

OIL ANALYSIS REPORT

Sample Rating Trend



Area [110207] Machine Id AUTO GRIND 2 Component

Gearbox Fluid PETRO CANADA 220 (3 GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

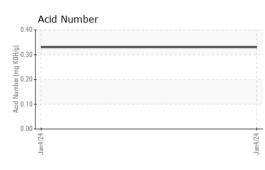
Fluid Condition

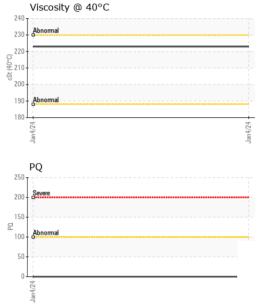
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | Jan2024 | | |
|------------------|----------|---------------|------------|-------------|----------|----------|
| SAMPLE INFORM | 1ATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0869279 | | |
| Sample Date | | Client Info | | 04 Jan 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINATION | ۷ | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184* | | 0 | | |
| Iron | ppm | ASTM D5185(m) | >200 | 2 | | |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | | |
| Nickel | ppm | ASTM D5185(m) | >10 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | | |
| Lead | ppm | ASTM D5185(m) | >50 | 0 | | |
| Copper | ppm | ASTM D5185(m) | >200 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | | 0 | | |
| Barium | ppm | ASTM D5185(m) | | 0 | | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 0 | | |
| Magnesium | ppm | ASTM D5185(m) | | <1 | | |
| Calcium | ppm | ASTM D5185(m) | | 2 | | |
| Phosphorus | ppm | ASTM D5185(m) | | 379 | | |
| Zinc | ppm | ASTM D5185(m) | | 2 | | |
| Sulfur | ppm | ASTM D5185(m) | | 977 | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >50 | 3 | | |
| Sodium | ppm | ASTM D5185(m) | | 0 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.33 | | |



OIL ANALYSIS REPORT





| VISUAL | | method | limit/base | current | history1 | history2 |
|-----------------------------|--------|--------------------|--|-------------|------------------------|---|
| White Metal | | /isual* | NONE | NONE | | |
| Yellow Metal | | /isual* | NONE | NONE | | |
| Precipitate | | /isual* | NONE | NONE | | |
| Silt | | /isual* | NONE | NONE | | |
| Debris | | /isual* | NONE | NONE | | |
| Sand/Dirt | | /isual* | NONE | NONE | | |
| Appearance | | /isual* | NORML | NORML | | |
| Odor | | /isual* | NORML | NORML | | |
| Emulsified Water | | /isual* | >0.2 | NEG | | |
| Free Water | scalar | /isual* | | NEG | | |
| FLUID PROPER | | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt / | STM D7279(m) | | 223 | | |
| SAMPLE IMAGE | ES | method | limit/base | current | history1 | history2 |
| Color | | | | | no image | no image |
| Bottom | | | | | no image | no image |
| GRAPHS | | | | | | |
| Ferrous Alloys | | | | PQ | | |
| | | | 220 | | | |
| iron chromium | | | 200 |) - Severe | | |
| S nickel | | | 180 | | | |
| | | | 160 | | | |
|) <u>L</u> | | | 140 | | | |
| Jan 4/24 . | | | 4/24 | | | |
| J | | | DC | Abnormal | | |
| Non-ferrous Meta | als | | 100 | | | |
| copper] | | | 80 | ++ | | |
| accesses lead | | | 60 |) | | |
| S tin | | | 40 |) | | |
| | | | | | | |
| 2 | | | 20 |) | | |
| | | | 20 | | | |
| | | | |) | | |
| hz/hue Viscosity @ 40°C | | | | | | |
| bZthuer Viscosity @ 40°C | ; | | Jan4/24 | Acid Number | | |
| brownal | ; | | Jan4/24 | Acid Number | | |
| Viscosity @ 40°C | ; | | Jan4/24 | Acid Number | | |
| Viscosity @ 40°C | ; | | Jan4/24 | Acid Number | | |
| Viscosity @ 40°C | , | | 40,044 (0) 40,044 | Acid Number | | |
| Viscosity @ 40°C | | | Jan4/24 | Acid Number | | |
| Viscosity @ 40°C | | : 05 . 1 : 08 . | And 2000 Acid Number (ng K014/2) And 2000 Acid Number (ng K014/3) 0.00 | Acid Number | GRAND 190 VOI CA | RIVER FOOI NDRAU DRIV MBRIDGE, C CA N3E 11 act: Ryan Sh |

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

CALA

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Laboratory

Sample No. Lab Number

Unique Number Test Package

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