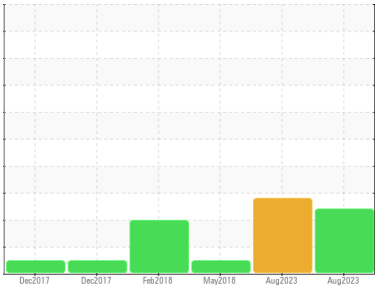
PROBLEM SUMMARY

Sample Rating Trend

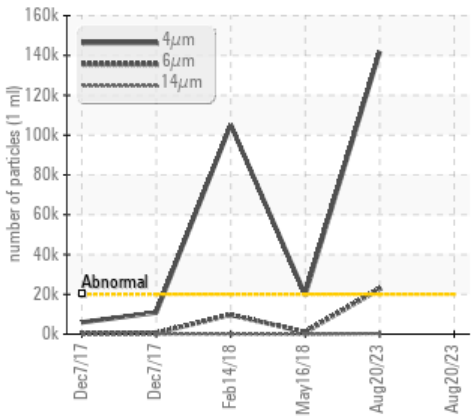


VISCOSITY

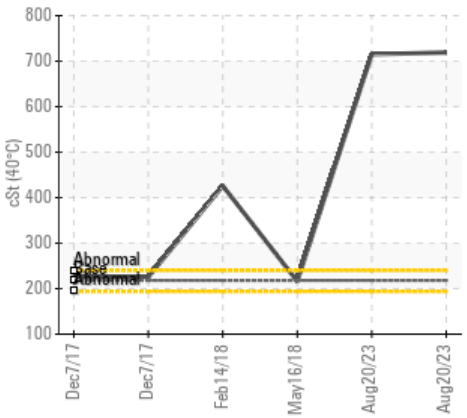
Area
STORK HYDROSTATIC
Machine Id
B21613 (S/N 69700026)
Component
Gearbox
Fluid
MOBIL DTE OIL BB (6 GAL)

COMPONENT CONDITION SUMMARY

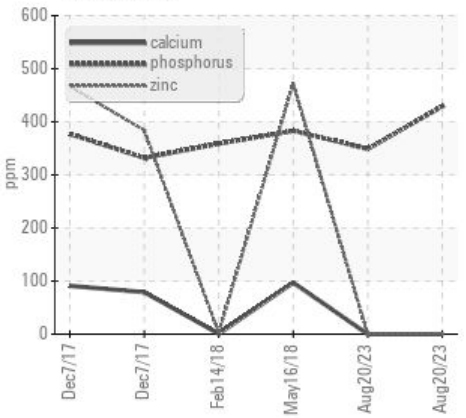
Particle Trend



Viscosity @ 40°C



Additives



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	NORMAL
Calcium	ppm	ASTM D5185m		▲ **0**	▲ 0	97
Zinc	ppm	ASTM D5185m		▲ **0**	▲ 0	472
Particles >4µm		ASTM D7647	>20000	▲ **141827**	---	19756
Particles >6µm		ASTM D7647	>5000	▲ **22676**	---	971
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/15**	---	21/17/11
Visc @ 40°C	cSt	ASTM D445	218	▲ **719**	▲ 715	216.0

Customer Id: HORBEL
Sample No.: WC0820487
Lab Number: 05929570
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

20 Aug 2023 Diag: Jonathan Hester

SEDIMENT

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. There is a moderate amount of visible silt present in the sample. The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

view report

16 May 2018 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

14 Feb 2018 Diag: Jonathan Hester

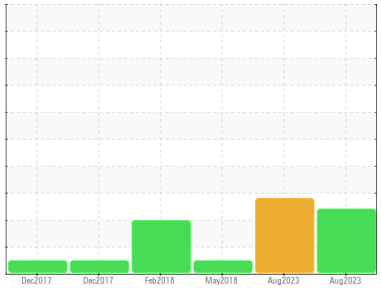
VISCOSITY

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. There is a high 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. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
STORK HYDROSTATIC
Machine Id
B21613 (S/N 69700026)
Component
Gearbox
Fluid
MOBIL DTE OIL BB (6 GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

Fluid Condition
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0820487**	WC0820485	WCI2312536
Sample Date		Client Info		**20 Aug 2023**	20 Aug 2023	16 May 2018
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	4000
Oil Changed		Client Info		**N/A**	N/A	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**9**	1	2
Chromium	ppm	ASTM D5185m	>15	**0**	0	0
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**0**	0	0
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Antimony	ppm	ASTM D5185m	>5	**---**	---	0
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	▲ 28	<1
Barium	ppm	ASTM D5185m		**0**	0	<1
Molybdenum	ppm	ASTM D5185m		**0**	0	14
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**<1**	0	0
Calcium	ppm	ASTM D5185m		▲ **0**	▲ 0	97
Phosphorus	ppm	ASTM D5185m		**429**	349	383
Zinc	ppm	ASTM D5185m		▲ **0**	▲ 0	472
Sulfur	ppm	ASTM D5185m		**5781**	▲ 10905	7384

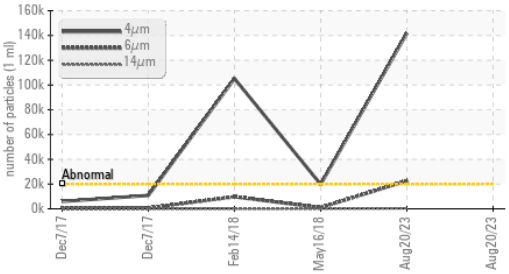
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**1**	2	2
Sodium	ppm	ASTM D5185m		**<1**	<1	0
Potassium	ppm	ASTM D5185m	>20	**<1**	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **141827**	---	19756
Particles >6µm		ASTM D7647	>5000	▲ **22676**	---	971
Particles >14µm		ASTM D7647	>640	**286**	---	15
Particles >21µm		ASTM D7647	>160	**29**	---	3
Particles >38µm		ASTM D7647	>40	**1**	---	0
Particles >71µm		ASTM D7647	>10	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/15**	---	21/17/11

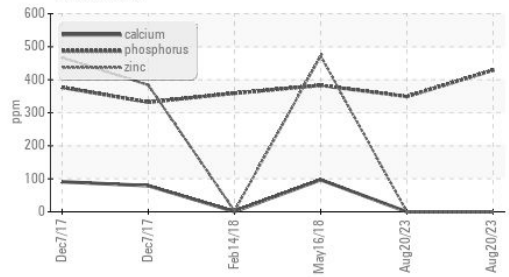
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.71**	0.99	0.796

OIL ANALYSIS REPORT

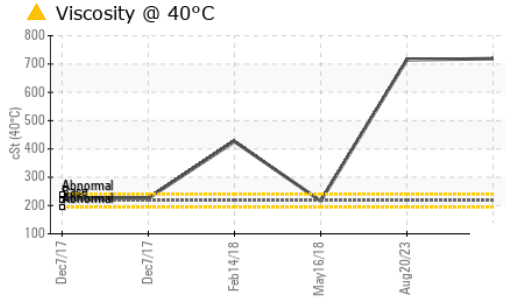
Particle Trend



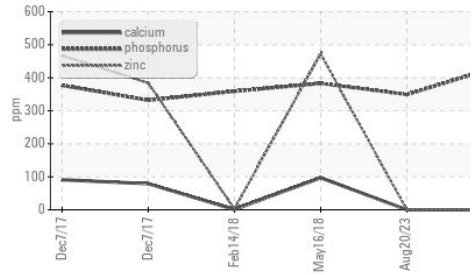
Additives



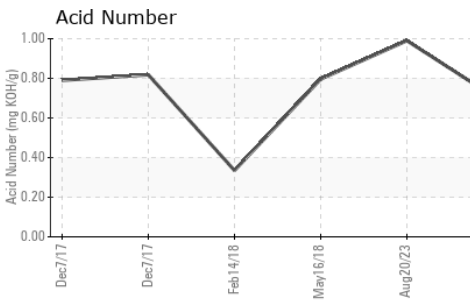
Viscosity @ 40°C



Additives



Acid Number



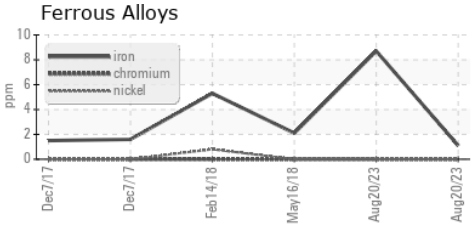
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	218	▲ **719**	▲ 715	216.0

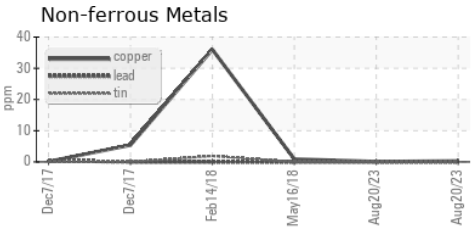
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS

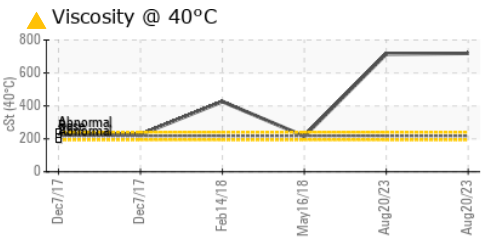
Ferrous Alloys



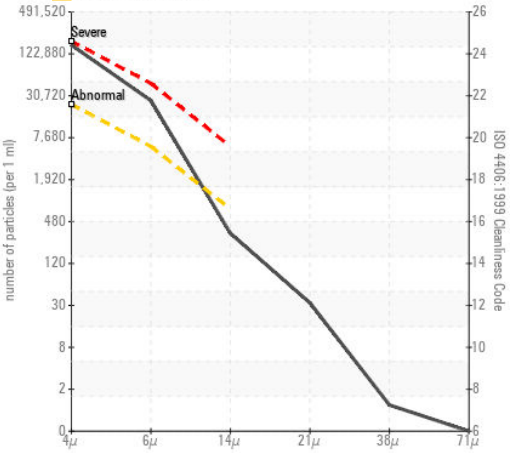
Non-ferrous Metals



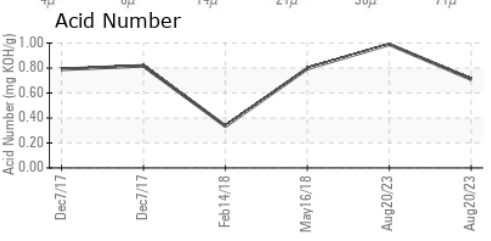
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0820487 **Received** : 21 Aug 2023
Lab Number : 05929570 **Diagnosed** : 24 Aug 2023
Unique Number : 10609517 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: PrtCount)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

HORMEL FOODS-BELOIT
3000 KENNEDY DRIVE
BELOIT, WI
US 53511
Contact: Craig Bennett
cabennett@hormel.com
T:
F: (608)365-8322