

PROBLEM SUMMARY

Sample Rating Trend

DEGRADATION

Machine Id

KENWORTH M-45

Component Transmission (Manual) Fluid {not provided} (4 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The fluid change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | SEVERE | | | | | |
|------------------|----------|--------------|-----------|----------------|--|--|--|--|--|
| Particles >4µm | | ASTM D7647 | >10000 | <u> </u> | | | | | |
| Particles >6µm | | ASTM D7647 | >2500 | 4 97936 | | | | | |
| Particles >14µm | | ASTM D7647 | >320 | <u> </u> | | | | | |
| Particles >21µm | | ASTM D7647 | >80 | A 1132 | | | | | |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | <u> </u> | | | | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 4.56 | | | | | |

Customer Id: PETABE Sample No.: PE0003251 Lab Number: 06194595 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

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

| RECOMMENDED AC | TIONS | | | |
|----------------|--------|------|---------|---|
| Action | Status | Date | Done By | Description |
| Resample | | | ? | We recommend an early resample to monitor this condition. |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



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Machine Id KENWORTH M-45

Component Transmission (Manual) Fluid

{not provided} (4 GAL)

DIAGNOSIS

A Recommendation

The fluid change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the fluid.

Fluid Condition

The AN level is above the recommended limit. The fluid is no longer serviceable.

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|---|--|--|---|--|--|--|
| Sample Number | | Client Info | | PE0003251 | | |
| Sample Date | | Client Info | | 21 May 2024 | | |
| Machine Age | mls | Client Info | | 240500 | | |
| Oil Age | mls | Client Info | | 240500 | | |
| Oil Changed | | Client Info | | Changed | | |
| Sample Status | | | | SEVERE | | |
| CONTAMINATION | ۷ | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.1 | NEG | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184 | >95 | 63 | | |
| Iron | ppm | ASTM D5185m | >200 | 134 | | |
| Chromium | ppm | ASTM D5185m | >5 | 2 | | |
| Nickel | ppm | ASTM D5185m | >5 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 2 | | |
| Silver | ppm | ASTM D5185m | >7 | 1 | | |
| Aluminum | ppm | ASTM D5185m | >25 | 15 | | |
| Lead | ppm | ASTM D5185m | >45 | <1 | | |
| Copper | ppm | ASTM D5185m | >225 | 26 | | |
| Tin | ppm | ASTM D5185m | >10 | <1 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | <1 | | |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | current 529 | history1 | history2 |
| ADDITIVES Boron Barium | ppm ppm | method ASTM D5185m ASTM D5185m | limit/base | current 529 150 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum | ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 529 150 2 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese | ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 529 150 2 4 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 529 150 2 4 8 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm ppm | methodASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185m | limit/base | Current 529 150 2 4 8 98 | 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 | limit/base | Current 529 150 2 4 8 98 2081 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | 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 529 150 2 4 8 98 2081 31 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm ppm | methodASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185m | limit/base | current 529 150 2 4 8 98 2081 31 887 | 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 ASTM D5185m | limit/base | Current 529 150 2 4 8 98 2081 31 887 Current | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | limit/base limit/base >125 | current 529 150 2 4 8 98 2081 31 887 current 49 | history1 history1 | history2 history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base | current 529 150 2 4 8 98 2081 31 887 current 49 7 | history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | limit/base limit/base >125 >20 | current 529 150 2 4 8 98 2081 31 887 current 49 7 6 | history1 history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | limit/base limit/base >125 >20 limit/base | current 529 150 2 4 8 98 2081 31 887 current 49 7 6 current | history1 history1 history1 history1 | history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus 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 >125 >20 limit/base >10000 | current 529 150 2 4 8 98 2081 31 887 current 49 7 6 current 149690 | 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 | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | limit/base | Current 529 150 2 4 8 98 2081 31 887 current 49 7 6 current 149690 >7936 | 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 | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | limit/base >125 >20 limit/base >20 >10000 >2500 >320 | Current 529 150 2 4 8 98 2081 31 887 current 49 7 6 current 149690 97936 7625 | history1 history1 history1 history1 history1 | history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 history2 |
| ADDITIVES Boron 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 ppm | method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 | limit/base | Current 529 150 2 4 8 98 2081 31 887 Current 49 7 6 Current 149690 97936 7625 1132 | history1 history1 history1 | history2 history2 |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >38µm | 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 | Current 529 150 2 4 8 98 2081 31 887 Current 49 7 6 Current 149690 7936 7625 1132 14 | history1 history1 history1 | history2 history2 history2 history2 |

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Oil Cleanliness



OIL ANALYSIS REPORT



PetroCard - Aberdeen 110 Commerce St Aberdeen, WA US 98520 Contact: ED ROZMARYN erozmaryn@petrocard.com T: 012) F:

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Submitted By: ED ROZMARYN

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