

OIL ANALYSIS REPORT

Sample Rating Trend





[NICHOLS EXC] Wachine to VOLVO A35G 340049 Component Front Axle

PETRO CANADA TRAXON 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Area

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

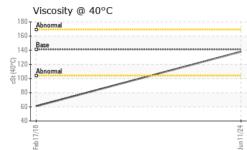
Fluid Condition

The condition of the oil is acceptable for the time in service.

| SAMPLE INFORM | 1ATION | method | limit/base | current | history1 | history2 |
|-----------------------------------|--------|-------------|------------|-------------|-------------|-------------------------------------|
| Sample Number | | Client Info | | ML0002170 | VCP215393 | |
| Sample Date | | Client Info | | 11 Jun 2024 | 17 Feb 2018 | |
| Machine Age | hrs | Client Info | | 6382 | 4202 | |
| Oil Age | hrs | Client Info | | 1031 | 0 | |
| Oil Changed | | Client Info | | Not Changd | Changed | |
| Sample Status | | | | NORMAL | NORMAL | |
| CONTAMINATION | ١ | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | NEG | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >900 | 70 | 224 | |
| Chromium | ppm | ASTM D5185m | >20 | 1 | 4 | |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 1 | |
| Titanium | ppm | ASTM D5185m | | <1 | 2 | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >30 | 2 | 4 | |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | |
| Copper | ppm | ASTM D5185m | >150 | <1 | 4 | |
| Tin | ppm | ASTM D5185m | >20 | 0 | 0 | |
| Antimony | ppm | ASTM D5185m | >5 | | 0 | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 243 | 287 | 183 | |
| Barium | ppm | ASTM D5185m | 1 | 0 | 0 | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 14 | |
| Manganese | ppm | ASTM D5185m | | 1 | 18 | |
| Magnesium | ppm | ASTM D5185m | 2 | 1 | <1 | |
| Calcium | ppm | ASTM D5185m | 6 | 0 | 23 | |
| Phosphorus | ppm | ASTM D5185m | 987 | 1132 | 1471 | |
| Zinc | ppm | ASTM D5185m | 1 | 4 | 21 | |
| Sulfur | ppm | ASTM D5185m | 21530 | 19392 | 28640 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | 23 | 1 | |
| Sodium | ppm | ASTM D5185m | | 0 | 2 | |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 2 | |
| VISUAL | | method | limit/base | current | history1 | history2 |
| White Metal | scalar | *Visual | NONE | NONE | MODER | |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | |
| Silt | scalar | *Visual | NONE | NONE | NONE | |
| Debris | scalar | *Visual | NONE | NONE | NONE | |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| Appearance | scalar | *Visual | NORML | NORML | NORML | |
| Odor | scalar | *Visual | NORML | NORML | NORML | |
| Encoder States All and All and an | agalar | *\/;oud | . 0 0 | | | |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | |
| Free Water | scalar | *Visual | >0.2 | NEG | | E - <u>NI</u> CNEWDE Page 1 of 2 |



OIL ANALYSIS REPORT



| | FLUID PROPER | RTIES | method | limit/base | current | history1 | history2 |
|--|---|-----------------------|------------------------------------|---|-------------|----------------------------------|---|
| | Visc @ 40°C | cSt | ASTM D445 | 141.0 | 138 | 60.88 | |
| | SAMPLE IMAG | ES | method | limit/base | current | history1 | history2 |
| - 4 | Color | | | | no image | no image | no image |
| Jun11/24 | Bottom | | | | no image | no image | no image |
| | GRAPHS | | | | | | |
| | Ferrous Alloys | | | Juni1/24 Juni1/24 / Juni | | | |
| Laboratory Sample No. Lab Number Unique Number Test Package sample report | : 11088984 : CONST t, contact Customer Se | Rece Teste Diag | eived : 20 ed : 2 nosed : 23 |) Jun 2024 1 Jun 2024 Jun 2024 - Doi | n Baldridge | 32 Contact: jeffm@nichols/ | CAVATION INC 4 MARKUS CT NEWARK, DE US 19713 5 JEFF MOORE excavation.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)

Certificate L2367

Contact/Location: JEFF MOORE - NICNEWDE

F:

T: (302)275-8818