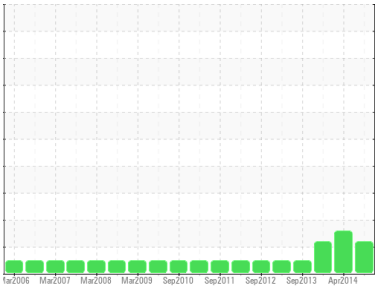
PROBLEM SUMMARY

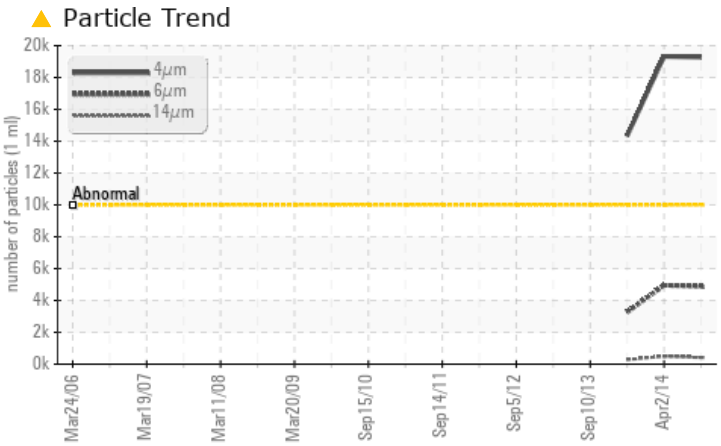
Sample Rating Trend



ISO

Machine Id
ROP G1 UGBR/THBR (S/N ROPGUGBRTHBR)
Component
Bearing
Fluid
ESSO TERESSO ISO 68 (227 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Particles >6µm		ASTM D7647	>2500	▲ **4870**	▲ 4953	▲ 3258
Particles >14µm		ASTM D7647	>160	▲ **411**	▲ 496	▲ 277
Particles >21µm		ASTM D7647	>40	▲ **105**	▲ 159	▲ 76
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **21/19/16**	▲ 21/19/16	▲ 21/19/15

Customer Id: NEWSTJ
Sample No.: WC838678
Lab Number: 01916732
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	MISSED	Sep 12 2018	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	MISSED	Sep 12 2018	?	We recommend an early resample to monitor this condition.
Filter Fluid	MISSED	Nov 03 2016	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

02 Apr 2014 Diag: Kevin Marson

ISO

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >38µm are notably high. Particles >6µm are notably high. 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

13 Mar 2014 Diag: Wes Davis

ISO

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

10 Sep 2013 Diag: Wes Davis

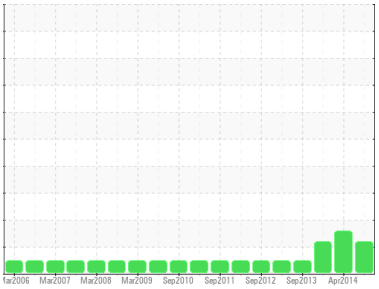
NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the component. 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



ISO

Machine Id
ROP G1 UGBR/THBR (S/N ROPGUGBRTHBR)
Component
Bearing
Fluid
ESSO TERESSO ISO 68 (227 LTR)

DIAGNOSIS

Recommendation
We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >6µm are notably high.

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		**WC838678**	WC838638	WC838635
Sample Date		Client Info		**13 May 2014**	02 Apr 2014	13 Mar 2014
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>63	**<1**	<1	<1
Chromium	ppm	ASTM D5185(m)		**0**	0	0
Nickel	ppm	ASTM D5185(m)		**<1**	0	0
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	**2**	2	2
Copper	ppm	ASTM D5185(m)	>13	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>27	**0**	0	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**<1**	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.5	**<1**	<1	<1
Barium	ppm	ASTM D5185(m)	0.4	**<1**	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	**<1**	0	0
Calcium	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Phosphorus	ppm	ASTM D5185(m)	0.7	**5**	6	6
Zinc	ppm	ASTM D5185(m)	0	**1**	2	1
Sulfur	ppm	ASTM D5185(m)	1315	**2017**	2053	1971
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

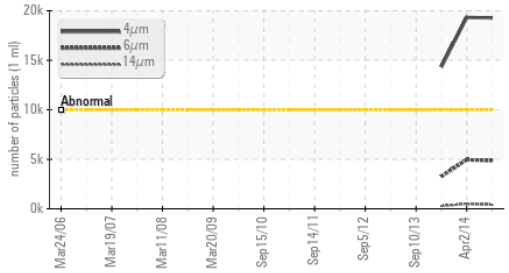
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>12	**2**	2	3
Sodium	ppm	ASTM D5185(m)		**<1**	<1	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**19268**	19320	14326
Particles >6µm		ASTM D7647	>2500	▲ **4870**	▲ 4953	▲ 3258
Particles >14µm		ASTM D7647	>160	▲ **411**	▲ 496	▲ 277
Particles >21µm		ASTM D7647	>40	▲ **105**	▲ 159	▲ 76
Particles >38µm		ASTM D7647	>10	**6**	▲ 18	6
Particles >71µm		ASTM D7647	>3	**0**	3	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **21/19/16**	▲ 21/19/16	▲ 21/19/15

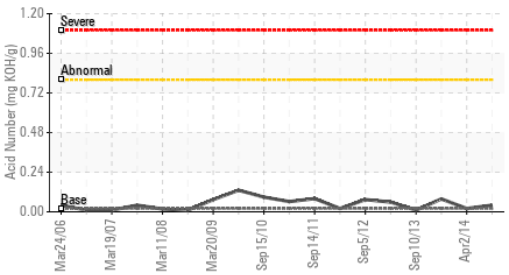
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	**0.04**	0.02	0.078

OIL ANALYSIS REPORT

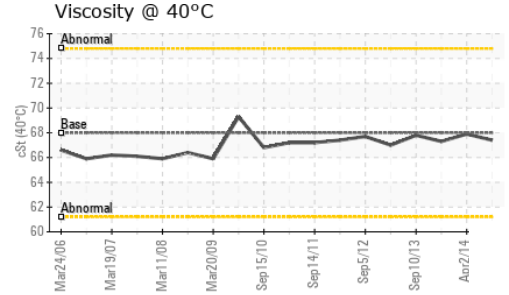
Particle Trend



Acid Number



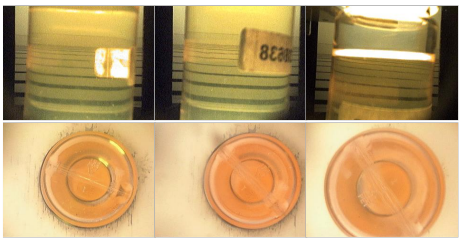
Viscosity @ 40°C



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	VLITE	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	**VLITE**	VLITE	VLITE
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

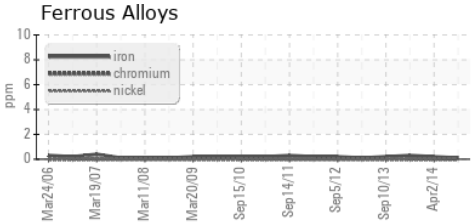
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	**67.4**	67.9	67.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

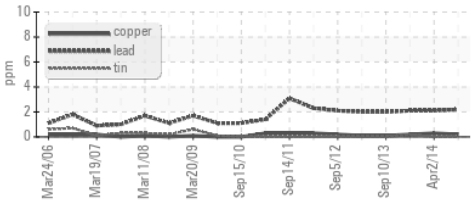


GRAPHS

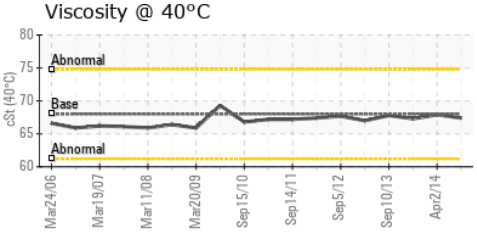
Ferrous Alloys



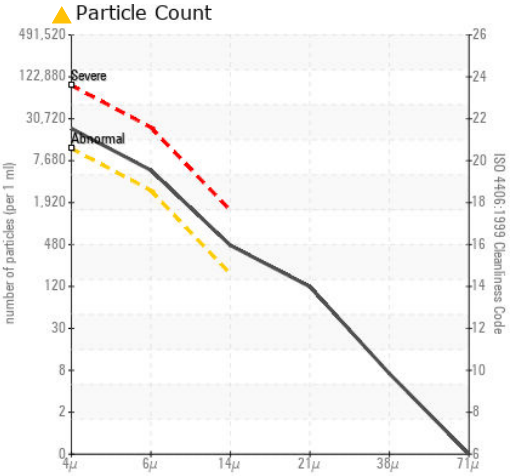
Non-ferrous Metals



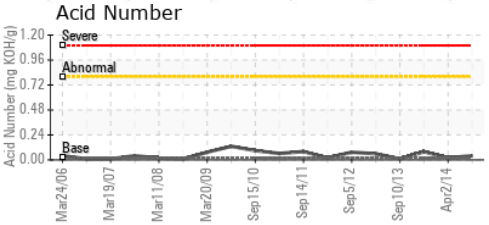
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC838678
Lab Number : 01916732
Unique Number : 9353960
Test Package : IND 2

Received : 15 May 2014
Diagnosed : 16 May 2014
Diagnostician : Wes Davis

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.

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