

PROBLEM SUMMARY

B39711 - DRY STORAGE BACK ELEVATOR

Gearbox Fluid PETRO CANADA 220 (--- GAL)

COMPONENT CONDITION SUMMARY

Sample Rating Trend VIS DEBRIS

No relevant graphs to display

| | | | |
|----------------|--------------------------|------|--|
| RECOMMENDATION | PROBLEMATIC TEST RESULTS | | |

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

| PROBLEMATIC T | EST RE | SULTS | | | | |
|---------------|--------|---------|------|----------|-----------|-----------|
| Sample Status | | | | ABNORMAL | ATTENTION | ATTENTION |
| Debris | scalar | *Visual | NONE | 🔺 MODER | NONE | LIGHT |

Customer Id: ROCROCUS Sample No.: WC0820521 Lab Number: 05926090 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

| RECOMMENDED | ACTIONS | | | |
|---------------|---------|------|---------|---|
| Action | Status | Date | Done By | Description |
| Change Filter | | | ? | We recommend you service the filters on this component if applicable. |
| Alert | | | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS



28 Feb 2023 Diag: Doug Bogart

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

27 Feb 2023 Diag: Angela Borella



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

30 Dec 2022 Diag: Jonathan Hester



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





OIL ANALYSIS REPORT

B39711 - DRY STORAGE BACK ELEVATOR

Gearbox Fluid

PETRO CANADA 220 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

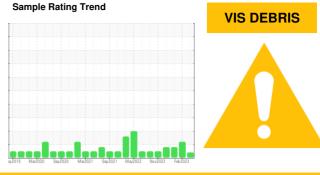
All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

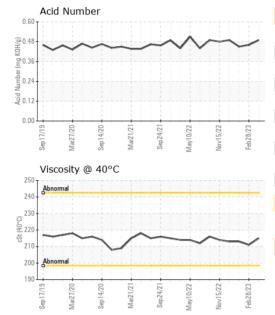
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



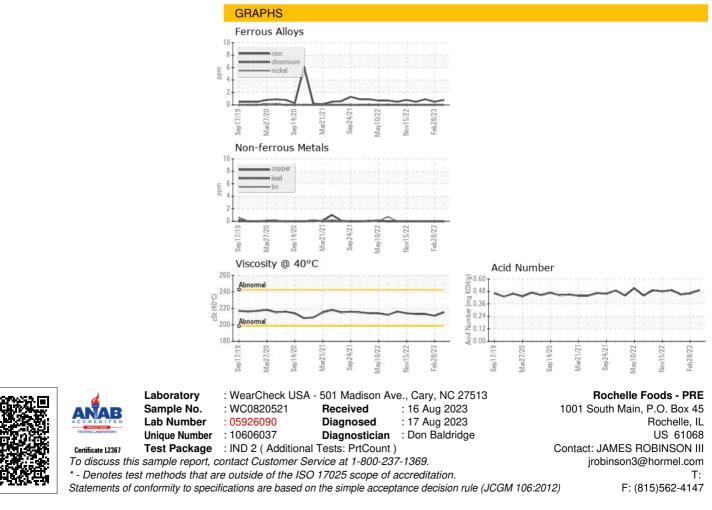
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------------|---------------|--------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | WC0820521 | WC0781535 | WC0774974 |
| Sample Date | | Client Info | | 09 Aug 2023 | 28 Feb 2023 | 27 Feb 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 | N/A |
| Sample Status | | | | ABNORMAL | ATTENTION | ATTENTION |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | <1 | <1 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | I- I- | method | limit/base | current | history1 | history2 |
| Boron | nom | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | ں <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| , | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese Magnesium | ppm | ASTM D5185m | | ۰ <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | | 0 | <1 | 2 |
| | ppm | ASTM D5185m | | 150 | 140 | 138 |
| Phosphorus Zinc | ppm | ASTM D5185m | | 3 | 5 | 1 |
| Sulfur | ppm | ASTM D5185m | | 3 755 | 5 779 | 863 |
| | ppm | | 11 11 11 | | - | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | 6 | 4 | 4 |
| Sodium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >20000 | | <u> </u> | 17086 |
| Particles >6µm | | ASTM D7647 | >5000 | | ▲ 6536 | ▲ 5287 |
| Particles >14µm | | ASTM D7647 | >640 | | 391 | 351 |
| Particles >21µm | | ASTM D7647 | >160 | | 69 | 57 |
| Particles >38µm | | ASTM D7647 | >40 | | 0 | 3 |
| Particles >71µm | | ASTM D7647 | >10 | | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | | ▲ 22/20/16 | ▲ 21/20/16 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.49 | 0.46 | 0.45 |



OIL ANALYSIS REPORT



| 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 | A MODER | NONE | LIGHT |
| 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 PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | | 215 | 211 | 213 |
| | | | | | | |
| SAMPLE IMAGES | \$ | method | limit/base | current | history1 | history2 |
| SAMPLE IMAGES | 3 | method | limit/base | Current | history1 | history2 |



Contact/Location: JAMES ROBINSON III - ROCROCUS