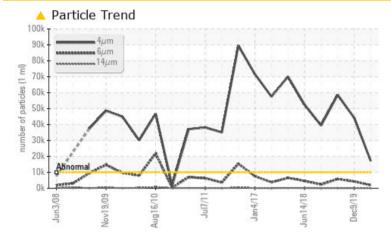


PROBLEM SUMMARY

Area [178362] Machine Id HCT-G-UGBR/THBR Component Bearing Fluid

ESSO TERESSO ISO 68 (95 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

			▲
un2008 Nov2009	Aug2010 Jul2011 J	an2017 Jun2018 Dec2019	

PROBLEMATIC TES	T RESULTS				
Sample Status			ATTENTION	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	<u> </u>	4 4202	▲ 58568
Oil Cleanliness	ISO 4406 (c)	>20/18/14	A 21/18/13	2 3/19/14	▲ 23/20/14

Sample Rating Trend

Customer Id: NEWSTJ Sample No.: WC0327950 Lab Number: 02381786 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 ACTIONS					
Action	Status	Date	Done By	Description	
Change Filter	MISSED	Sep 03 2021	?	We recommend you service the filters on this component.	

HISTORICAL DIAGNOSIS



09 Dec 2019 Diag: Wes Davis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm are notably high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

view report

22 Aug 2019 Diag: Wes Davis



We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

17 Dec 2018 Diag: Wes Davis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







OIL ANALYSIS REPORT

Area [178362] Machine Id HCT-G-UGBR/THBR Component

Bearing Fluid

ESSO TERESSO ISO 68 (95 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

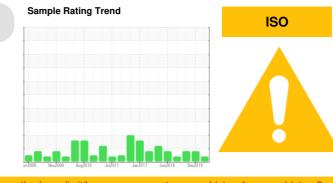
All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

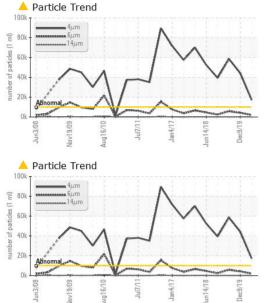
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

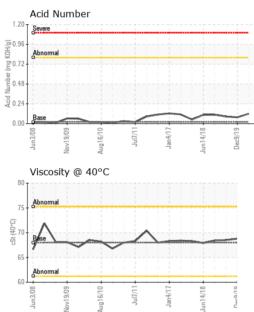


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0327950	WC0299315	WC0299360
Sample Date		Client Info		01 Sep 2020	09 Dec 2019	22 Aug 2019
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
CONTAMINATION	1	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
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	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>2	<1	<1	0
Lead	ppm	ASTM D5185(m)	>161	3	<1	<1
Copper	ppm	ASTM D5185(m)	>13	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>27	2	2	2
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	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.5	<1	<1	0
Barium	ppm	ASTM D5185(m)	0.4	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	0
Calcium	ppm	ASTM D5185(m)	0	1	1	1
Phosphorus	ppm	ACTM DE10E(m)				
	ppin	ASTM D5185(m)	0.7	3	2	2
Zinc	ppm	ASTM D5185(m)		3 3	2	2 2
Zinc	ppm	ASTM D5185(m)	0	3	2	2
Zinc Sulfur	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	3 1921	2 1875	2 1879
Zinc Sulfur Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 1315	3 1921 <1	2 1875 <1	2 1879 <1
Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	0 1315 limit/base	3 1921 <1 current	2 1875 <1 history1	2 1879 <1 history2
Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	0 1315 limit/base	3 1921 <1 <u>current</u> 6	2 1875 <1 history1 4	2 1879 <1 history2 6
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D5185(m) ASTM D5185(m)	0 1315 limit/base >12	3 1921 <1 <u>current</u> 6 <1	2 1875 <1 history1 4 0	2 1879 <1 history2 6 0
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 1315 limit/base >12 >20	3 1921 <1 current 6 <1 <1	2 1875 <1 <u>history1</u> 4 0 <1	2 1879 <1 history2 6 0 <1
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method	0 1315 limit/base >12 >20 limit/base	3 1921 <1 current 6 <1 <1 <1 current	2 1875 <1 history1 4 0 <1 +	2 1879 <1 history2 6 0 <1 +istory2
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINI Particles >4µm	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 1315 Iimit/base >12 >20 Iimit/base >10000	3 1921 <1 current 6 <1 <1 <1 current 2 17175	2 1875 <1 history1 4 0 <1 <1 history1 history1	2 1879 <1 history2 6 0 <1 <1 history2 ∧ 58568
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	0 1315 imit/base >12 >20 imit/base >10000 >2500 >160	3 1921 <1 current 6 <1 <1 <1 current 2 17175 1915	2 1875 <1 4 0 <1 √ 44202 ▲ 44202 ▲ 4241	2 1879 <1 history2 6 0 <1 <1 history2 ∧ 58568 ∧ 5791
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647	0 1315 imit/base >12 >20 imit/base >10000 >2500 >160	3 1921 <1 current 6 <1 <1 <1 current 17175 1915 76	2 1875 <1 4 0 <1 <1 history1 <1 history1 <1 44202 ▲ 44202 ▲ 4241 82	2 1879 <1 history2 6 0 <1 <1 history2 ∧ 58568 ∧ 5791 116
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 1315 imit/base >12 >20 imit/base >10000 >2500 >160 >40 >10	3 1921 <1 current 6 <1 <1 <1 current 17175 1915 76 20	2 1875 <1 4 0 <1 <1 history1 ▲ 44202 ▲ 44202 ▲ 44241 82 20	2 1879 <1 history2 6 0 <1 <1 history2 ▲ 58568 ▲ 5791 116 25
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 1315 imit/base >12 >20 imit/base >10000 >2500 >160 >40 >10	3 1921 <1 current 6 <1 <1 <1 current 17175 1915 76 20 1	2 1875 <1 history1 4 0 <1	2 1879 <1 history2 6 0 <1 <1 58568 ▲ 5791 116 25 0



OIL ANALYSIS REPORT

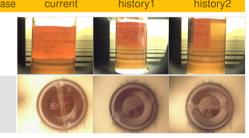


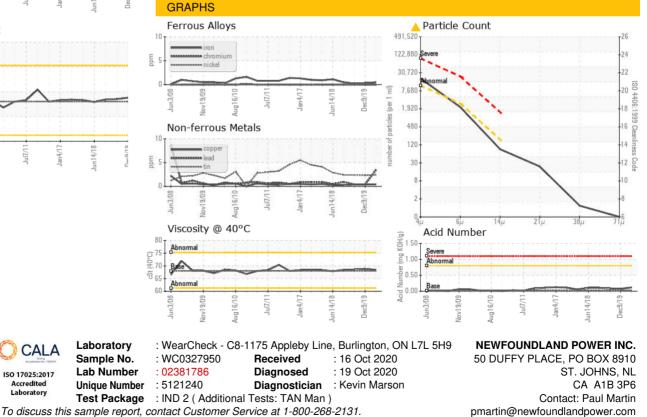


FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.12	0.077	0.086
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	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	FIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	68.4	68.8	68.5
SAMPLE IMAGE	S	method	limit/base	current	history1	history2

Color

Bottom





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.

CALA

ISO 17025:2017 Accredited Laboratory

Contact/Location: Paul Martin - NEWSTJ