



OIL ANALYSIS REPORT

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

Machine Id
MRC-319
 Component
Natural Gas Engine
 Fluid
TULCO LUBSOIL GEO XL LOW ASH 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | TO60001967 | TO60001929 | TO60001734 |
| Sample Date | | Client Info | | 10 Jan 2024 | 02 Dec 2023 | 04 Nov 2023 |
| Machine Age | hrs | Client Info | | 4117 | 3602 | 3259 |
| 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 | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 6 | 3 | 2 |
| Chromium | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | 2 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >30 | 7 | 4 | <1 |
| Copper | ppm | ASTM D5185m | >35 | 3 | 2 | 1 |
| Tin | ppm | ASTM D5185m | >4 | <1 | 0 | 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

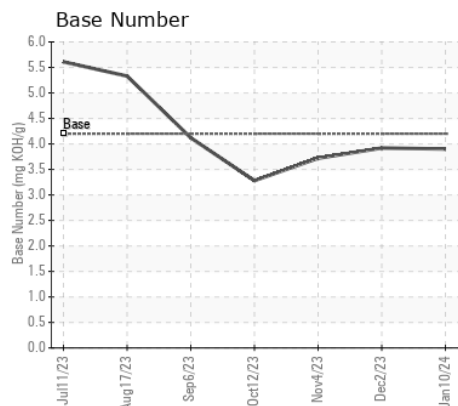
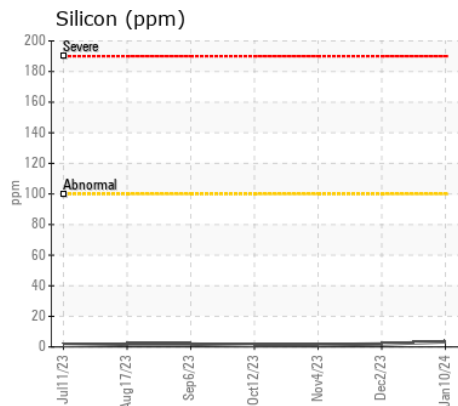
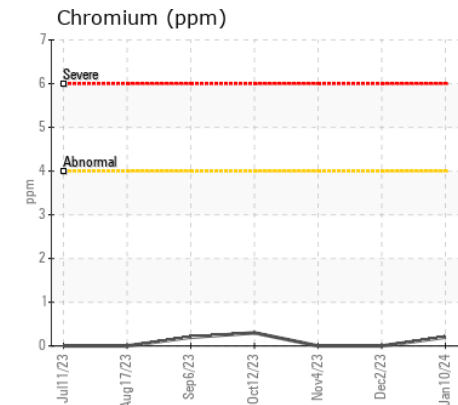
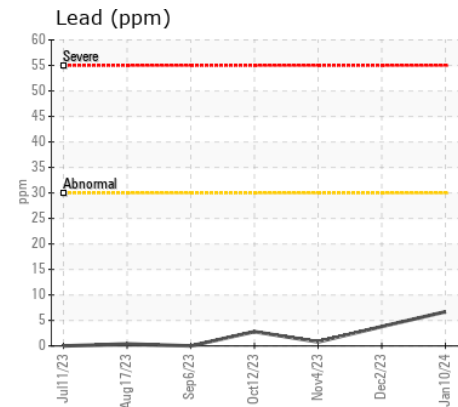
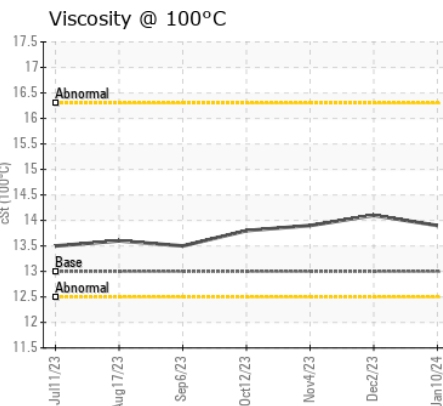
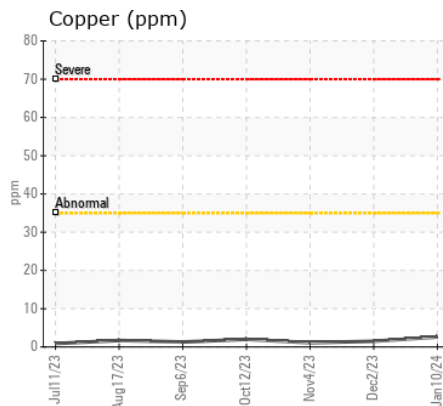
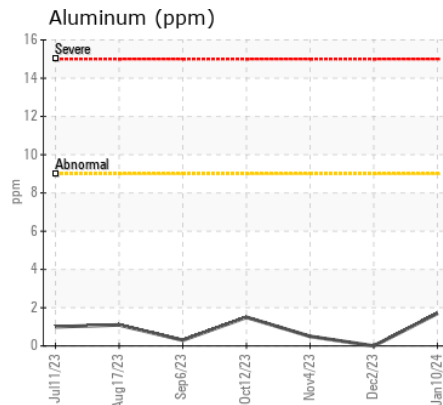
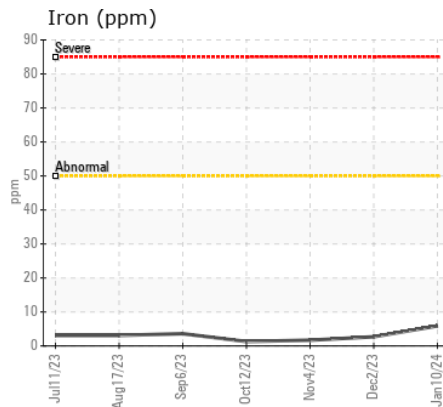
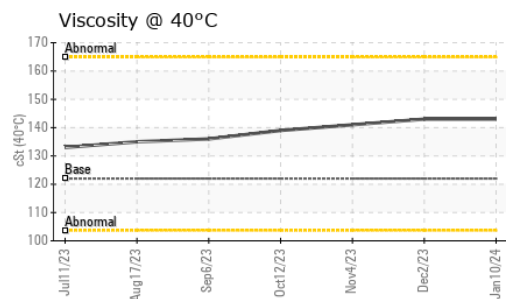
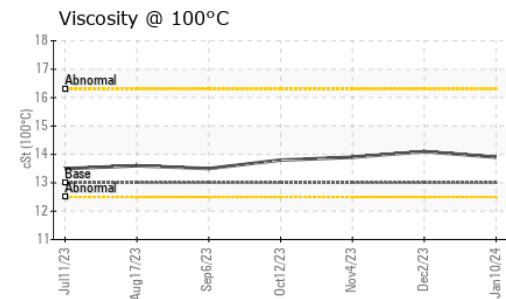
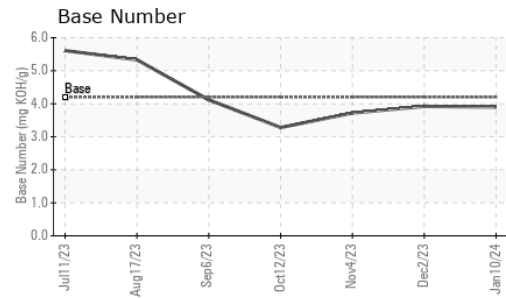
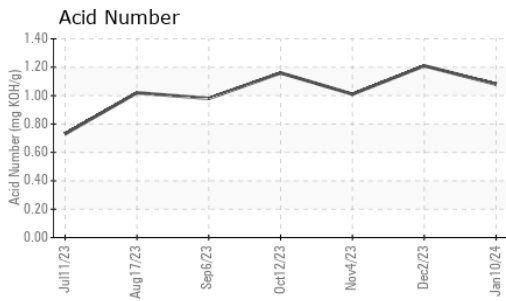
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >+100 | 3 | 2 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 0 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.7 | 9.6 | 9.4 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.1 | 16.9 | 16.5 |
| 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 BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|----------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 0 | 2 | 2 |
| Boron | ppm | ASTM D5185m | 100 | 119 | 89 | 78 |
| Barium | ppm | ASTM D5185m | | 2 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 1 | 3 | 2 | <1 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 10 | 24 | 16 | 19 |
| Calcium | ppm | ASTM D5185m | 1150 | 1744 | 1408 | 1233 |
| Phosphorus | ppm | ASTM D5185m | 290 | 429 | 297 | 200 |
| Zinc | ppm | ASTM D5185m | 272 | 427 | 323 | 296 |
| Sulfur | ppm | ASTM D5185m | 1900 | 2321 | 1583 | 1265 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.8 | 15.6 | 14.8 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.08 | 1.21 | 1.01 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 4.2 | 3.90 | 3.92 | 3.72 |
| Visc @ 40°C | cSt | ASTM D445 | 122 | 143 | 143 | 141 |
| Visc @ 100°C | cSt | ASTM D445 | 13 | 13.9 | 14.1 | 13.9 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 103 | 92 | 95 | 94 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60001967 **Received** : 18 Jan 2024
Lab Number : 06065103 **Diagnosed** : 19 Jan 2024
Unique Number : 10836485 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, VI)

MIDLAND - EOG RESOURCES INC.
 5509 CHAMPIONS DRIVE
 MIDLAND, TX
 US 79706
 Contact: HERMAN GARZA
 herman_garza@eogresources.com
 T: (432)686-3600
 F:

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)