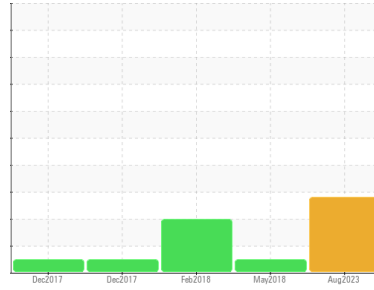




# PROBLEM SUMMARY

Sample Rating Trend



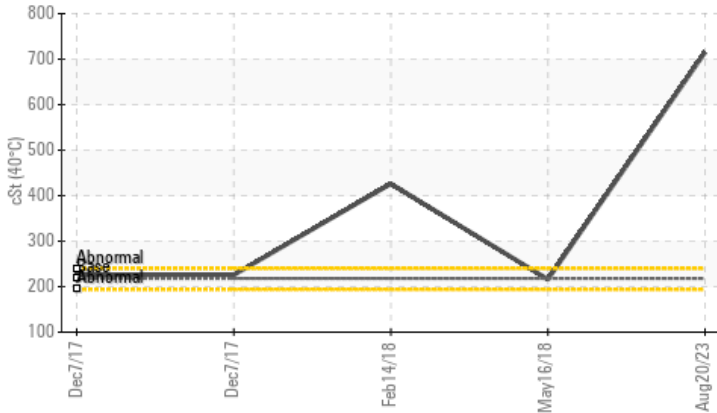
**SEDIMENT**



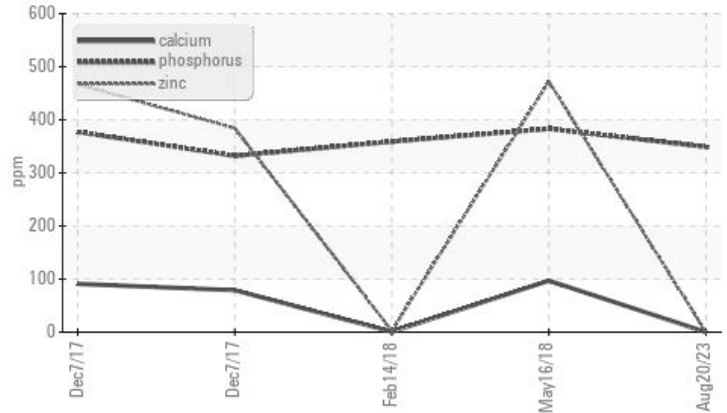
Area  
**STORK HYDROSTATIC**  
 Machine Id  
**B21613 (S/N 69700026)**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL DTE OIL BB (6 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Additives



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	ABNORMAL
Boron	ppm	ASTM D5185m	▲ 28	<1	<1
Calcium	ppm	ASTM D5185m	▲ 0	97	<1
Zinc	ppm	ASTM D5185m	▲ 0	472	▲ 2
Sulfur	ppm	ASTM D5185m	▲ 10905	7384	▲ 793
Silt	scalar	*Visual	NONE	NONE	NONE
Visc @ 40°C	cSt	ASTM D445	218	▲ 715	216.0
					▲ 426.1

Customer Id: HORBEL  
 Sample No.: WC0820485  
 Lab Number: 05929569  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS

### 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



### 07 Dec 2017 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.

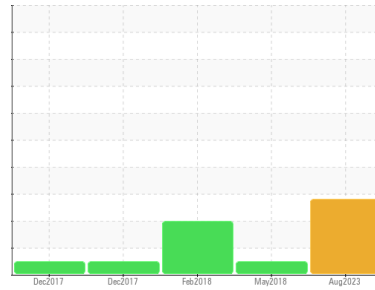
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



## SEDIMENT



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

### DIAGNOSIS

#### Recommendation

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.

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of visible silt present in the sample.

#### Fluid Condition

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.

### SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0820485</b>	WCI2312536	WCI2329113
Sample Date	Client Info	<b>20 Aug 2023</b>	16 May 2018	14 Feb 2018
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	4000
Oil Changed	Client Info	<b>N/A</b>	Not Changd	Not Changd
Sample Status		<b>ABNORMAL</b>	NORMAL	ABNORMAL

### WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>1</b>	2	5
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	<1	36
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	2
Antimony	ppm	ASTM D5185m >5	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>▲ 28</b>	<1	<1
Barium	ppm	ASTM D5185m	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	14	8
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>▲ 0</b>	97	<1
Phosphorus	ppm	ASTM D5185m	<b>349</b>	383	359
Zinc	ppm	ASTM D5185m	<b>▲ 0</b>	472	▲ 2
Sulfur	ppm	ASTM D5185m	<b>▲ 10905</b>	7384	▲ 793

### CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>2</b>	2	5
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0

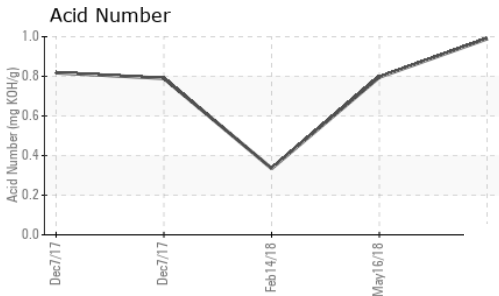
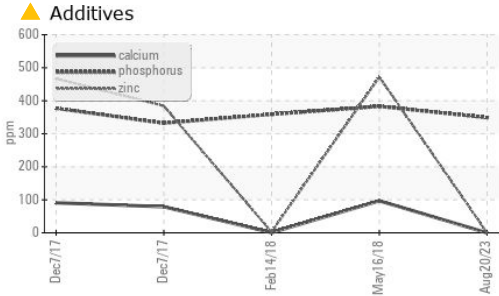
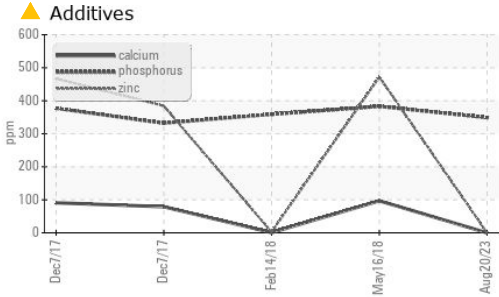
### FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	<b>---</b>	19756	▲ 105146
Particles >6µm	ASTM D7647 >5000	<b>---</b>	971	▲ 9740
Particles >14µm	ASTM D7647 >640	<b>---</b>	15	88
Particles >21µm	ASTM D7647 >160	<b>---</b>	3	15
Particles >38µm	ASTM D7647 >40	<b>---</b>	0	1
Particles >71µm	ASTM D7647 >10	<b>---</b>	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	<b>---</b>	21/17/11	▲ 24/20/14

### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.99</b>	0.796	0.335

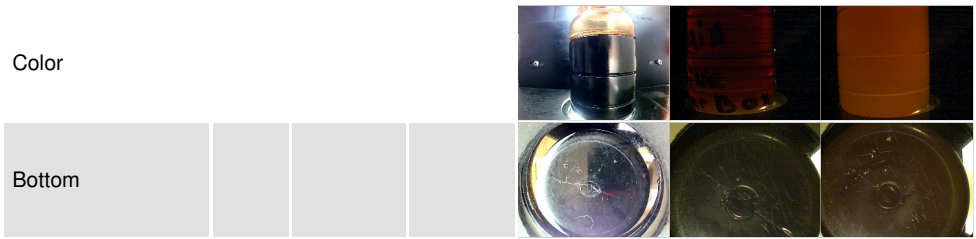
# OIL ANALYSIS REPORT



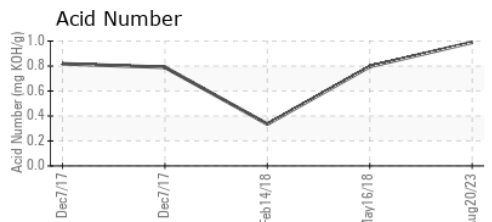
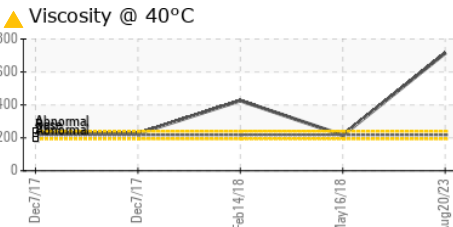
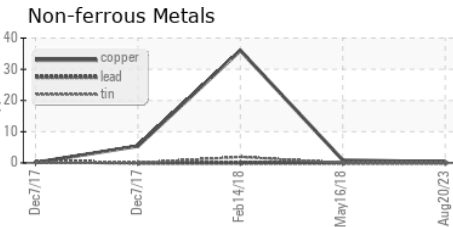
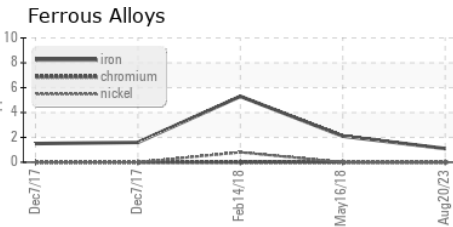
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 218	▲ 715	216.0	▲ 426.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0820485 **Received** : 21 Aug 2023  
**Lab Number** : 05929569 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10609516 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

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

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)