



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

Area
CPT OA FRANKS
Machine Id
[CPT OA FRANKS] 010 586734-10
Component
Steering
Fluid
CHEVRON RANDO HDZ 68 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | MW06237705 | MW06153768 | MW06121532 |
| Sample Date | | Client Info | | 15 Jul 2024 | 11 Apr 2024 | 29 Feb 2024 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ATTENTION | ATTENTION | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | <1 | 1 | 0 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >5 | 0 | 2 | 0 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 2 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 4 | 8 | 7 |
| Tin | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

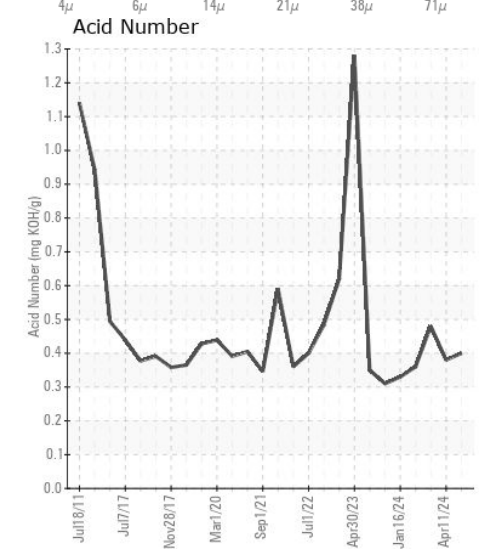
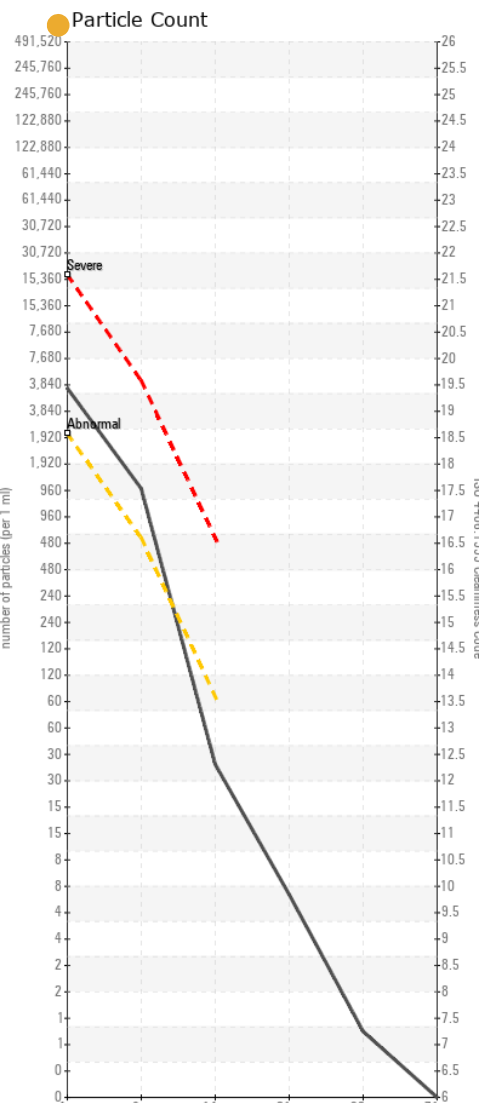
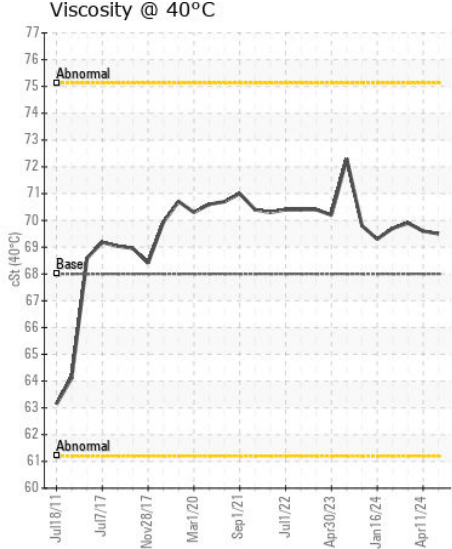
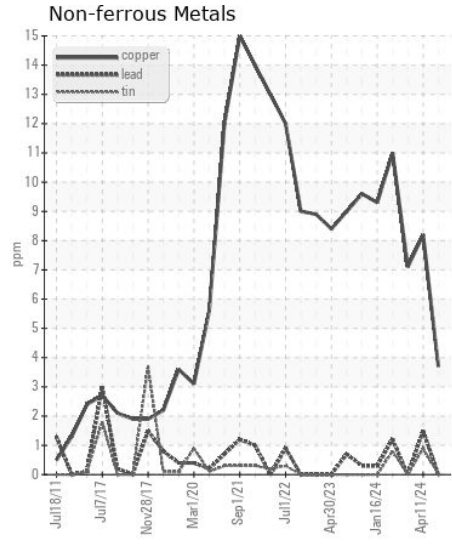
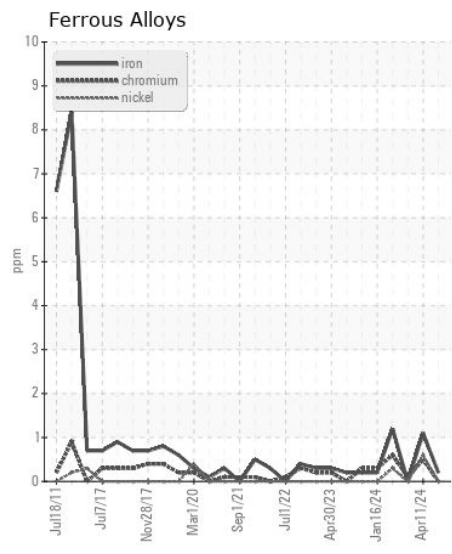
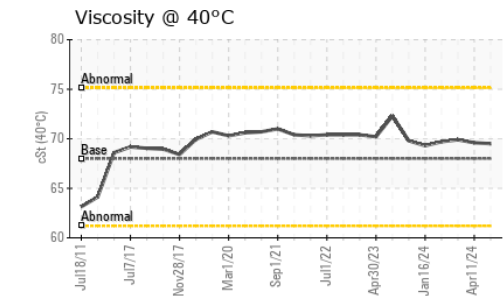
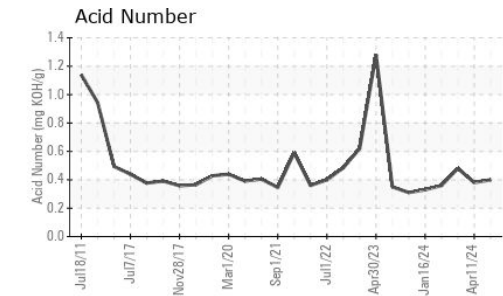
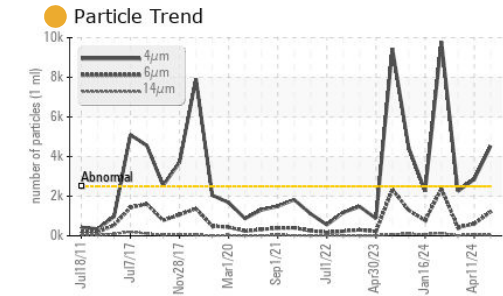
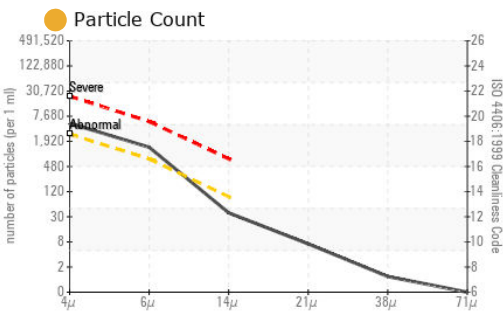
There is a moderate amount of silt (particulates < 14 microns in size) present in the fluid.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | <1 | 1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >2500 | 4534 | 2848 | 2252 |
| Particles >6µm | | ASTM D7647 | >640 | 1216 | 607 | 431 |
| Particles >14µm | | ASTM D7647 | >80 | 33 | 63 | 19 |
| Particles >21µm | | ASTM D7647 | >20 | 6 | 26 | 5 |
| Particles >38µm | | ASTM D7647 | >4 | 1 | 2 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >18/16/13 | 19/17/12 | 19/16/13 | 18/16/11 |
| 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 | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | 1 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 1 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 1 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 4 | 8 | 9 |
| Calcium | ppm | ASTM D5185m | 75 | 59 | 71 | 76 |
| Phosphorus | ppm | ASTM D5185m | 275 | 369 | 354 | 396 |
| Zinc | ppm | ASTM D5185m | 350 | 451 | 460 | 513 |
| Sulfur | ppm | ASTM D5185m | 550 | 1058 | 1016 | 1268 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.40 | 0.38 | 0.48 |
| Visc @ 40°C | cSt | ASTM D445 | 68.0 | 69.5 | 69.6 | 69.9 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW06237705 **Received** : 16 Jul 2024
Lab Number : 06237705 **Tested** : 17 Jul 2024
Unique Number : 11126539 **Diagnosed** : 18 Jul 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: PrtCount)

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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)