

OIL ANALYSIS REPORT

Area GUAY SON [CONHER] Machine Id IBACO BM CHUYITO 28 MP Component

XTRA REV 15W40 (--- LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

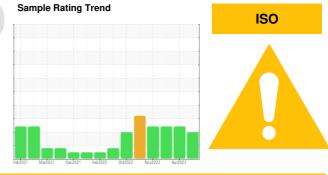
All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil. Fuel content negligible.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.



| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 |
|--|--|---|--------------------------------------|--|--|---|
| Sample Number | | Client Info | | KL0012875 | KL0011396 | KL0011273 |
| Sample Date | | Client Info | | 21 Sep 2023 | 06 Apr 2023 | 22 Nov 2022 |
| Machine Age | hrs | Client Info | | 14980 | 14970 | 13719 |
| Oil Age | hrs | Client Info | | 10 | 13888 | 439 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | ABNORMAL | SEVERE | SEVERE |
| CONTAMINATION | N | method | limit/base | current | history1 | history2 |
| Glycol | | WC Method | | NEG | NEG | NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 4 | 49 | 15 |
| Chromium | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | <1 | 1 |
| Lead | ppm | ASTM D5185m | >40 | <1 | <1 | 1 |
| Copper | ppm | ASTM D5185m | >330 | 1 | 7 | 3 |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | | | | | | |
| DOIOII | ppm | ASTM D5185m | | 0 | 18 | 1 |
| Barium | ppm ppm | ASTM D5185m ASTM D5185m | | 0 | 18 0 | 1 0 |
| | | | | | | |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m | | 0 1 | 0 17 | 0 1 |
| Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | | 0 1 <1 | 0 17 <1 | 0 1 <1 |
| Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 1 <1 8 | 0 17 <1 66 | 0 1 <1 6 |
| Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 1 <1 8 2559 | 0 17 <1 66 2360 | 0 1 <1 6 2447 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 1 <1 8 2559 1103 | 0 17 <1 66 2360 844 | 0 1 <1 6 2447 978 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 1 <1 8 2559 1103 1342 | 0 17 <1 66 2360 844 1045 | 0 1 <1 6 2447 978 1109 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base >25 | 0 1 <1 8 2559 1103 1342 3722 | 0 17 <1 66 2360 844 1045 3453 | 0 1 <1 6 2447 978 1109 3549 |
| 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 | | 0 1 <1 8 2559 1103 1342 3722 current | 0 17 <1 66 2360 844 1045 3453 history1 | 0 1 <1 6 2447 978 1109 3549 history2 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >25 | 0 1 <1 8 2559 1103 1342 3722 current 6 | 0 17 <1 66 2360 844 1045 3453 history1 7 | 0 1 <1 6 2447 978 1109 3549 history2 10 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m | >25 >20 | 0 1 <1 8 2559 1103 1342 3722 current 6 < | 0 17 <1 66 2360 844 1045 3453 history1 7 <1 | 0 1 <1 6 2447 978 1109 3549 history2 10 1 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | >25 >20 | 0 1 <1 8 2559 1103 1342 3722 current 6 <1 2 | 0 17 <1 66 2360 844 1045 3453 history1 7 <1 1 | 0 1 <1 6 2447 978 1109 3549 history2 10 1 2 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | >25 >20 >5 | 0 1 <1 8 2559 1103 1342 3722 current 6 <1 2 2.9 | 0 17 <1 66 2360 844 1045 3453 history1 7 <1 1 ◆ 21.0 | 0 1 <1 6 2447 978 1109 3549 history2 10 1 2 € 20.0 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | >25 >20 >5 limit/base >3 | 0 1 <1 8 2559 1103 1342 3722 current 6 <1 2 2.9 current | 0 17 <1 66 2360 844 1045 3453 history1 7 <1 1 € 21.0 history1 | 0 1 <1 6 2447 978 1109 3549 history2 10 1 2 ↓ 20.0 history2 |

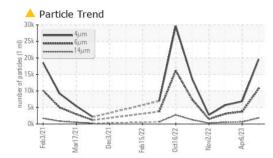


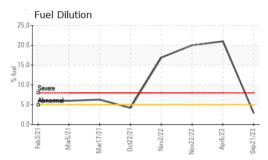
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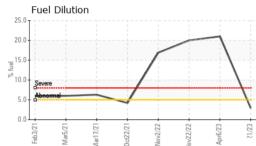
FLUID CLEANLINESS

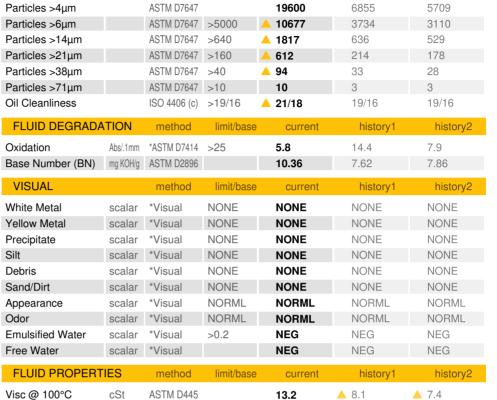
GRAPHS

Ferrous Allovs









limit/base

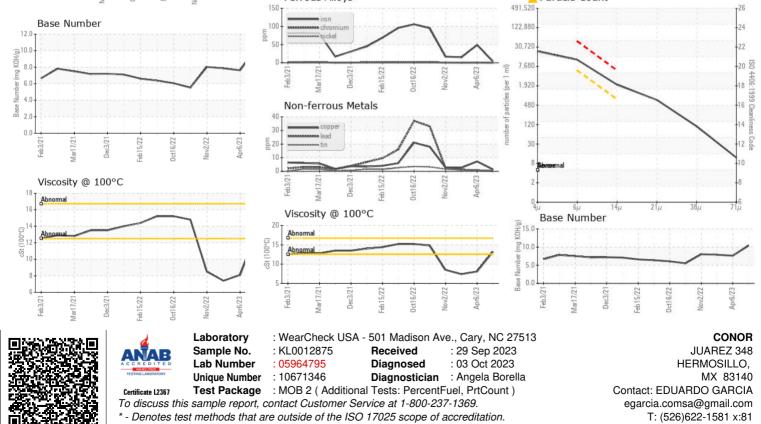
current

Particle Count

method

history1

history2



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

Submitted By: EDUARDO GARCIA

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