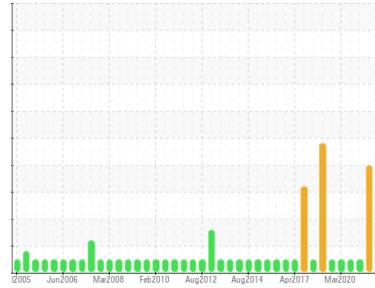




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**



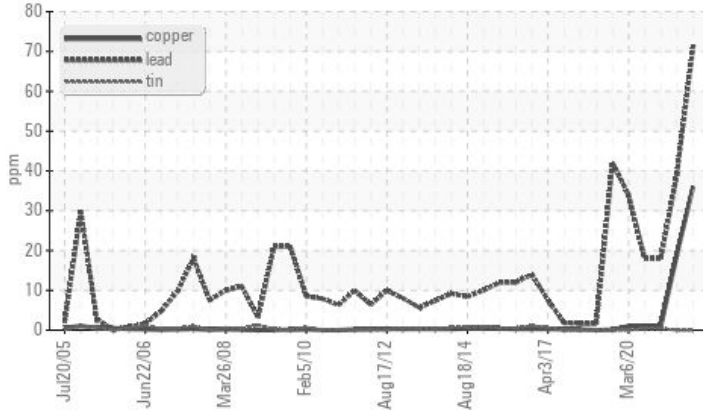
Machine Id  
**RBK G2 TURB**

Component  
**Bearing**

Fluid  
**MOBIL DTE OIL HVY MEDIUM (12 GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



## RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. 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 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			<b>ABNORMAL</b>	ABNORMAL	NORMAL
Copper	ppm	ASTM D5185(m) >13	▲ <b>36</b>	▲ 19	<1
Free Water	scalar	Visual*	▲ <b>1%</b>	▲ 1%	NEG

**Customer Id:** NEWSTJ  
**Sample No.:** WC0445156  
**Lab Number:** 02517607  
**Test Package:** IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@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 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 Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

## HISTORICAL DIAGNOSIS

### WATER



#### 03 Mar 2022 Diag: Kevin Marson

Check seals and/or filters for points of contaminant entry. We advise that you check all areas where contaminants can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend that you change the oil. We recommend an early resample to monitor this condition. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. **DISCLAIMER:** Interpretation of laboratory tests is based on sample, as received from client. Source of sample and sampling technique cannot be verified. Copper ppm levels are abnormal. Bearing wear is indicated. Elemental level of silicon (Si) above normal indicating ingress of seal material. The white residue present in the sample is oil additive precipitate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

[view report](#)



### NORMAL



#### 15 Feb 2021 Diag: Kevin Marson

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### NORMAL



#### 09 Dec 2020 Diag: Kevin Marson

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

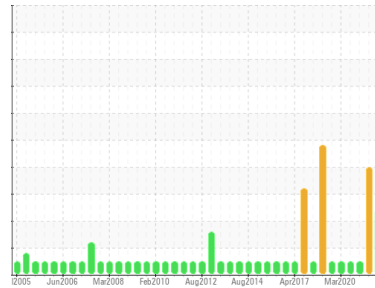
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**RBK G2 TURB**

Component  
**Bearing**

Fluid  
**MOBIL DTE OIL HVY MEDIUM (12 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. 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 advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition.

### Wear

Copper ppm levels are abnormal. Bearing wear is indicated.

### Contamination

Free water present.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0445156</b>	WC0445222	WC0327885
Sample Date	Client Info		<b>07 Oct 2022</b>	03 Mar 2022	15 Feb 2021
Machine Age	mths	Client Info	<b>24</b>	24	24
Oil Age	mths	Client Info	<b>24</b>	0	24
Oil Changed	Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >63	<b>&lt;1</b>	0	<1
Chromium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Lead	ppm	ASTM D5185(m) >161	<b>71</b>	39	18
Copper	ppm	ASTM D5185(m) >13	<b>▲ 36</b>	<b>▲ 19</b>	<1
Tin	ppm	ASTM D5185(m) >27	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m)	<b>134</b>	128	128
Zinc	ppm	ASTM D5185(m)	<b>44</b>	57	41
Sulfur	ppm	ASTM D5185(m)	<b>531</b>	543	2159
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

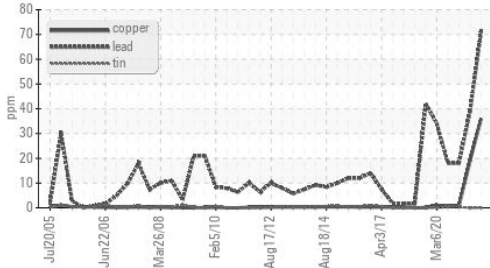
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >12	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

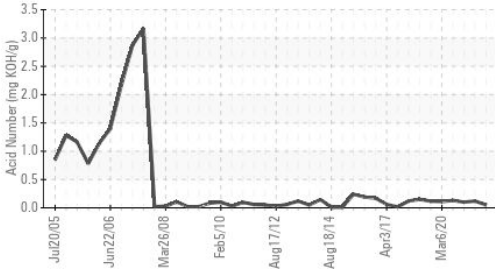
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.05</b>	0.12	0.10

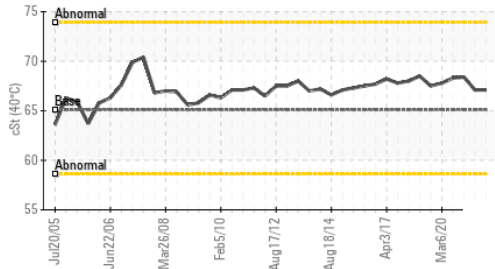
### Non-ferrous Metals



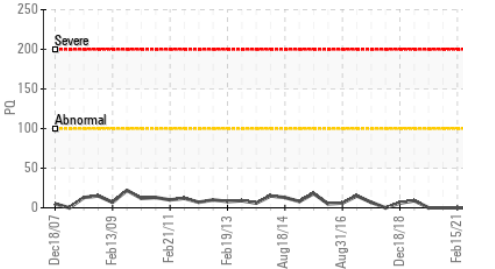
### Acid Number



### Viscosity @ 40°C



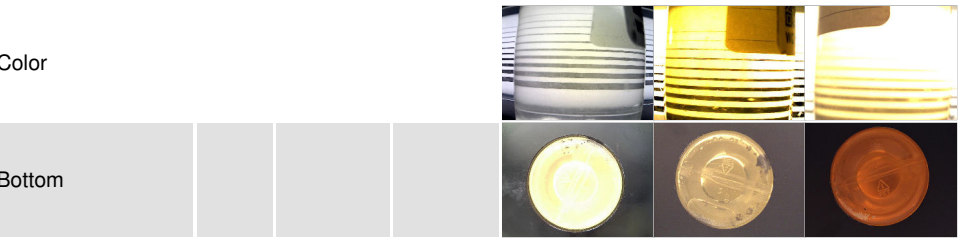
### PQ



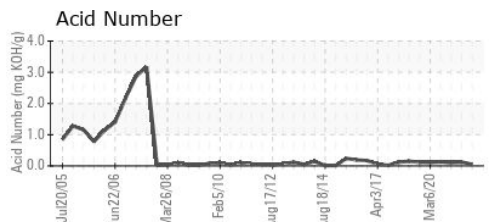
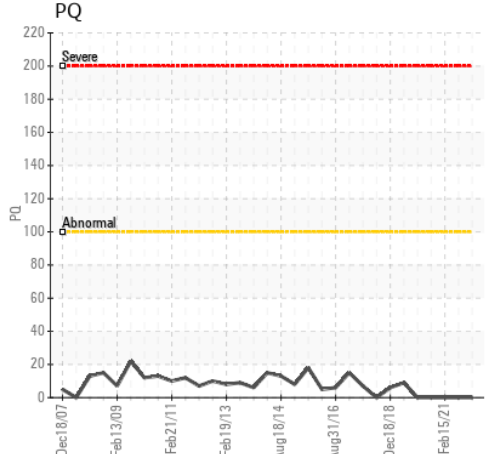
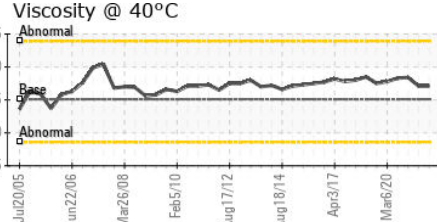
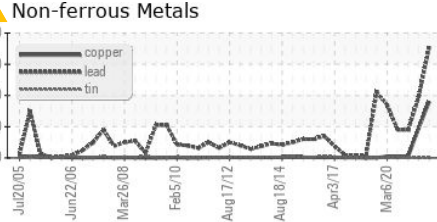
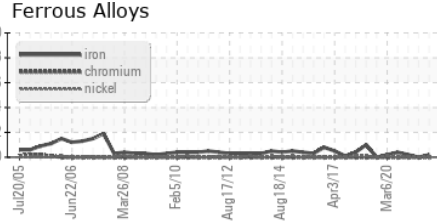
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	VLITE	▲ LIGHT
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	▲ LIGHT
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>2	.2%	.5%
Free Water	scalar	Visual*		▲ 1%	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	65.1	67.1	68.4

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0445156 **Received** : 20 Oct 2022  
**Lab Number** : 02517607 **Diagnosed** : 24 Oct 2022  
**Unique Number** : 5474587 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2

**NEWFOUNDLAND POWER INC.**  
 50 DUFFY PLACE, PO BOX 8910  
 ST. JOHNS, NL  
 CA A1B 3P6  
 Contact: Paul Martin  
 pmartin@newfoundlandpower.com  
 T:  
 F: (709)737-2926

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.