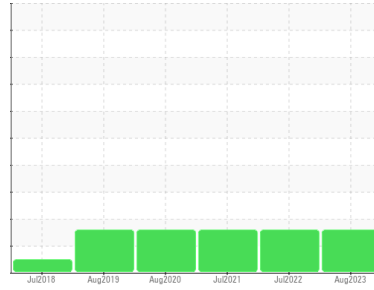




# PROBLEM SUMMARY

Sample Rating Trend



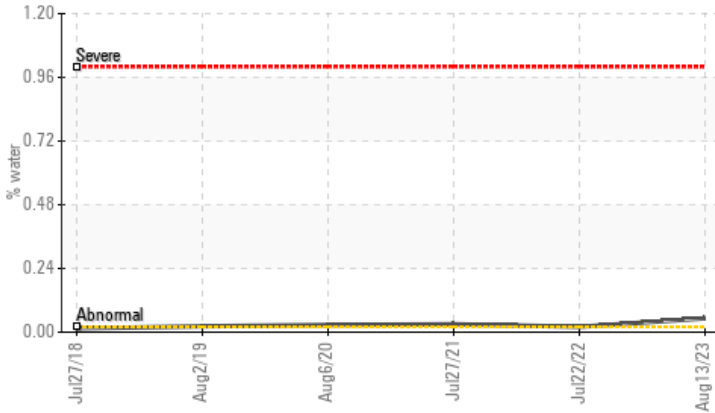
**WATER**



Machine Id  
**MCQUAY BROOKFIELD 77 K ST 1 (S/N STNU091100082)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**NOT GIVEN (10 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Water



## RECOMMENDATION

No corrective action is recommended at this time.  
 We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>MARGINAL</b>	MARGINAL	MARGINAL
Water	%	ASTM D6304	>0.02	▲ <b>0.052</b>	▲ 0.020	▲ 0.030
ppm Water	ppm	ASTM D6304	>250	▲ <b>526.3</b>	▲ 209.1	▲ 301.3

Customer Id: CDSCRO  
 Sample No.: WC0830508  
 Lab Number: 05923456  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

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

## HISTORICAL DIAGNOSIS

### 22 Jul 2022 Diag: Jonathan Hester

#### WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 27 Jul 2021 Diag: Don Baldrige

#### WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 06 Aug 2020 Diag: Don Baldrige

#### WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

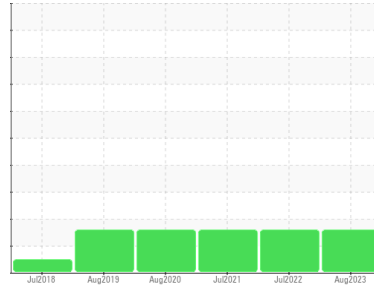
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**MCQUAY BROOKFIELD 77 K ST 1 (S/N STNU091100082)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**NOT GIVEN (10 GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a light concentration of water present in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0830508</b>	WC0713817	WC0484519
Sample Date	Client Info		<b>13 Aug 2023</b>	22 Jul 2022	27 Jul 2021
Machine Age	hrs	Client Info	<b>0</b>	1479	13790
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Not Chngd	N/A
Sample Status			<b>MARGINAL</b>	MARGINAL	MARGINAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>2</b>	5	3
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >50	<b>2</b>	3	2
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >100	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>1</b>	1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	3
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>	<1	<1
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>7</b>	0	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>453</b>	211	1
Zinc	ppm	ASTM D5185m	<b>19</b>	5	2
Sulfur	ppm	ASTM D5185m	<b>0</b>	24	0

## CONTAMINANTS

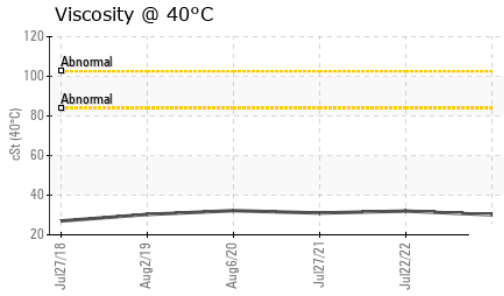
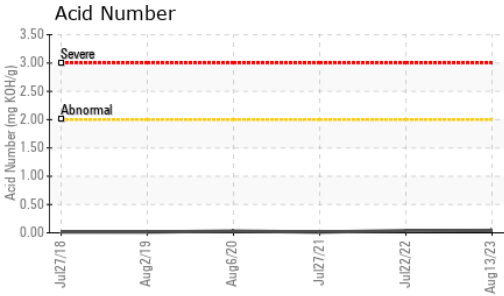
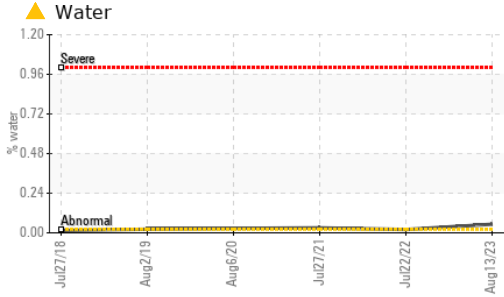
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>6</b>	4	19
Sodium	ppm	ASTM D5185m	<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	0
Water	%	ASTM D6304 >0.02	<b>▲ 0.052</b>	▲ 0.020	▲ 0.030
ppm Water	ppm	ASTM D6304 >250	<b>▲ 526.3</b>	▲ 209.1	▲ 301.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	<b>0.042</b>	0.038	0.013



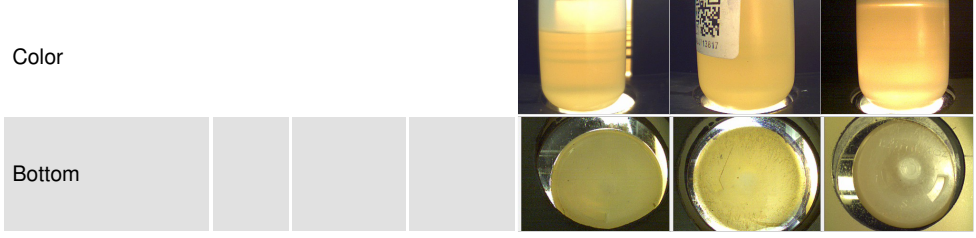
# OIL ANALYSIS REPORT



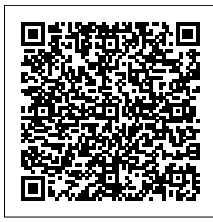
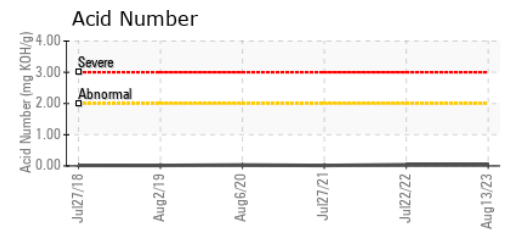
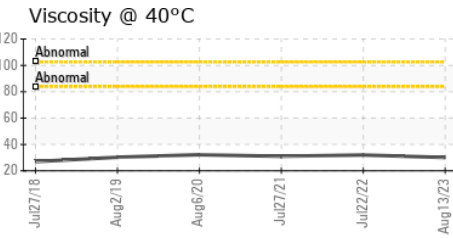
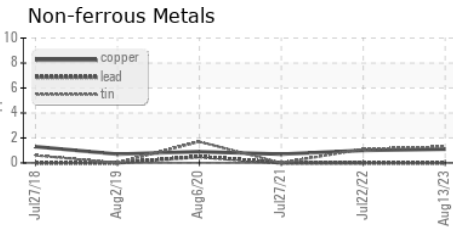
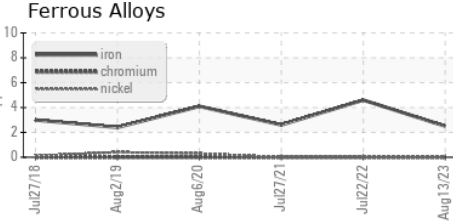
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.02	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	30.1	32.0	31.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0830508 **Received** : 14 Aug 2023  
**Lab Number** : 05923456 **Diagnosed** : 15 Aug 2023  
**Unique Number** : 10603403 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**CDS MECHANICAL SERVICES INC**  
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 CROFTON, MD  
 US 21114  
 Contact: DAVID BEALE  
 DBEALE@CDSMECHANICAL.NET  
 T:  
 F:

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)