

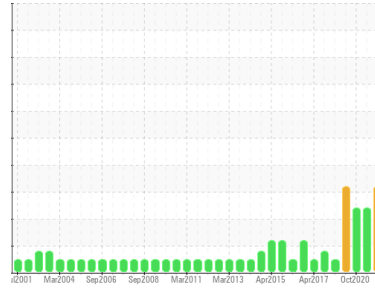


# PROBLEM SUMMARY

Sample Rating Trend

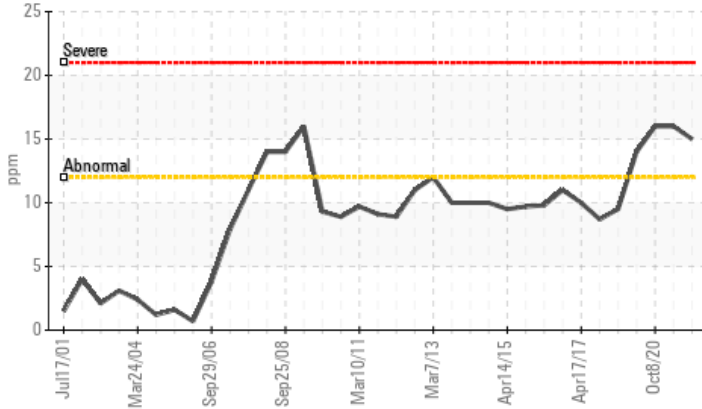
DIRT

Area  
[192037]  
Machine Id  
**ROP G1 LGBR**  
Component  
**Bearing**  
Fluid  
**ESSO TERESSO ISO 68 (91 LTR)**

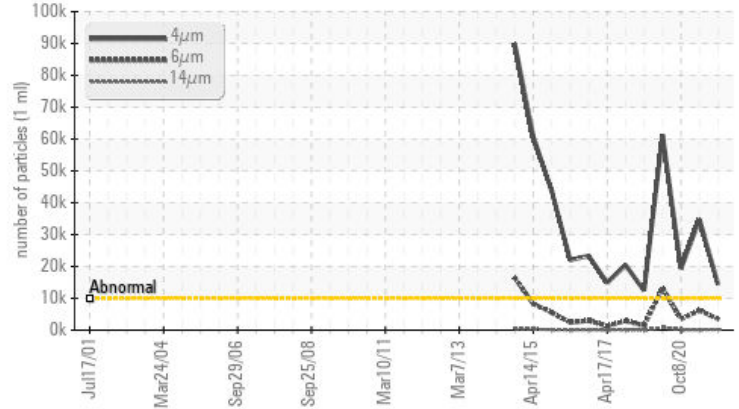


## COMPONENT CONDITION SUMMARY

### ▲ Silicon (ppm)



### ▲ Particle Trend



## RECOMMENDATION

Check seals and/or filters for points of contaminant entry. 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.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Silicon	ppm	ASTM D5185(m) >12	▲ 15	▲ 16	▲ 16
Particles >4µm		ASTM D7647 >10000	▲ 14387	▲ 34719	▲ 19370
Particles >6µm		ASTM D7647 >2500	▲ 3499	▲ 6158	▲ 3446
Particles >14µm		ASTM D7647 >160	▲ 190	124	124
Oil Cleanliness		ISO 4406 (c) >20/18/14	▲ 21/19/15	▲ 22/20/14	▲ 21/19/14

Customer Id: NEWSTJ  
Sample No.: WC0445357  
Lab Number: 02517609  
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
Change Filter	MISSED	Dec 20 2022	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	MISSED	Dec 20 2022	?	We recommend an early resample to monitor this condition.
Check Breathers	MISSED	Dec 20 2022	?	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 Seals	MISSED	Dec 20 2022	?	Check seals and/or filters for points of contaminant entry.
Filter Fluid	MISSED	Dec 20 2022	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS

### 20 Oct 2021 Diag: Kevin Marson

DIRT



Check seals and/or filters for points of contaminant entry. 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. All component wear rates are normal. Silicon ppm levels are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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



### 08 Oct 2020 Diag: Kevin Marson

DIRT



Check seals and/or filters for points of contaminant entry. 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. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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



### 10 Apr 2019 Diag: Kevin Marson

DIRT



Check seals and/or filters for points of contaminant entry. 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. All component wear rates are normal. Silicon ppm levels are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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



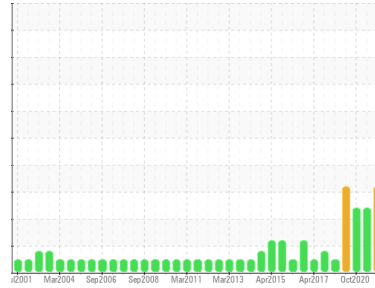


# OIL ANALYSIS REPORT

Sample Rating Trend

DIRT

Area  
**[192037]**  
 Machine Id  
**ROP G1 LGBR**  
 Component  
**Bearing**  
 Fluid  
**ESSO TERESSO ISO 68 (91 LTR)**



## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. 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.

### Wear

All component wear rates are normal.

### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

### 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		<b>WC0445357</b>	WC0445197	WC0327963
Sample Date	Client Info		<b>02 Jun 2022</b>	20 Oct 2021	08 Oct 2020
Machine Age	hrs	Client Info	<b>22</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## 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>1</b>	1	1
Chromium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >161	<b>8</b>	11	7
Copper	ppm	ASTM D5185(m) >13	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >27	<b>0</b>	0	0
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) 4.5	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0.4	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Phosphorus	ppm	ASTM D5185(m) 0.7	<b>&lt;1</b>	1	2
Zinc	ppm	ASTM D5185(m) 0	<b>4</b>	4	4
Sulfur	ppm	ASTM D5185(m) 1315	<b>2059</b>	2005	2063
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

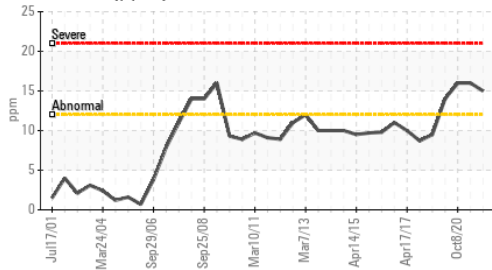
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >12	<b>▲ 15</b>	▲ 16	▲ 16
Sodium	ppm	ASTM D5185(m)	<b>1</b>	1	1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	0

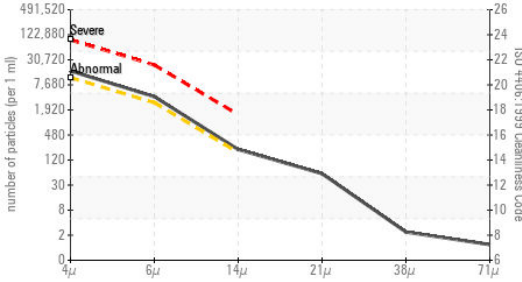


# OIL ANALYSIS REPORT

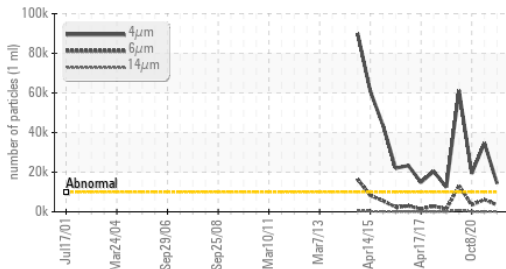
## ▲ Silicon (ppm)



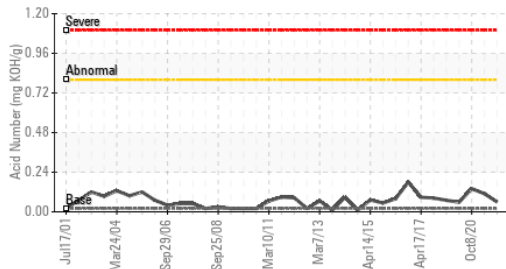
## ▲ Particle Count



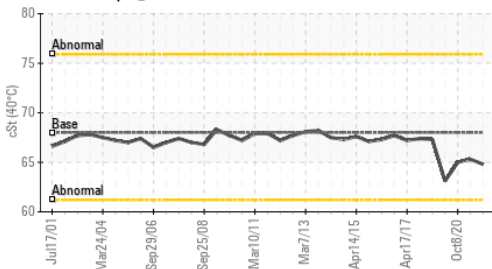
## ▲ Particle Trend



## Acid Number



## Viscosity @ 40°C



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 14387	▲ 34719	▲ 19370
Particles >6µm	ASTM D7647	>2500	▲ 3499	▲ 6158	▲ 3446
Particles >14µm	ASTM D7647	>160	▲ 190	124	124
Particles >21µm	ASTM D7647	>40	50	14	22
Particles >38µm	ASTM D7647	>10	2	0	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 21/19/15	▲ 22/20/14	▲ 21/19/14

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.02	0.06	0.11	0.14

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	68	64.8	65.3	65.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



Bottom



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0445357  
 Lab Number : 02517609  
 Unique Number : 5474589  
 Test Package : IND 2 ( Additional Tests: PrtCount )

Received : 20 Oct 2022  
 Diagnosed : 25 Oct 2022  
 Diagnostician : Kevin Marson

**NEWFOUNDLAND POWER INC.**  
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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.