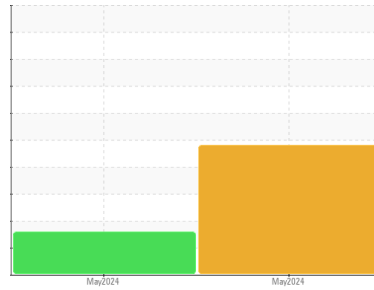


PROBLEM SUMMARY

Sample Rating Trend

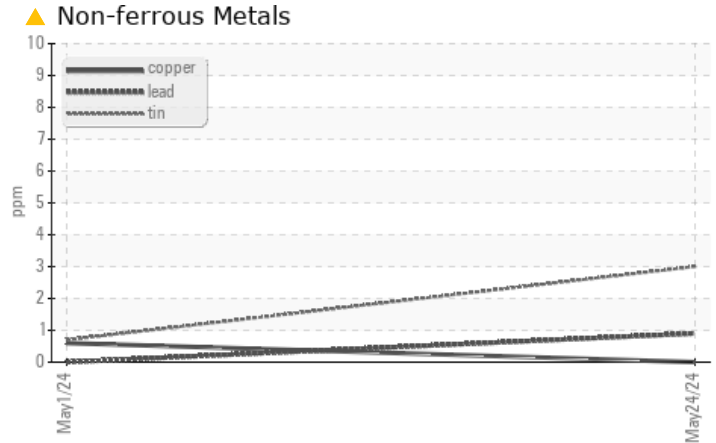
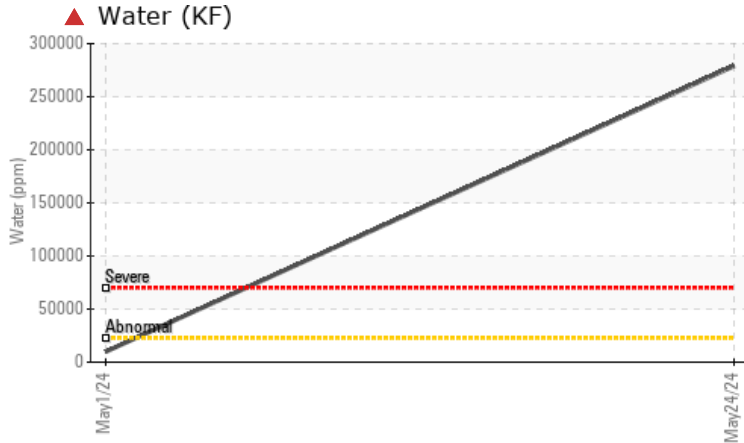


WATER



Machine Id
LEROI 111448 - LP1 (S/N SC354528)
 Component
Compressor
 Fluid
CIMARRON HB-150 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | SEVERE | ABNORMAL | --- |
|------------------|--------|-------------|--------|----------|----------|-----|
| Tin | ppm | ASTM D5185m | >3 | ▲ 3 | <1 | --- |
| Water | % | ASTM D6304 | >2.26 | ▲ 27.9 | ▲ 0.985 | --- |
| ppm Water | ppm | ASTM D6304 | >22600 | ▲ 279000 | ▲ 9850 | --- |
| Emulsified Water | scalar | *Visual | >2.26 | ▲ 0.2% | NEG | --- |

Customer Id: CIMCAR
 Sample No.: TO90004071
 Lab Number: 06205571
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Fluid | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |
| Change Filter | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

HISTORICAL DIAGNOSIS

WATER



01 May 2024 Diag: Angela Borella

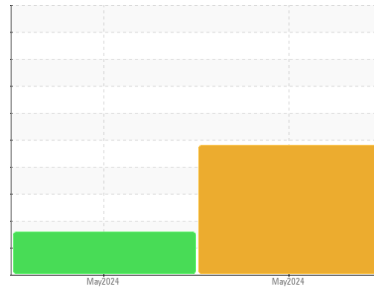
We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
LEROI 111448 - LP1 (S/N SC354528)
 Component
Compressor
 Fluid
CIMARRON HB-150 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

▲ Wear

All component wear rates are normal.

▲ Contamination

Appearance is hazy. There is a high concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number | Client Info | | | TO90004071 | TO90004232 | --- |
| Sample Date | Client Info | | | 24 May 2024 | 01 May 2024 | --- |
| Machine Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | Client Info | | | Changed | N/A | --- |
| Sample Status | | | | SEVERE | ABNORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >70 | 0 | 4 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | --- |
| Nickel | ppm | ASTM D5185m | | <1 | <1 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | --- |
| Silver | ppm | ASTM D5185m | | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >3 | 1 | 2 | --- |
| Lead | ppm | ASTM D5185m | >4 | <1 | 0 | --- |
| Copper | ppm | ASTM D5185m | >20 | 0 | <1 | --- |
| Tin | ppm | ASTM D5185m | >3 | ▲ 3 | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | --- |
| Cadmium | ppm | ASTM D5185m | | <1 | <1 | --- |

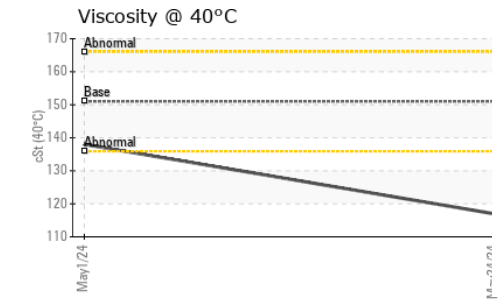
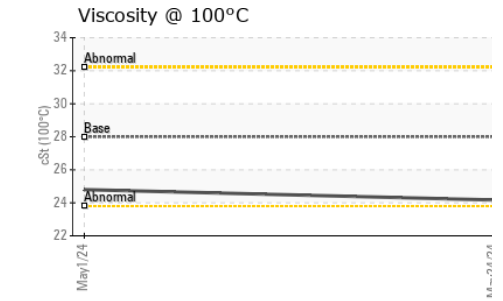
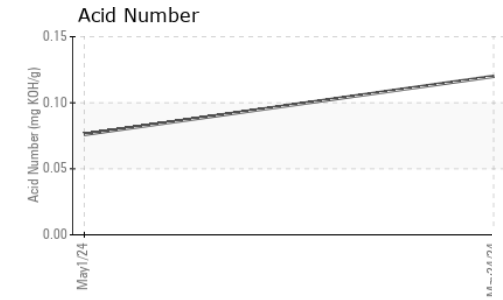
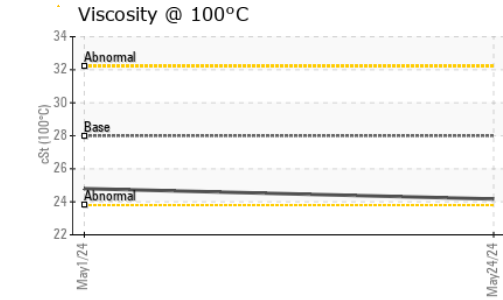
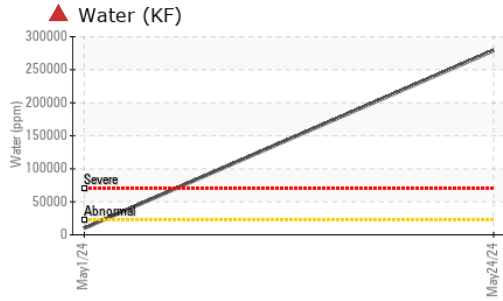
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 11 | 0 | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | 1 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | --- |
| Magnesium | ppm | ASTM D5185m | 0 | 3 | <1 | --- |
| Calcium | ppm | ASTM D5185m | 0 | 15 | 5 | --- |
| Phosphorus | ppm | ASTM D5185m | 0 | 34 | 14 | --- |
| Zinc | ppm | ASTM D5185m | 0 | 10 | 3 | --- |
| Sulfur | ppm | ASTM D5185m | 0 | 635 | 173 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|-----------------|----------------|----------|
| Silicon | ppm | ASTM D5185m | >45 | 2 | 1 | --- |
| Sodium | ppm | ASTM D5185m | | 0 | 1 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 5 | <1 | --- |
| Water | % | ASTM D6304 | >2.26 | ▲ 27.9 | ▲ 0.985 | --- |
| ppm Water | ppm | ASTM D6304 | >22600 | ▲ 279000 | ▲ 9850 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|---------|----------|----------|
| Particles >4µm | | ASTM D7647 | >10000 | --- | 5929 | --- |
| Particles >6µm | | ASTM D7647 | >2500 | --- | 1076 | --- |
| Particles >14µm | | ASTM D7647 | >320 | --- | 44 | --- |
| Particles >21µm | | ASTM D7647 | >80 | --- | 10 | --- |
| Particles >38µm | | ASTM D7647 | >20 | --- | 2 | --- |
| Particles >71µm | | ASTM D7647 | >4 | --- | 1 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | --- | 20/17/13 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.12 | 0.076 | --- |

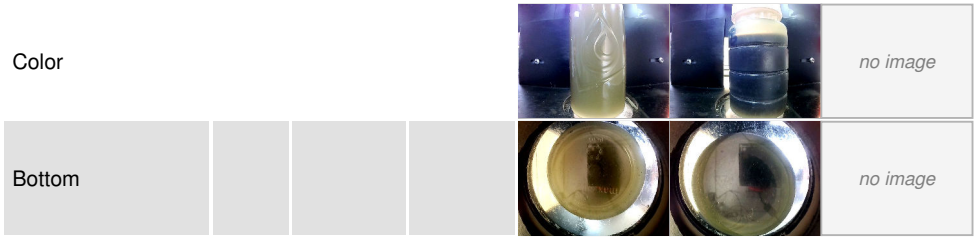
OIL ANALYSIS REPORT



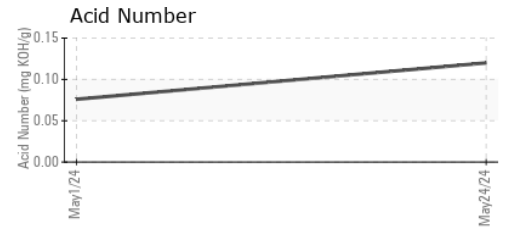
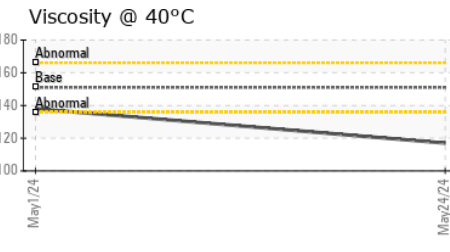
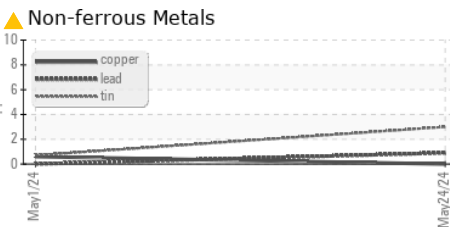
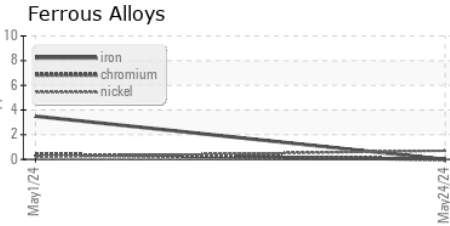
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | HAZY | NORML |
| Odor | scalar | *Visual | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >2.26 | 0.2% | NEG |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 151 | 117 | 138 |
| Visc @ 100°C | cSt | ASTM D445 | 28 | 24.17 | 24.8 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 224 | 239 | 214 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90004071
Lab Number : 06205571
Unique Number : 11073032
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)
Received : 10 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Jonathan Hester

CIMARRON ENERGY - CARLSBAD
 4425 GRANDI RD, UNIT F
 CARLSBAD, NM
 UM 88220-8923
 Contact: CARLOS LEAL
 cleal@cimarron.com

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)