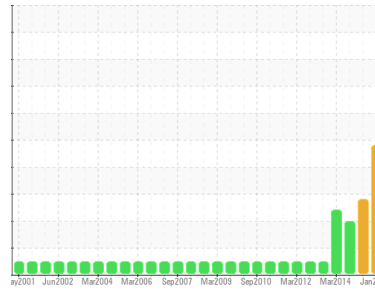




PROBLEM SUMMARY

Sample Rating Trend



DIRT

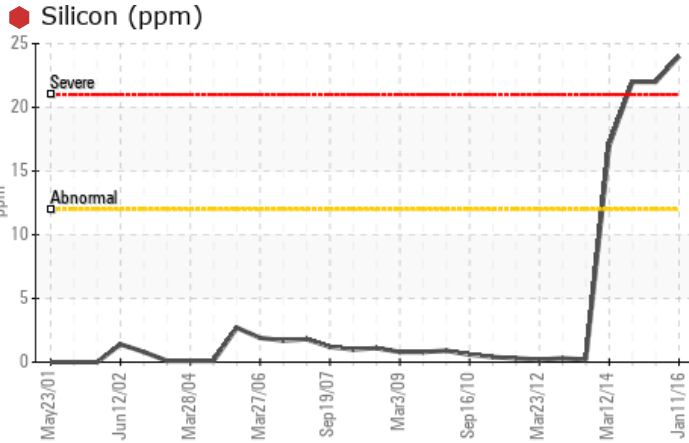


Machine Id
NCH G1 TUBR

Component
Bearing

Fluid
ESSO TERESSO ISO 68 (55 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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				SEVERE	ABNORMAL	ABNORMAL
Silicon	ppm	ASTM D5185(m)	>12	24	22	22

Customer Id: NEWSTJ
 Sample No.: WC925446
 Lab Number: 02049058
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca


To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
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 Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS


DIRT




14 Oct 2014 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. 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 >6µm are abnormally high. Elemental level of silicon (Si) above normal indicating ingress of seal material and/or dirt. 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




DIRT




15 Sep 2014 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. 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 and/or dirt. 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




DIRT



12 Mar 2014 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. 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. Lead ppm levels are noted. All other component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material and/or dirt. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

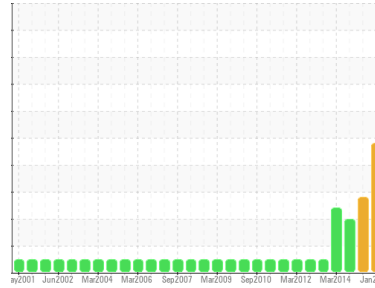
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
NCH G1 TUBR
 Component
Bearing
 Fluid
ESSO TERESSO ISO 68 (55 LTR)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. 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

High concentration of dirt present in the oil.

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		WC925446	WC892226	WC892225
Sample Date	Client Info		11 Jan 2016	14 Oct 2014	15 Sep 2014
Machine Age	yrs	Client Info	0	0	0
Oil Age	yrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		5	0	9
Iron	ppm	ASTM D5185(m) >63	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	0	0	0
Nickel	ppm	ASTM D5185(m)	0	0	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >2	<1	<1	<1
Lead	ppm	ASTM D5185(m) >161	18	20	19
Copper	ppm	ASTM D5185(m) >13	<1	<1	<1
Tin	ppm	ASTM D5185(m) >27	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	0	<1	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	<1	<1

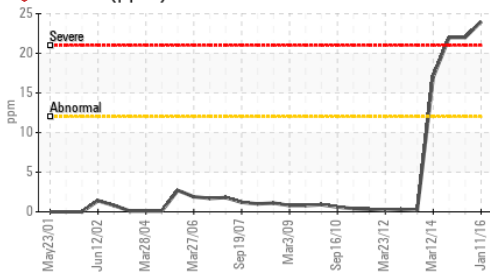
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 4.5	0	<1	<1
Barium	ppm	ASTM D5185(m) 0.4	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	<1	0
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	0	0	0
Calcium	ppm	ASTM D5185(m) 0	<1	2	1
Phosphorus	ppm	ASTM D5185(m) 0.7	<1	0	<1
Zinc	ppm	ASTM D5185(m) 0	2	2	2
Sulfur	ppm	ASTM D5185(m) 1315	2168	2224	2268
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

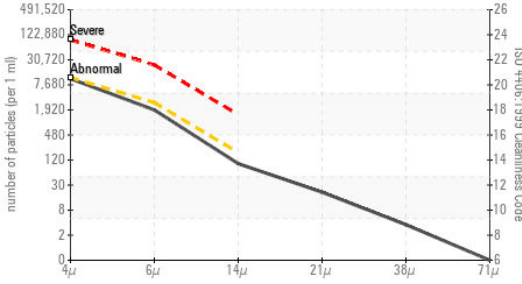
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >12	24	22	22
Sodium	ppm	ASTM D5185(m)	1	2	2
Potassium	ppm	ASTM D5185(m) >20	0	0	0

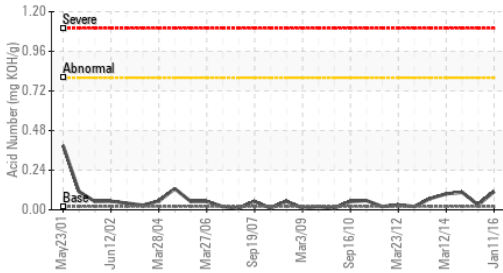
Silicon (ppm)



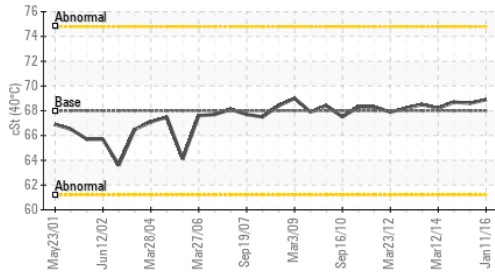
Particle Count



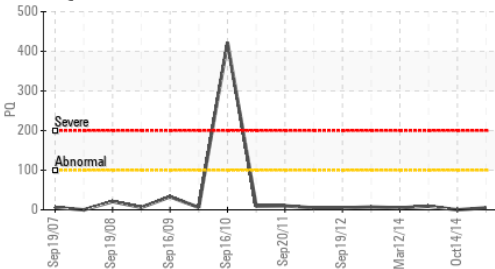
Acid Number



Viscosity @ 40°C



PQ



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	9401	46616	19955
Particles >6µm	ASTM D7647	>2500	1678	▲ 11698	▲ 2653
Particles >14µm	ASTM D7647	>160	87	▲ 542	71
Particles >21µm	ASTM D7647	>40	18	▲ 93	9
Particles >38µm	ASTM D7647	>10	3	3	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	20/18/14	▲ 23/21/16	▲ 21/19/13

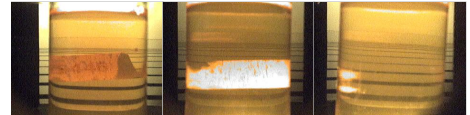
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.02	0.11	0.03	0.106

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	LIGHT	NONE
Sand/Dirt	scalar Visual*	NONE	NONE	NONE	NONE
Appearance	scalar Visual*	NORML	NORML	NORML	NORML
Odor	scalar Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar Visual*	>0.1	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	68.9	68.6	68.7

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

Color



Bottom



ISO 17025:2017
Accredited
Laboratory

Laboratory

Sample No.

Lab Number

Unique Number

Test Package

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC925446

: **02049058**

: 4251361

: IND 2 (Additional Tests: PrtCount)

Received : 26 Jan 2016

Diagnosed : 27 Jan 2016

Diagnostician : Wes Davis

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.