

## **OIL ANALYSIS REPORT**

Particles >38µm

Particles >71µm

**Oil Cleanliness** 

Acid Number (AN)

FLUID DEGRADATION

### GUAY SON [CONHER] **PISA 4 SH - Pacifico Industrial** Component

**Hydraulic System** ISO 68 (1000 LTR)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. (after 6 hours of Kleenoil filtration). ( Customer Sample Comment: After 6 hours of Kleenoil filtration )

#### Wear

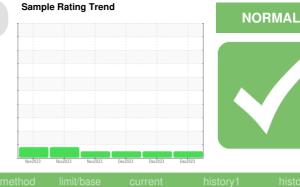
All component wear rates are normal.

#### 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.



| SAMPLE INFORM   | IATION | method      | limit/base | current     | history1    | history2    |
|-----------------|--------|-------------|------------|-------------|-------------|-------------|
| Sample Number   |        | Client Info |            | KL0013438   | KL0013439   | KL0013440   |
| Sample Date     |        | Client Info |            | 01 Dec 2023 | 01 Dec 2023 | 01 Dec 2023 |
| Machine Age     | mths   | Client Info |            | 0           | 0           | 0           |
| Oil Age         | mths   | Client Info |            | 24          | 24          | 24          |
| Oil Changed     |        | Client Info |            | Not Changd  | Not Changd  | Not Changd  |
| Sample Status   |        |             |            | NORMAL      |             | NORMAL      |
| CONTAMINATION   | J      | method      | limit/base | current     | history1    | history2    |
| Water           |        | WC Method   | >0.1       | NEG         | NEG         | NEG         |
| WEAR METALS     |        | method      | limit/base | current     | history1    | history2    |
| Iron            | ppm    | ASTM D5185m | >20        | <1          | 5           | 2           |
| Chromium        | ppm    | ASTM D5185m | >10        | 0           | 0           | 0           |
| Nickel          | ppm    | ASTM D5185m | >10        | 0           | 0           | 0           |
| Titanium        | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| Silver          | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| Aluminum        | ppm    | ASTM D5185m | >10        | 0           | 0           | 0           |
| Lead            | ppm    | ASTM D5185m | >10        | 0           | 0           | 0           |
| Copper          | ppm    | ASTM D5185m | >75        | 4           | 4           | 4           |
| Tin             | ppm    | ASTM D5185m | >10        | 0           | 0           | 0           |
| Vanadium        | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| Cadmium         | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| ADDITIVES       |        | method      | limit/base | current     | history1    | history2    |
| Boron           | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| Barium          | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| Molybdenum      | ppm    | ASTM D5185m |            | 0           | 0           | 0           |
| Manganese       | ppm    | ASTM D5185m |            | <1          | <1          | <1          |
| Magnesium       | ppm    | ASTM D5185m |            | <1          | 3           | 2           |
| Calcium         | ppm    | ASTM D5185m |            | 18          | 20          | 21          |
| Phosphorus      | ppm    | ASTM D5185m |            | 321         | 329         | 319         |
| Zinc            | ppm    | ASTM D5185m |            | 371         | 388         | 373         |
| Sulfur          | ppm    | ASTM D5185m |            | 1483        | 1532        | 1475        |
| CONTAMINANTS    |        | method      | limit/base | current     | history1    | history2    |
| Silicon         | ppm    | ASTM D5185m | >20        | 1           | 1           | 1           |
| Sodium          | ppm    | ASTM D5185m |            | 2           | 11          | 4           |
| Potassium       | ppm    | ASTM D5185m | >20        | 0           | <1          | <1          |
| FLUID CLEANLIN  | ESS    | method      | limit/base | current     | history1    | history2    |
| Particles >4µm  |        | ASTM D7647  |            | 1889        |             | 14971       |
| Particles >6µm  |        | ASTM D7647  | >1300      | 203         |             | 1207        |
| Particles >14µm |        | ASTM D7647  | >160       | 11          |             | 20          |
| Particles >21µm |        | ASTM D7647  | >40        | 3           |             | 4           |

0

0

15/11

0.24

ASTM D7647 >10

ISO 4406 (c) >17/14

ASTM D7647 >3

mg KOH/g ASTM D8045

Submitted By: EDUARDO GARCIA

0.27

1

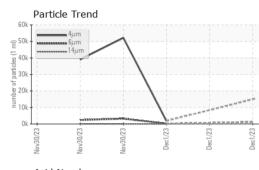
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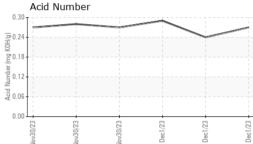
17/11

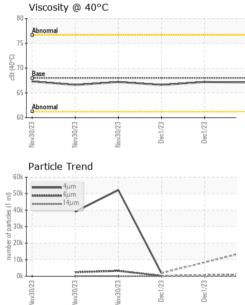
0.29



# **OIL ANALYSIS REPORT**







| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual   | >0.1       | NEG     | 0.2%     | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERT    | IES    | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 68.0       | 67.2    | 67.1     | 66.6     |
| SAMPLE IMAGES    |        | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         | •        | •        |
| Bottom           |        |           |            |         |          | (5)      |

