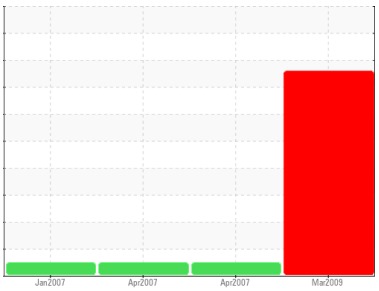
PROBLEM SUMMARY

Sample Rating Trend

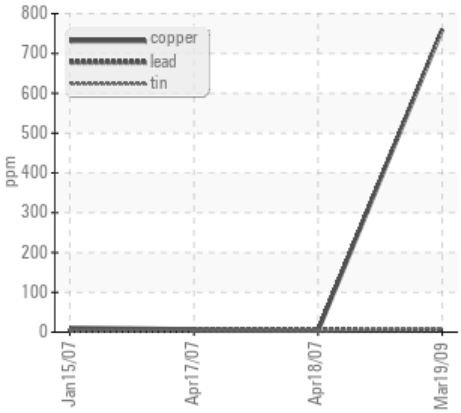


WEAR

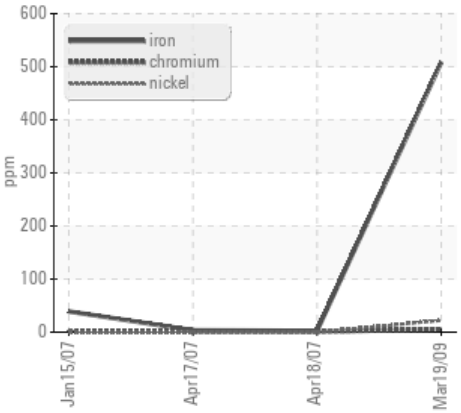
Machine Id
TC01
Component
Gearbox
Fluid
TRIBOL GEAROIL 1100/320 (--- LTR)

COMPONENT CONDITION SUMMARY

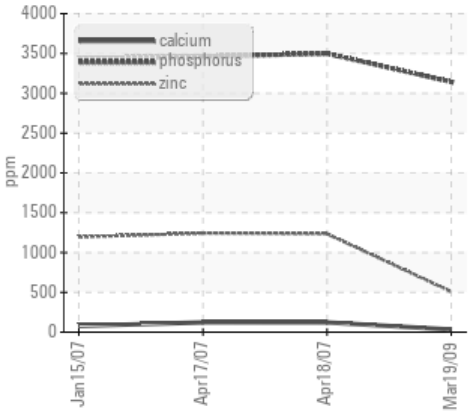
Non-ferrous Metals



Ferrous Alloys



Additives



RECOMMENDATION

We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)		▲ 508	3	4
Chromium	ppm	ASTM D5185(m)		▲ 5	<1	1
Nickel	ppm	ASTM D5185(m)		▲ 22	<1	<1
Copper	ppm	ASTM D5185(m)		● 760	4	7
Calcium	ppm	ASTM D5185(m)		▲ 33	122	123
Zinc	ppm	ASTM D5185(m)		▲ 509	1235	1242

Customer Id: GOONAP
Sample No.: PP
Lab Number: 01527181
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
+1

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
Filter Fluid	MISSED	Jul 12 2023	?	We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type.

HISTORICAL DIAGNOSIS

18 Apr 2007 Diag:

NORMAL

Resample at the next service interval to monitor.The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system. All component wear rates are normal. There is no indication of any contamination in the component. The condition of oil is suitable for further service.

view report

17 Apr 2007 Diag:

WEAR PARTICLES

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.Trace amount of abnormal low alloy steel is observed in this sample Consider efforts to improve fluid cleanliness. There is no indication of any contamination in the component. The condition of oil is suitable for further service.

view report

15 Jan 2007 Diag:

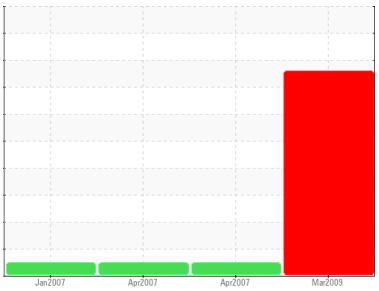
NORMAL

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 condition of oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
TC01
Component
Gearbox
Fluid
TRIBOL GEAROIL 1100/320 (--- LTR)

DIAGNOSIS

Recommendation
We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type.

Wear
The copper level is severe. Bearing and/or bushing wear is indicated. The iron level is abnormal. The chromium level is abnormal. Gear wear is indicated.

Contamination
There is no indication of any contamination in the component.

Fluid Condition
Additive levels indicate the addition of a different brand, or type of oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PP**	PP	PP
Sample Date		Client Info		**19 Mar 2009**	18 Apr 2007	17 Apr 2007
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				**SEVERE**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**16**	---	---
Iron	ppm	ASTM D5185(m)		▲ **508**	3	4
Chromium	ppm	ASTM D5185(m)		▲ **5**	<1	1
Nickel	ppm	ASTM D5185(m)		▲ **22**	<1	<1
Titanium	ppm	ASTM D5185(m)		**<1**	<1	<1
Silver	ppm	ASTM D5185(m)		**<1**	<1	<1
Aluminum	ppm	ASTM D5185(m)		**34**	35	35
Lead	ppm	ASTM D5185(m)		**5**	4	4
Copper	ppm	ASTM D5185(m)		⬢ **760**	4	7
Tin	ppm	ASTM D5185(m)		**9**	4	4
Vanadium	ppm	ASTM D5185(m)		**1**	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**3**	<1	<1
Barium	ppm	ASTM D5185(m)		**<1**	<1	<1
Molybdenum	ppm	ASTM D5185(m)		**1649**	2194	2197
Manganese	ppm	ASTM D5185(m)		**5**	0	0
Magnesium	ppm	ASTM D5185(m)		**3**	4	4
Calcium	ppm	ASTM D5185(m)		▲ **33**	122	123
Phosphorus	ppm	ASTM D5185(m)		**3143**	3498	3463
Zinc	ppm	ASTM D5185(m)		▲ **509**	1235	1242
Sulfur	ppm	ASTM D5185(m)		**11084**	9650	9570

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		**22**	33	34
Sodium	ppm	ASTM D5185(m)		**4**	8	8
Potassium	ppm	ASTM D5185(m)		**0**	<1	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**2.77**	3.71	3.70

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	**VLITE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	VLITE	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*		**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

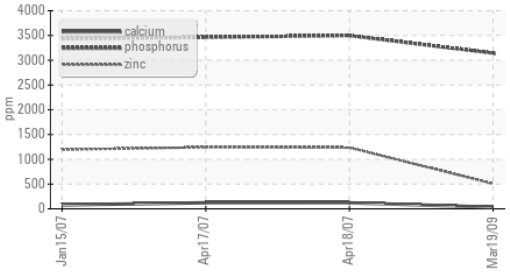
OIL ANALYSIS REPORT

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		**312**	228	234

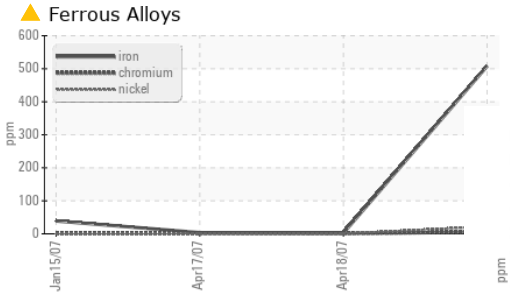
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

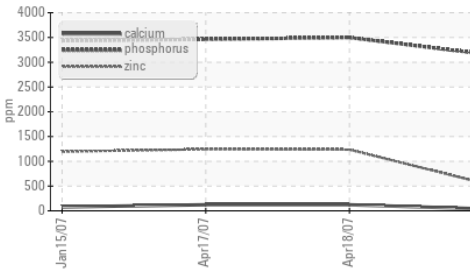
Additives



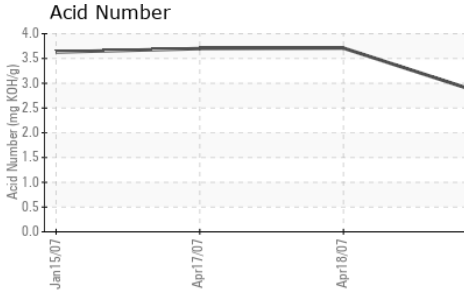
Ferrous Alloys



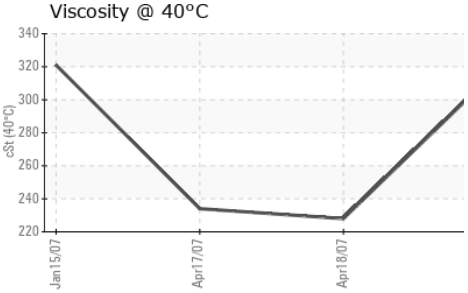
Additives



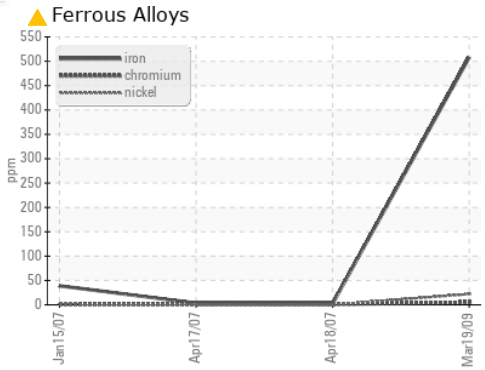
Acid Number



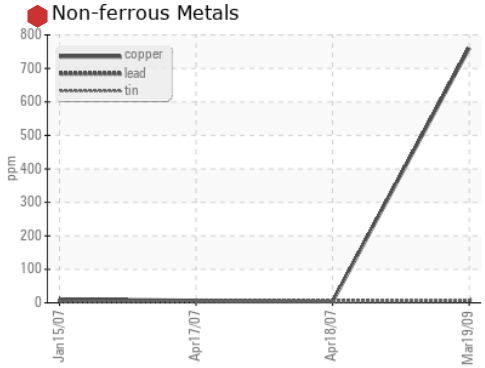
Viscosity @ 40°C



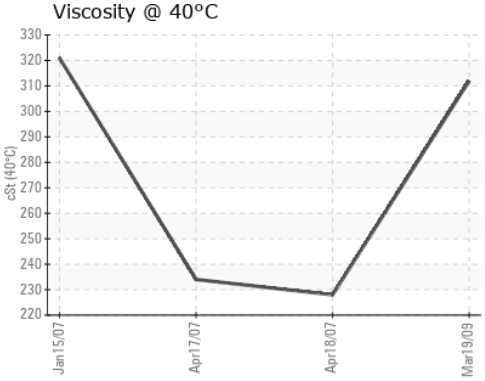
Ferrous Alloys



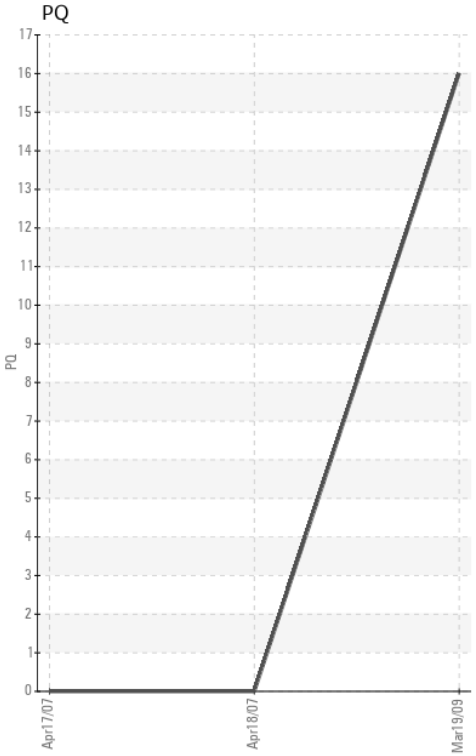
Non-ferrous Metals



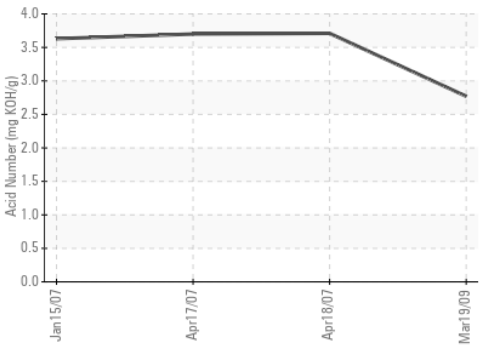
Viscosity @ 40°C



PQ



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP
Lab Number : 01527181
Unique Number : 2872074
Test Package : IND 2

Received : 20 Mar 2009
Diagnosed : 23 Mar 2009
Diagnostician :

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.

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