



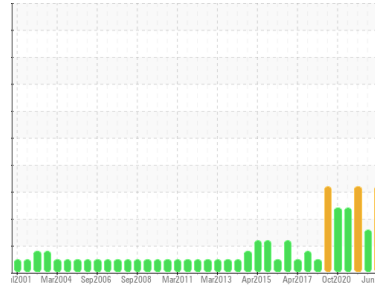
PROBLEM SUMMARY

Sample Rating Trend

DIRT

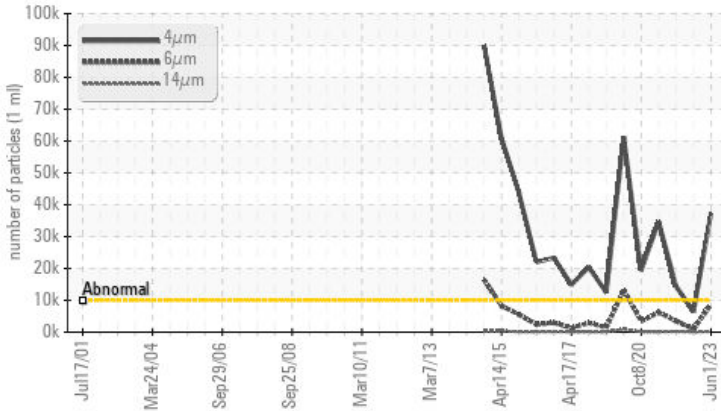
Area
[199035]
 Machine Id
ROP G1 LGBR

Component
Bearing
 Fluid
MOBIL DTE OIL HVY MEDIUM (91 LTR)

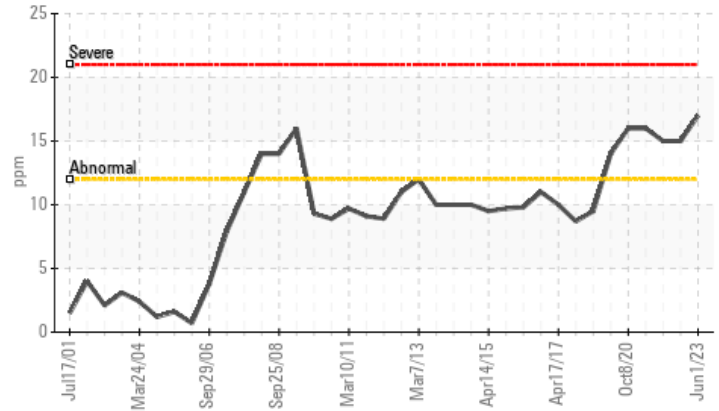


COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Silicon (ppm)



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	▲ 17	▲ 15	▲ 15
Particles >4µm		ASTM D7647 >10000	▲ 37261	6458	▲ 14387
Particles >6µm		ASTM D7647 >2500	▲ 8690	999	▲ 3499
Particles >14µm		ASTM D7647 >160	▲ 220	40	▲ 190
Oil Cleanliness		ISO 4406 (c) >20/18/14	▲ 22/20/15	20/17/12	▲ 21/19/15

Customer Id: NEWSTJ
 Sample No.: WC0455568
 Lab Number: 02563193
 Test Package: IND 2



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To discuss the diagnosis or test data:
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Kevin.Marson@wearcheck.com

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

29 Nov 2022 Diag: Kevin Marson

DIRT



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 recommend an early resample to monitor this condition. All component wear rates are normal. 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



02 Jun 2022 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



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



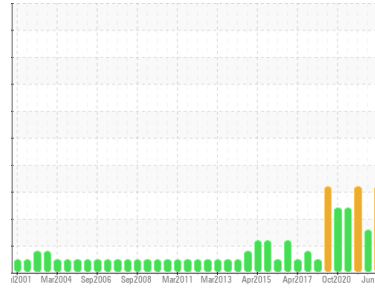


OIL ANALYSIS REPORT

Sample Rating Trend

DIRT

Area
[199035]
 Machine Id
ROP G1 LGBR
 Component
Bearing
 Fluid
MOBIL DTE OIL HVY MEDIUM (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

Silicon ppm levels are abnormally high. Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. 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		WC0455568	WC0455764	WC0445357
Sample Date	Client Info		01 Jun 2023	29 Nov 2022	02 Jun 2022
Machine Age	hrs	Client Info	22	22	22
Oil Age	hrs	Client Info	22	22	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >63	1	1	1
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >20	<1	<1	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	12	9	8
Copper	ppm	ASTM D5185(m) >13	<1	<1	<1
Tin	ppm	ASTM D5185(m) >27	0	0	0
Antimony	ppm	ASTM D5185(m)	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<1	<1	0
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	0	0
Calcium	ppm	ASTM D5185(m)	0	0	<1
Phosphorus	ppm	ASTM D5185(m)	<1	<1	<1
Zinc	ppm	ASTM D5185(m)	5	4	4
Sulfur	ppm	ASTM D5185(m)	2090	2017	2059
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

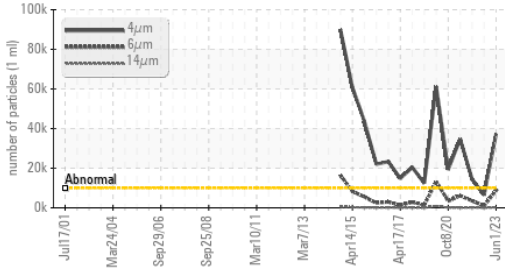
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >12	▲ 17	▲ 15	▲ 15
Sodium	ppm	ASTM D5185(m)	2	1	1
Potassium	ppm	ASTM D5185(m) >20	0	<1	<1

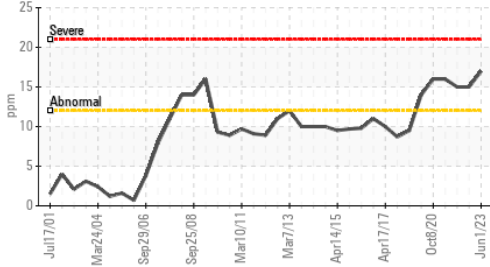
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 37261	6458	▲ 14387
Particles >6µm	ASTM D7647	>2500	▲ 8690	999	▲ 3499
Particles >14µm	ASTM D7647	>160	▲ 220	40	▲ 190
Particles >21µm	ASTM D7647	>40	36	13	50
Particles >38µm	ASTM D7647	>10	1	1	2
Particles >71µm	ASTM D7647	>3	0	0	1
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 22/20/15	20/17/12	▲ 21/19/15

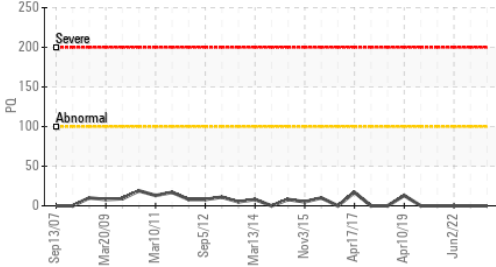
Particle Trend



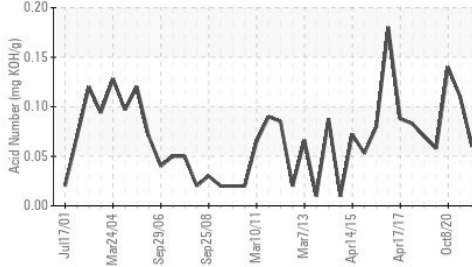
Silicon (ppm)



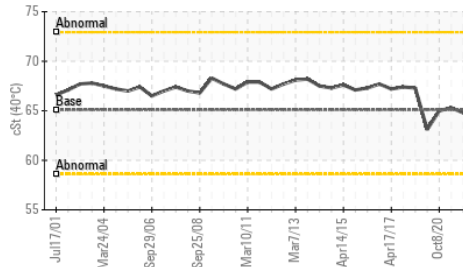
PQ



Acid Number



Viscosity @ 40°C

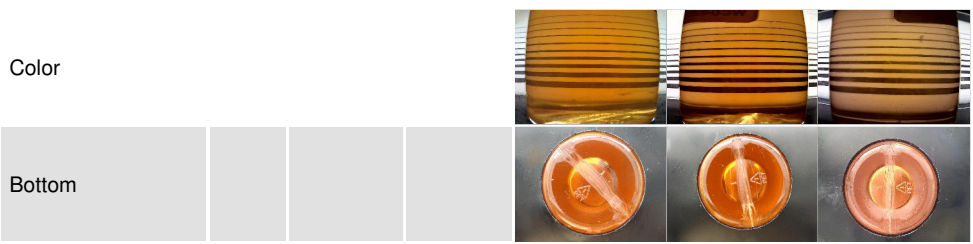


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.11	0.12	0.06

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	NONE	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

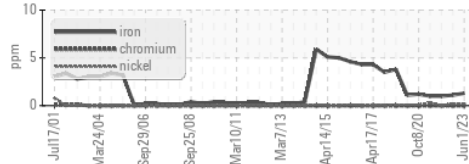
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	65.1	65.0	65.3	64.8

SAMPLE IMAGES

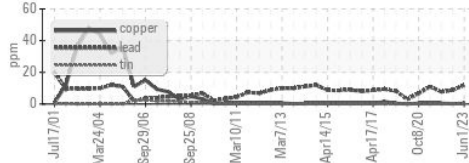


GRAPHS

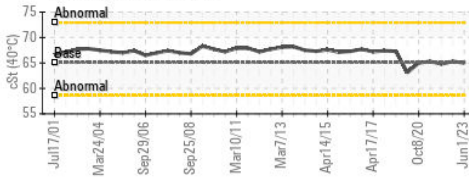
Ferrous Alloys



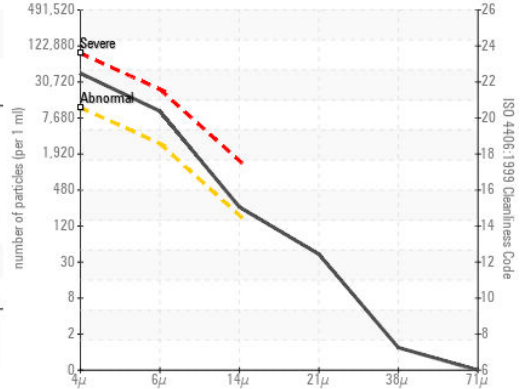
Non-ferrous Metals



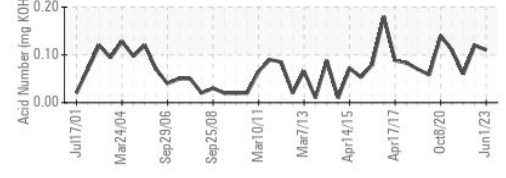
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0455568
Lab Number : **02563193**
Unique Number : 5592234
Test Package : IND 2 (Additional Tests: PRTCOUNT, TAN Man)

Received : 09 Jun 2023
Diagnosed : 14 Jun 2023
Diagnostician : Kevin Marson

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ST. JOHNS, NL
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Contact: Paul Martin
pmartin@newfoundlandpower.com

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.

T:
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