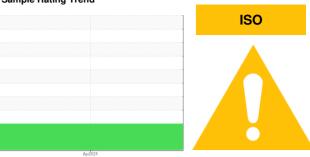


# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# **PMH3549 - KOENIG**

**Hydraulic System** 

**AW HYDRAULIC OIL ISO 32 (--- GAL)** 

### DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

#### **Fluid Condition**

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

			,	Apr2024		
0.44404 5 145004						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0897204		
Sample Date		Client Info		22 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	2		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>75	1		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
					•	
Boron	ppm	ASTM D5185m	5	0		
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	5 5	0		
				_		
Barium	ppm	ASTM D5185m	5	0		
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	5	0		
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 1 0		
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25	0 1 0 7		
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	0 1 0 7 86		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	0 1 0 7 86 336		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370	0 1 0 7 86 336 446		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500	0 1 0 7 86 336 446 1803		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base	0 1 0 7 86 336 446 1803	    history1	    history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 1 0 7 86 336 446 1803	    history1	    history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 1 0 7 86 336 446 1803 current	    history1	history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 1 0 7 86 336 446 1803 current 1 0	    history1	history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >20 	0 1 0 7 86 336 446 1803 current 1 0 2	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20 limit/base >5000	0 1 0 7 86 336 446 1803	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300	0 1 0 7 86 336 446 1803	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160	0 1 0 7 86 336 446 1803	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >51µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160 >40	0 1 0 7 86 336 446 1803	history1 history1	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 25 200 300 370 2500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	0 1 0 7 86 336 446 1803	history1 history1	history2 history2

Acid Number (AN)

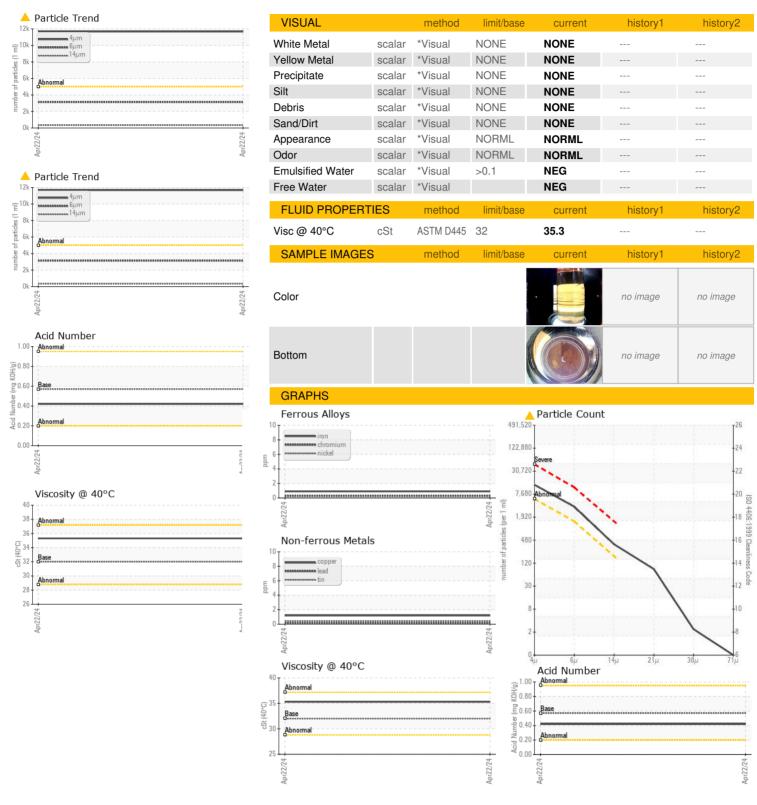
mg KOH/g ASTM D8045 0.57

0.42

Contact/Location: ERIC HILL - PALTIF



## **OIL ANALYSIS REPORT**





Certificate 12367

Laboratory Sample No.

: WC0897204 Lab Number : 06157575 Unique Number : 10992998

Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

: 24 Apr 2024 Diagnosed : 24 Apr 2024 - Wes Davis

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.

: 23 Apr 2024

**PALFINGER - BRANCH 400** 

4151 W ST RT 18 TIFFIN, OH US 44883

Contact: ERIC HILL e.hill@palfinger.com T: (419)448-8156

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: ERIC HILL - PALTIF