

OIL ANALYSIS REPORT

Galv Line [Galv Line] 650250-HOT BRIDLE ROLL # 1 Component

Gearbox Fluic

PETRO CANADA ENDURATEX EP 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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.



Sample Rating Trend



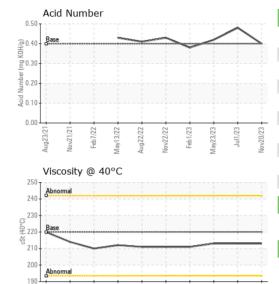
| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | PCA0107662 | PCA0101471 | PCA0095421 |
| Sample Date | | Client Info | | 20 Nov 2023 | 01 Jul 2023 | 23 May 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | 5 | 8 | 8 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 1 | 1 |
| Copper | ppm | ASTM D5185m | >200 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 60 | 14 | 13 | 12 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 1 | 2 | 3 |
| Calcium | ppm | ASTM D5185m | 0 | 32 | 31 | 31 |
| Phosphorus | ppm | ASTM D5185m | 270 | 191 | 188 | 200 |
| Zinc | ppm | ASTM D5185m | 0 | 18 | 23 | 23 |
| Sulfur | ppm | ASTM D5185m | 11200 | 7372 | 7960 | 9258 |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | 17 | 17 | 15 |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 4 |
| FLUID DEGRA | DATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.40 | 0.40 | 0.48 | 0.42 |



Nov21/21 Feb7/22 Aay13/22 Vug22/22

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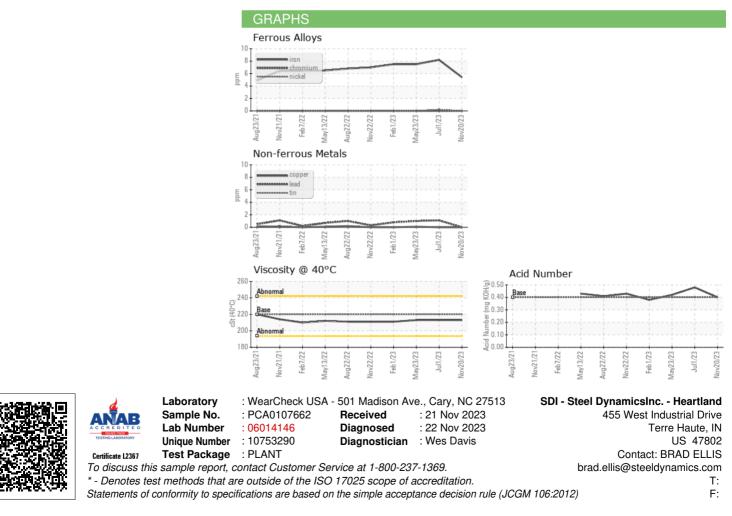
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| VISUAL | | method | limit/base | current | history1 | history2 |
|----------------------------|--------|---------------------|-------------------|----------------|-----------------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | LIGHT | 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 |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPE | RTIES | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Visc @ 40°C | cSt | ASTM D445 | 220 | 213 | 213 | 213 |
| | cSt | ASTM D445 method | 220 limit/base | 213 current | | |
| Visc @ 40°C | cSt | | | - | 213 | 213 |
| Visc @ 40°C SAMPLE IMAG | cSt | | | - | 213 history1 | 213 |



Contact/Location: BRAD ELLIS - SDITER