

OIL ANALYSIS REPORT

Area MP-101 B71457 - VACUUM PUMP BUSCH RA0630 SOUTH RETAIL BACON B71457 (S/N USM121330077) Component Vacuum Pump

PETRO CANADA PURITY FG SYNTHETIC 10

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

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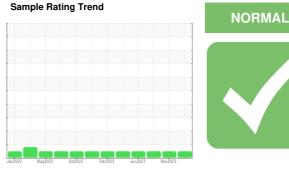
All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. 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.



| 00 (GAL) | | | | | | |
|------------------------------|---------|-------------------|-----------------|----------------------|-----------------------|-----------------------|
| SAMPLE INFORM | | Jan2022 method | May2022 Oct2022 | Feb2023 Jun2023 N | ov2023 | history () |
| | VIATION | Client Info | iimii/base | current WC0894931 | history1 WC0856070 | history2 WC0842519 |
| Sample Number Sample Date | | Client Info | | 09 Mar 2024 | 10 Nov 2023 | 17 Sep 2023 |
| Machine Age | hrs | Client Info | | 09 Mai 2024 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | 1115 | Client Info | | N/A | N/A | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| | | | | NORMAL | NORIVIAL | |
| CONTAMINATIO | N | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >.1 | NEG | NEG | NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >20 | 1 | 2 | 0 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 7 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 0 | <1 | 3 |
| Calcium | ppm | ASTM D5185m | | <1 | 1 | 3 |
| Phosphorus | ppm | ASTM D5185m | | 413 | 468 | 408 |
| Zinc | ppm | ASTM D5185m | | 6 | 3 | 12 |
| Sulfur | ppm | ASTM D5185m | | 1154 | 1332 | 1023 |
| CONTAMINANTS | 3 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 4 | 8 | 4 |
| Sodium | ppm | ASTM D5185m | | 4 | 0 | <1 |
| D · · · | | | | • | | |

| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | <1 |
|-------------------|----------|--------------|------------|----------|----------|----------|
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | 1401 | 676 | 3621 |
| Particles >6µm | | ASTM D7647 | >2500 | 428 | 175 | 761 |
| Particles >14µm | | ASTM D7647 | >320 | 33 | 12 | 46 |
| Particles >21µm | | ASTM D7647 | >80 | 6 | 3 | 11 |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 18/16/12 | 17/15/11 | 19/17/13 |
| FLUID DEGRADATION | | method | | | | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.5 | 0.19 | 0.16 | 0.17 |

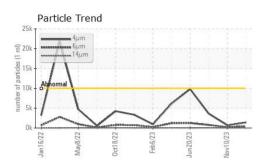
Acid Number (AN)

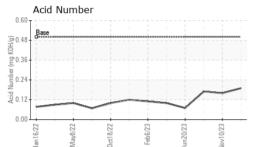
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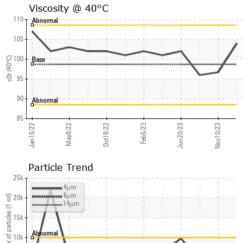
Contact/Location: RYAN LOWE - HORAUS



OIL ANALYSIS REPORT





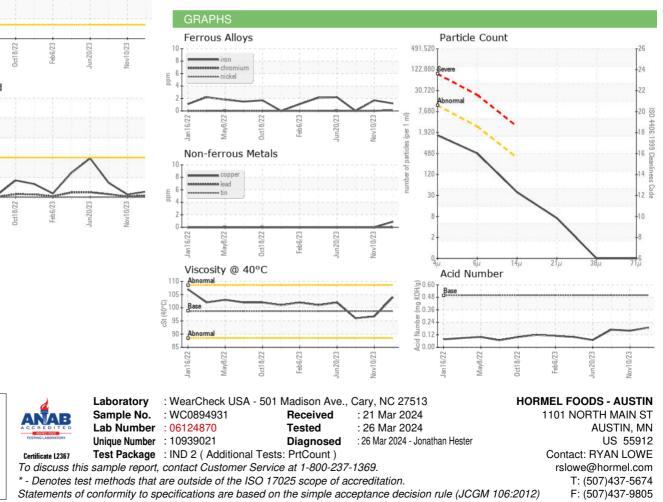


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| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | 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 | >.1 | 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 | 98.7 | 104 | 96.7 | 96.0 |
| SAMPLE IMAGES | \$ | method | limit/base | current | history1 | history2 |
| Color | | | | • | | |
| Bottom | | | | | | |



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