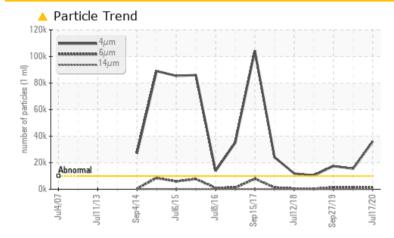


PHR-G2-TUBR

Component Bearing Fluid MOBIL DTE OIL HVY MEDIUM (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS						
Sample Status		ABNORMAL	ATTENTION	ATTENTION		
Particles >4µm	ASTM D7647 >1000	0 🔺 36034	🔺 15481	1 7476		
Oil Cleanliness	ISO 4406 (c) >20/18	3/14 🔺 22/18/11	🔺 21/18/14	a 21/18/13		

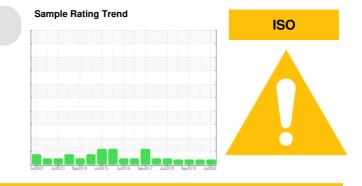
Customer Id: NEWSTJ Sample No.: WC0327998 Lab Number: 02381810 Test Package: IND 2



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

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



RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Change Filter	MISSED	Feb 23 2021	?	We recommend you service the filters on this component.
Resample	MISSED	Feb 23 2021	?	We recommend an early resample to monitor this condition.
Information Required	MISSED	Feb 23 2021	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS



13 Jan 2020 Diag: Kevin Marson

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for topup/fill. 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 a light amount of silt (particulates < 14 microns in size) present 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.



27 Sep 2019 Diag: Kevin Marson

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for topup/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL DTE OIL HVY MEDIUM, however, a fluid match indicates that this fluid is ISO 68 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present 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.



09 Jan 2019 Diag: Wes Davis



We recommend you service the filters on this component. 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 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.





OIL ANALYSIS REPORT

Sample Rating Trend

Machine Id PHR-G2-TUBR

Component Bearing Fluid MOBIL DTE OIL HVY MEDIUM (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

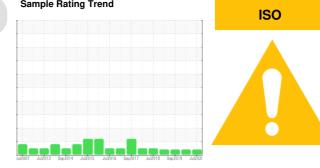
All component wear rates are normal.

Contamination

Particles >4µm are abnormally high.

Fluid Condition

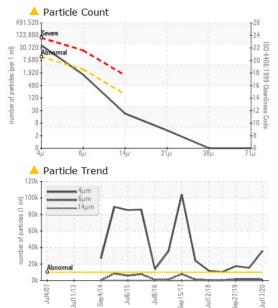
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

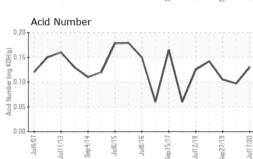


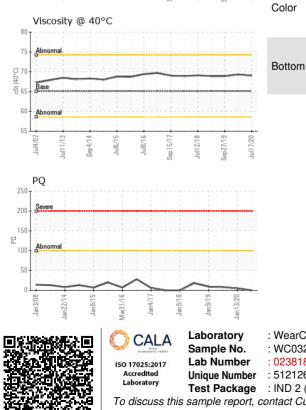
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0327998	WC0316829	WC0299337
Sample Date		Client Info		17 Jul 2020	13 Jan 2020	27 Sep 2019
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	ATTENTION
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	5	8
Iron	ppm	ASTM D5185(m)	>63	4	2	2
Chromium	ppm	ASTM D5185(m)		0	0	0
Nickel	ppm	ASTM D5185(m)		<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>2	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>161	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>13	1	<1	<1
Tin	ppm	ASTM D5185(m)	>27	10	5	4
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	0	0
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		0	<1	<1
Calcium	ppm	ASTM D5185(m)		<1	<1	<1
Phosphorus	ppm	ASTM D5185(m)		2	2	1
Zinc	ppm	ASTM D5185(m)		3	3	3
Sulfur	ppm	ASTM D5185(m)		2024	1992	2036
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>12	<1	0	0
Sodium	ppm	ASTM D5185(m)		<1	0	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1



OIL ANALYSIS REPORT







FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	A 36034	1 5481	1 7476
Particles >6µm		ASTM D7647	>2500	1394	1606	1477
Particles >14µm		ASTM D7647	>160	19	101	44
Particles >21µm		ASTM D7647	>40	3	32	11
Particles >38µm		ASTM D7647	>10	0	2	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	A 22/18/11	▲ 21/18/14	1 21/18/13
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.13	0.097	0.105
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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	65.1	69.0	69.3	68.9
SAMPLE IMAGES	S	method	limit/base	current	history1	history2



NEWFOUNDLAND POWER INC. : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0327998 Received : 16 Oct 2020 50 DUFFY PLACE, PO BOX 8910 : 02381810 Diagnosed : 21 Oct 2020 : 5121264 Diagnostician : Kevin Marson Test Package : IND 2 (Additional Tests: PRTCOUNT, TAN Man) 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.

ST. JOHNS, NL CA A1B 3P6 Contact: Paul Martin pmartin@newfoundlandpower.com

T: F: (709)737-2926

Contact/Location: Paul Martin - NEWSTJ