



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Area
MEV
Machine Id
MEV
Component
Port Reduction Gear
Fluid
CHEVRON MEROPA 320 (170 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | MW0055098 | MW0055089 | MW0043837 |
| Sample Date | | Client Info | | 12 Jan 2024 | 12 Oct 2023 | 15 Jul 2023 |
| Machine Age | hrs | Client Info | | 13139 | 0 | 0 |
| Oil Age | hrs | Client Info | | 13139 | 10938 | 8969 |
| Filter Age | hrs | Client Info | | 13139 | 10938 | 8969 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | None | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >150 | 23 | 24 | 23 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | 1 | 2 | <1 |
| Lead | ppm | ASTM D5185m | >100 | 2 | 2 | 1 |
| Copper | ppm | ASTM D5185m | >50 | 3 | 3 | 3 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

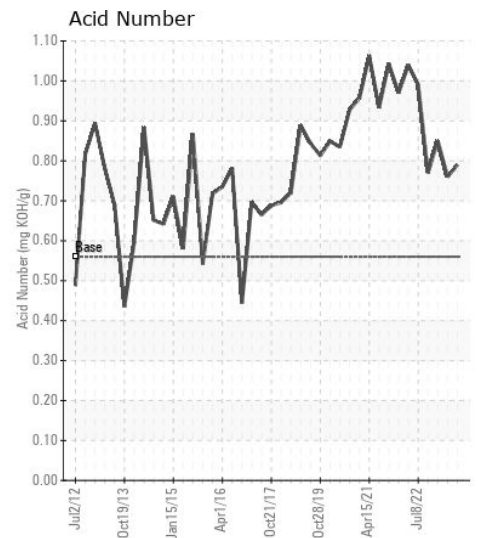
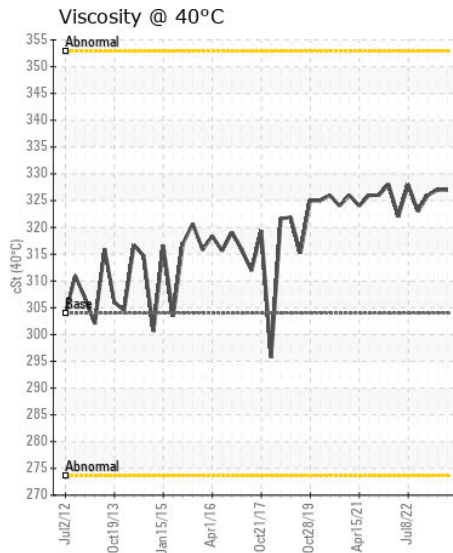
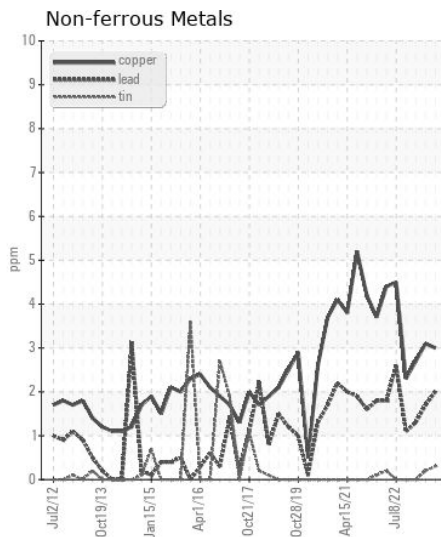
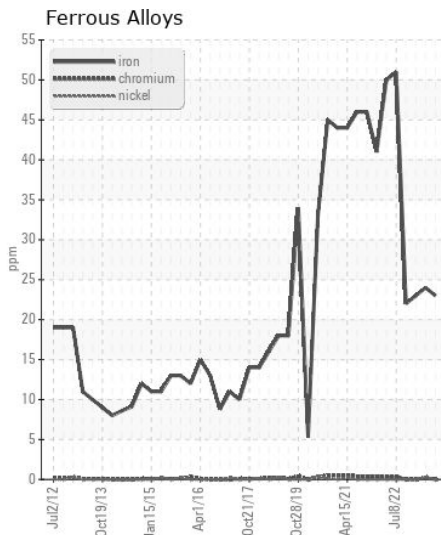
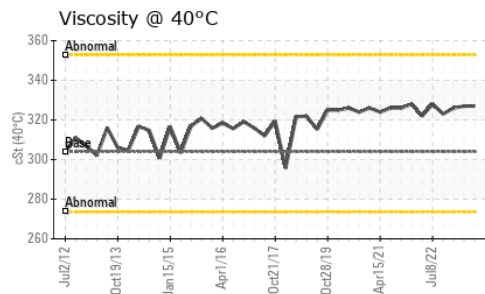
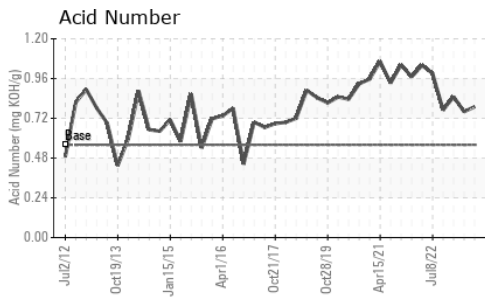
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >50 | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 3 | 2 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| 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 | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Boron | ppm | ASTM D5185m | 20 | 4 | 4 | 4 |
| Barium | ppm | ASTM D5185m | | 7 | 11 | 6 |
| Molybdenum | ppm | ASTM D5185m | 0 | 1 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 1 | 1 | 0 |
| Calcium | ppm | ASTM D5185m | 25 | 52 | 23 | 20 |
| Phosphorus | ppm | ASTM D5185m | 235 | 222 | 264 | 258 |
| Zinc | ppm | ASTM D5185m | | 4 | 0 | 1 |
| Sulfur | ppm | ASTM D5185m | | 5001 | 5558 | 5275 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.56 | 0.79 | 0.76 | 0.85 |
| Visc @ 40°C | cSt | ASTM D445 | 304 | 327 | 327 | 326 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0055098
Lab Number : 06083809
Unique Number : 10871254
Test Package : MAR 2

Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 2024 - Wes Davis

AMERICAN RIVER TRANSPORTATION CO.
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 ST. LOUIS, MO
 US 63111
 Contact: BRIAN GRIEWING
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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)