

# **OIL ANALYSIS REPORT**

## Sample Rating Trend

# **NORMAL**

# [BEFORE FILTRATION] 402205.02

Hydraulic System

**AW HYDRAULIC OIL ISO 46 (--- GAL)** 

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

## **Fluid Condition**

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

|   |  |   |  |   |          | '                 |
|---|--|---|--|---|----------|-------------------|
|   |  |   |  | Jun2024   |          |                   |
| 0.4451.5.1150.54  | 4471011  |   |  |   |          |                   |
| SAMPLE INFORM   | MATION   | method  | limit/base   | current   | history1 | history2          |
| Sample Number   |  | Client Info   |  | KL0014366   |          |                   |
| Sample Date   |  | Client Info   |  | 04 Jun 2024   |          |                   |
| Machine Age   | hrs  | Client Info   |  | 0   |          |                   |
| Oil Age   | hrs  | Client Info   |  | 0   |          |                   |
| Oil Changed   |  | Client Info   |  | N/A   |          |                   |
| Sample Status   |  |   |  | NORMAL  |          |                   |
| CONTAMINATIO  | N  | method  | limit/base   | current   | history1 | history2          |
| Water   |  | WC Method   | >0.05  | NEG   |          |                   |
| WEAR METALS   |  | method  | limit/base   | current   | history1 | history2          |
| Iron  | ppm  | ASTM D5185m   | >20  | 3   |          |                   |
| Chromium  | ppm  | ASTM D5185m   | >20  | <1  |          |                   |
| Nickel  | ppm  | ASTM D5185m   | >20  | <1  |          |                   |
| Titanium  | ppm  | ASTM D5185m   |  | <1  |          |                   |
| Silver  | ppm  | ASTM D5185m   |  | <1  |          |                   |
| Aluminum  | ppm  | ASTM D5185m   | >20  | 2   |          |                   |
| Lead  | ppm  | ASTM D5185m   | >20  | -<br><1   |          |                   |
| Copper  | ppm  | ASTM D5185m   | >20  | 2   |          |                   |
| Tin   | ppm  | ASTM D5185m   | >20  | -<br><1   |          |                   |
| Vanadium  | ppm  | ASTM D5185m   | 720  | 0   |          |                   |
| Cadmium   | ppm  | ASTM D5185m   |  | <1  |          |                   |
| oddiniani   | PPIII  | 7.0 1111 20 100111  |  |   |          |                   |
| A D D I TIV / E O   |  |   |  |   |          |                   |
| ADDITIVES   |  | method  | limit/base   | current   | history1 | history2          |
| ADDITIVES<br>Boron  | ppm  | ASTM D5185m   | limit/base   | current<br>0  | history1 | history2          |
|   | ppm  |   |  |   | ,        | ,                 |
| Boron   |  | ASTM D5185m   | 5  | 0   |          |                   |
| Boron<br>Barium   | ppm  | ASTM D5185m<br>ASTM D5185m  | 5<br>5   | 0<br><1   |          |                   |
| Boron<br>Barium<br>Molybdenum   | ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 5<br>5   | 0<br><1<br><1   |          |                   |
| Boron<br>Barium<br>Molybdenum<br>Manganese  | ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 5<br>5<br>5  | 0<br><1<br><1<br><1   |          |                   |
| Boron Barium Molybdenum Manganese Magnesium   | ppm<br>ppm<br>ppm                                    | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 5<br>5<br>5<br>25  | 0<br><1<br><1<br><1<br>55   |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium   | ppm<br>ppm<br>ppm<br>ppm                             | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 5<br>5<br>5<br>25<br>200   | 0<br><1<br><1<br><1<br>55   |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus  | ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 5<br>5<br>5<br>25<br>200<br>300  | 0<br><1<br><1<br><1<br>55<br>4<br>260   |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 5<br>5<br>5<br>25<br>200<br>300<br>370   | 0<br><1<br><1<br><1<br>55<br>4<br>260<br>334  |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base                             | 0<br><1<br><1<br><1<br>55<br>4<br>260<br>334<br>925   |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | ASTM D5185m   | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base                             | 0 <1 <1 <1 <2 <1 <2 <1 <1 <1 <2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1                                  |          | history2          |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185m   | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base<br>>15                      | 0 <1 <1 <1 <21 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4   |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium  | ppm              | ASTM D5185m   | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base<br>>15                      | 0 <1 <1 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1 <1 <2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 |          | history2          |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium  | ppm              | ASTM D5185m                                     | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base<br>>15                      | 0 <1 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1                                  |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN   | ppm              | ASTM D5185m | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base<br>>15<br>>20               | 0 <1 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1                         |          |                   |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm | ppm              | ASTM D5185m | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base<br>>15<br>>20               | 0 <1 <1 <1 <1 <1 <1 <55 4   |          | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm                 | ppm              | ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m     | 5<br>5<br>5<br>25<br>200<br>300<br>370<br>2500<br>limit/base<br>>15<br>>20<br>limit/base | 0 <1 <1 <1 <1 <55 <4 <260 <334 <925   |          |                   |

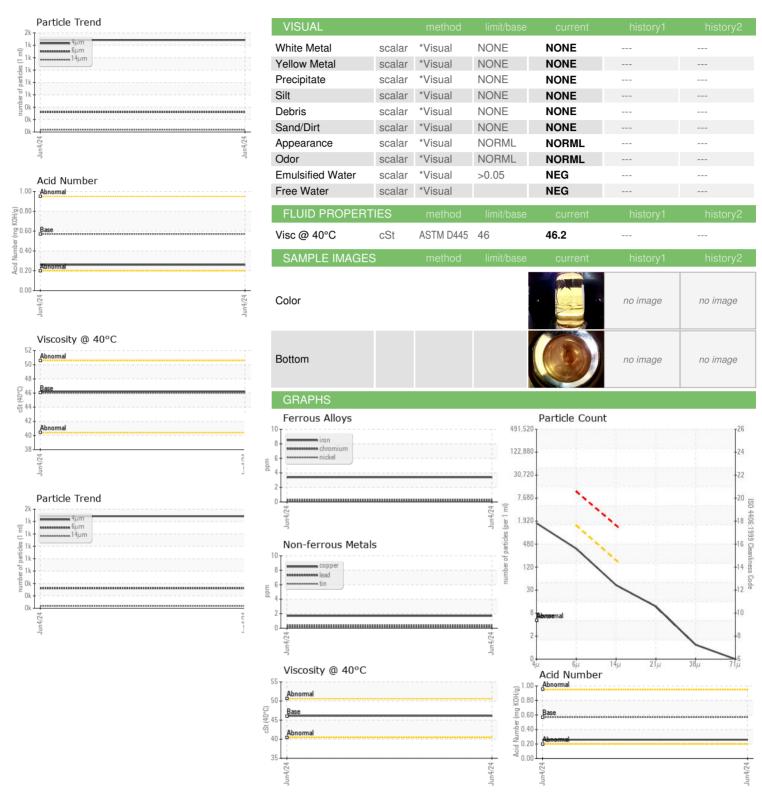
Acid Number (AN)

mg KOH/g ASTM D8045 0.57

Contact/Location: PAT HARRAH - PVFHOUTX



# **OIL ANALYSIS REPORT**





Certificate 12367

Laboratory Sample No.

: KL0014366 Lab Number : 06213421 Unique Number : 11086285 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 18 Jun 2024 **Tested** : 19 Jun 2024

Diagnosed : 20 Jun 2024 - Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.

US 77066 Contact: PAT HARRAH PAT.HARRAH@PVFLUID.COM T: (281)620-2085

\* - 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)

Report Id: PVFHOUTX [WUSCAR] 06213421 (Generated: 06/23/2024 01:30:05) Rev: 1

Contact/Location: PAT HARRAH - PVFHOUTX

**PV FLUID PRODUCTS** 

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