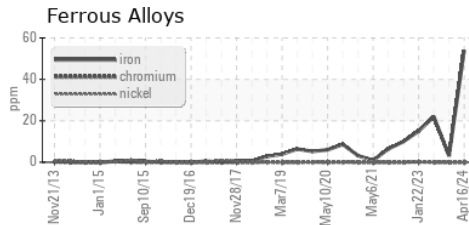
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● MILKY	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	● 0.2%	▲ 0.2%
Free Water	scalar	*Visual		● NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	● 272	213

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0752644  
**Lab Number** : 06151254  
**Unique Number** : 10981332  
**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

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)

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