

## **PROBLEM SUMMARY**

# THYSSENKRUPP US120327 (S/N EV9237)

Hydraulic System Fluid NOT GIVEN (--- GAL)

#### COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC T	EST RESULTS			
Sample Status			ABNORMAL	 
Particles >4µm	ASTM D7647	>5000	🔺 17467	 
Particles >6µm	ASTM D7647	>1300	🔺 2648	 
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>21/19/13</b>	 

Customer Id: TKEKIR Sample No.: BB0000172 Lab Number: 05933475 Test Package: PLANT



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

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



RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Filter			?	We recommend you service the filters on this component if applicable.		
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample.		

HISTORICAL DIAGNOSIS



### **OIL ANALYSIS REPORT**

#### Machine Id THYSSENKRUPP US120327 ( Component

**Hydraulic System** NOT GIVEN (--- GAL)

#### DIAGNOSIS

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

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

7 (S/N EV92	237)					
				Aug2023		
		method	limit/base	current	history1	history2
			IIIIIIIIIUUuuu	BB0000170	Thotory I	motoryz
Sample Number		Client Info		15 Aug 2022		
Sample Date	bro	Client Info		15 Aug 2023		
	hre	Client Info		0		
Oil Age Oil Changed	1115	Client Info		Not Change		
Sample Status				ABNORMAL		
		mathad	limit/base	ourroat	historyd	biotom/Q
WEAR METALS		method	inniv base	current	nistory i	nistory2
Iron	ppm	ASTM D5185m	>20	<1		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Litanium	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM DE105m	. 20	0		
Auminum	ppm	ASTM D5185m	>20	0		
Coppor	ppm	ASTM D5185m	>20	-1		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	nom	ASTM D5185m	20	0		
Cadmium	ppm	ASTM D5185m		0		
Guainiani	ppiii			•		
		100 C 100	11 11 11 11		1 A A A A A A A A A A A A A A A A A A A	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 0 2	history1  	history2 
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 0 2 0	history1  	history2  
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 2 0 0	history1  	history2  
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 2 0 0 <1	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 2 0 0 <1 69 226	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 2 0 0 <1 69 286 246	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 2 0 0 <1 69 286 346 4258	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 0 2 0 0 <1 69 286 346 4358	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           0           2           0           -           0           <1	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           0           2           0           -           69           286           346           4358           current           <1	history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >15	current           0           2           0           -           69           286           346           4358           current           <1	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm 1 ppm 2 ppm 2 ppm 2 ppm 3 ppm 4 ppm 4 ppm 4 ppm 4 ppm 4 ppm 4 ppm 4	method           ASTM D5185m	limit/base	current           0           2           0           0           -           69           286           346           4358           current           <1           0           2	history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	limit/base limit/base >15 >20 limit/base	current           0           2           0           0           <1	history1 history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >15 >20 limit/base >5000	current         0         2         0         -         69         286         346         4358         current         <1	history1                        history1            history1            history1            history1                  history1            history1	history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >15 >20 limit/base >5000 >1300	current         0         2         0         286         346         4358         current         <1	history1                        history1            history1            history1            history1                           history1	history2                        history2               history2                  history2                     history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >15 >20 limit/base >5000 >1300 >160	current         0         2         0         2         0         <1	history1                           history1            history1            history1               history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40	current         0         2         0         <1	history1                           history1            history1                  history1	history2                        history2            history2            history2               history2 </td
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	current         0         2         0         21         0         <1	history1                           history1            history1            history1               history1   <	history2   history2                  history2 </td
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D7647           ASTM D7647           ASTM D7647           ASTM D7647           ASTM D7647           ASTM D7647	limit/base limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >10 >3	current         0         2         0         4358         current         <1	history1  history1            history1	history2                           history2            history2            history2            history2 </td
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >14µm Particles >38µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D7647	limit/base >15 >20 limit/base >20 limit/base >20 >1300 >1300 >1300 >160 >40 >10 >3 >19/17/14	current         0         2         0         286         346         4358         current         <1         0         286         346         4358         current         <1         0         2         current         ▲         17467         ▲         63         11         0         0         0         0         0         0         0         0         0         0         0         0	history1                           history1            history1            history1	history2                        history2            history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >4µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D7647           ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3 >19/17/14 limit/base	current         0         2         0         <1	history1                              history1            history1            history1   -	history2                        history2            history2            history2

Sample Rating Trend

ISO



## **OIL ANALYSIS REPORT**

method

limit/base

current

history1

history2

VISUAL









0.00

55

50

45

35

30

25

€ € 4(

Aug15/23

Viscosity @ 40°C



mac



T:

F: