

OIL ANALYSIS REPORT

B39711 - DRY STORAGE BACK ELEVATOR Component Gearbox

Fluid

PETRO CANADA 220 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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



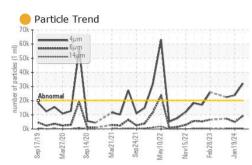
Sample Rating Trend

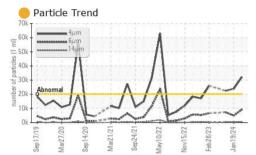
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|------------------|------------|--------------------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | WC0885455 | WC0842451 | WC0850296 |
| Sample Date | | Client Info | | 31 Mar 2024 | 19 Jan 2024 | 08 Oct 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | 1115 | Client Info | | N/A | N/A | Changed |
| Sample Status | | Chefit IIIIO | | ATTENTION | ATTENTION | ATTENTION |
| | | | | ATTENTION | - | ATTENTION |
| CONTAMINATIO | N | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | 4 | <1 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 3 |
| Phosphorus | ppm | ASTM D5185m | | 169 | 150 | 160 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | 974 | 679 | 745 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | | ASTM D5185m | | 4 | 5 | 14 |
| Sodium | ppm | ASTM D5185m | >00 | 4 | | |
| Potassium | ppm ppm | ASTM D5185m | >20 | 2 | <1 0 | <1 0 |
| FLUID CLEANLIN | | method | limit/base | | history1 | history2 |
| Particles >4µm | 1200 | ASTM D7647 | >20000 | 32230 | 23891 | 22392 |
| Particles >6µm | | ASTM D7647 ASTM D7647 | >20000 | 9238 | 4900 | 7311 |
| Particles >6µm | | ASTM D7647 ASTM D7647 | >5000 | 9230 591 | 4900 270 | 492 |
| | | ASTM D7647 ASTM D7647 | | | 68 | 492 107 |
| Particles >21µm | | | | 125 | 4 | |
| Particles >38µm | | ASTM D7647 | >40 | 3 | | 4 |
| Particles >71µm | | ASTM D7647 | | 0 | 0 | 1 |
| Oil Cleanliness | TION | ISO 4406 (c) | >21/19/16 | 22/20/16 | 22/19/15 | 22/20/16 |
| FLUID DEGRADA | | method | limit/base | | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.54 | 0.50 | 0.49 |

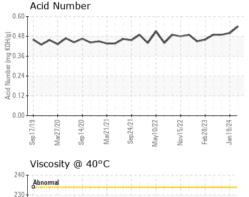
Contact/Location: JAMES ROBINSON III - ROCROCUS

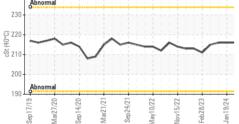


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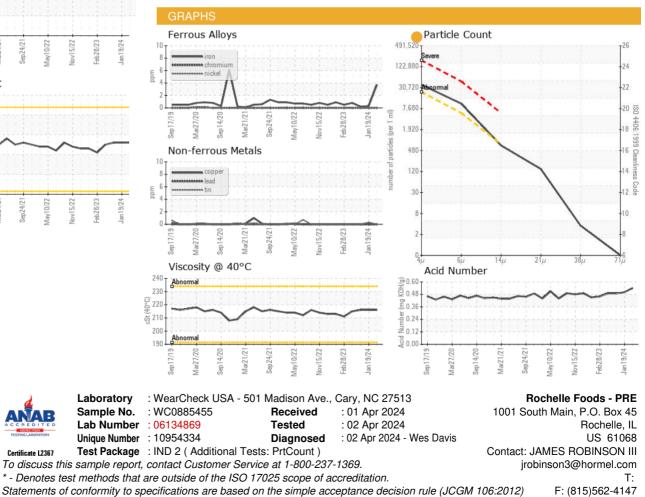








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|------------------|--------|---------------|------------|---------|------------|------------------|
| VISUAL | | method | limit/base | current | history1 | history2 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | 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 | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERT | | method | limit/base | current | history1 | history2 |
| | | | linin/base | | | |
| Visc @ 40°C | cSt | ASTM D445 | | 216 | 216 | 216 |
| SAMPLE IMAGES | 6 | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Color | | | | - | | |





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