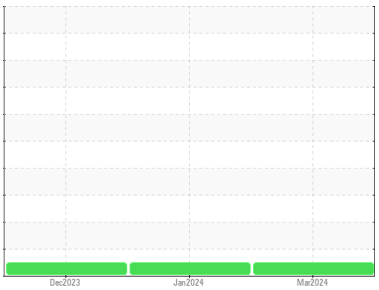
CCECO A Y2K Fluid Power Brand

# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Machine Id
## SMALL LOG LINE PECK-COCK
Component
**Hydraulic System**
Fluid
**ESSO NUTO H ISO 46 (--- GAL)**

## DIAGNOSIS

**Recommendation**
Resample at the next service interval to monitor.

**Wear**
All component wear rates are normal.

**Contamination**
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **Y2K0001662** | Y2K0001660 | Y2K0000191 |
| Sample Date | | Client Info | | **15 Mar 2024** | 26 Jan 2024 | 08 Dec 2023 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | Not Changd | N/A |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **0** | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | **0** | 2 | 2 |
| Lead | ppm | ASTM D5185m | >20 | **0** | 1 | 0 |
| Copper | ppm | ASTM D5185m | >20 | **1** | 4 | 2 |
| Tin | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 0 | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | **0** | 13 | 6 |
| Molybdenum | ppm | ASTM D5185m | 0 | **0** | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 5 | **0** | <1 | <1 |
| Calcium | ppm | ASTM D5185m | 50 | **49** | 51 | 49 |
| Phosphorus | ppm | ASTM D5185m | 330 | **323** | 348 | 368 |
| Zinc | ppm | ASTM D5185m | 410 | **406** | 429 | 432 |
| Sulfur | ppm | ASTM D5185m | 2700 | **945** | 920 | 935 |

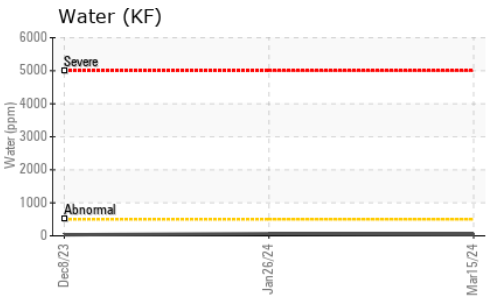
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >15 | **0** | 0 | <1 |
| Sodium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Water | % | ASTM D6304 | >0.05 | **0.003** | 0.006 | 0.003 |
| ppm Water | ppm | ASTM D6304 | >500 | **36** | 68 | 31 |

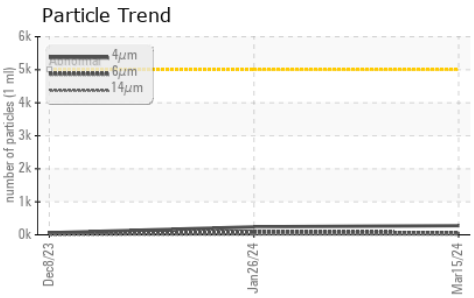
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >5000 | **279** | 241 | 60 |
| Particles >6µm | | ASTM D7647 | >1300 | **59** | 96 | 28 |
| Particles >14µm | | ASTM D7647 | >160 | **7** | 12 | 5 |
| Particles >21µm | | ASTM D7647 | >40 | **2** | 2 | 1 |
| Particles >38µm | | ASTM D7647 | >10 | **0** | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | **15/13/10** | 15/14/11 | 13/12/10 |

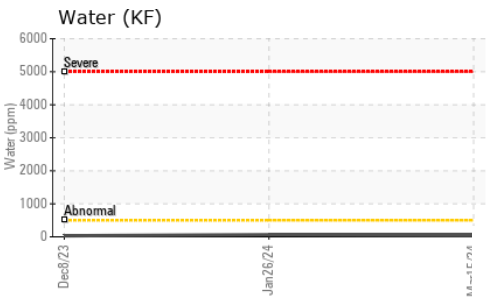
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.45 | **0.27** | 0.23 | 0.24 |

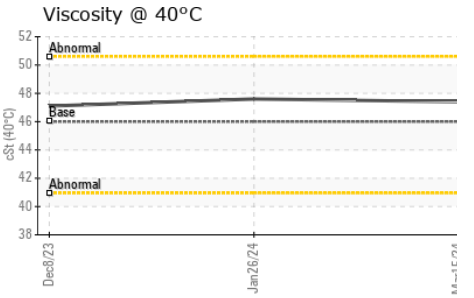
# OIL ANALYSIS REPORT

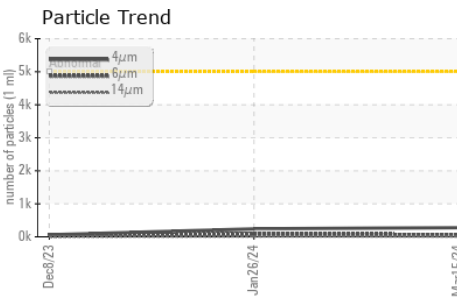
CCECO A Y2K Fluid Power Brand



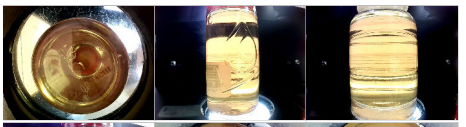
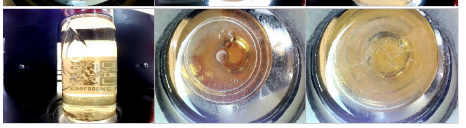



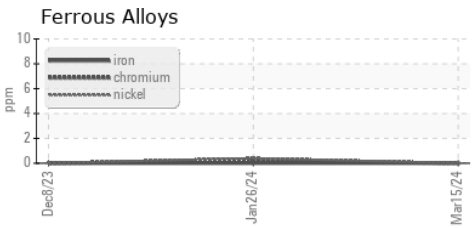



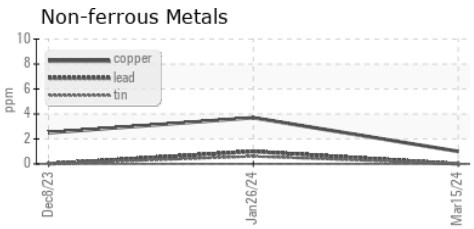

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 | >0.05 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

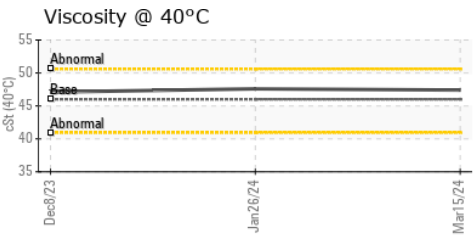
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 46 | **47.4** | 47.6 | 47.1 |

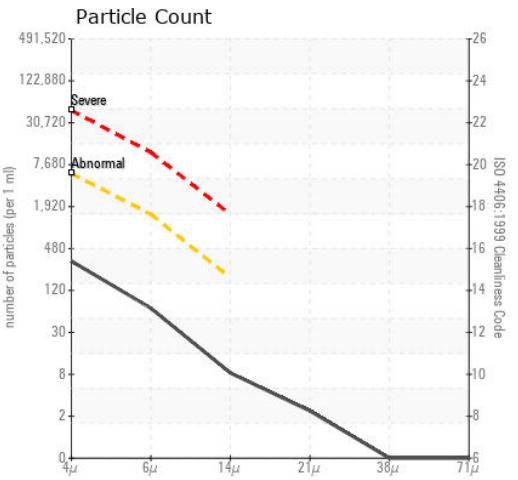
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

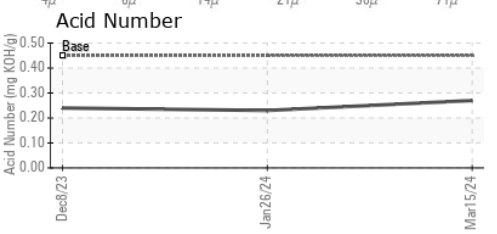
## GRAPHS




ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : Y2K0001662
**Lab Number** : 06145869
**Unique Number** : 10975947
**Test Package** : MOB 2 ( Additional Tests: KF )

**Received** : 11 Apr 2024
**Tested** : 12 Apr 2024
**Diagnosed** : 12 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.*
*Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)*


**INDUSTRIAL POWER SYSTEMS**
5151 OLD SALEM RD
ALBANY, OR
US 97322
Contact: CURTIS STECKLER
curtis@ipowersystems.com
T: (503)560-2593
F: