

OIL ANALYSIS REPORT

Sample Rating Trend





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

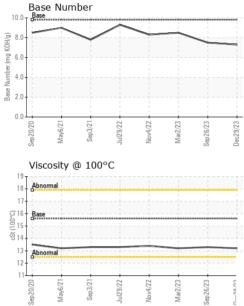
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| L) | | Sep2020 1 | Nay2021 Sep2021 Jul20 | 22 Nov2022 Mar2023 Sep2023 | Dec2023 | |
|--|----------------------|---------------------------|-----------------------|----------------------------|-------------|-------------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0082870 | PCA0082842 | PCA0069556 |
| Sample Date | | Client Info | | 29 Dec 2023 | 26 Sep 2023 | 02 Mar 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 11186 |
| Dil Age | hrs | Client Info | | 0 | 0 | 397 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| ⁻ uel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Nater | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| ron | ppm | ASTM D5185m | >100 | 18 | 14 | 16 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | 0 | 3 |
| _ead | ppm | ASTM D5185m | >40 | 5 | 4 | <1 |
| Copper | ppm | ASTM D5185m | >330 | 1 | <1 | 0 |
| Fin | ppm | ASTM D5185m | >15 | <1 | <1 | 0 |
| /anadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 5 | 2 | 2 |
| Barium | ppm | ASTM D5185m | | 0 | 2 | 0 |
| Volybdenum | ppm | ASTM D5185m | | 64 | 63 | 63 |
| Vanganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Vagnesium | ppm | ASTM D5185m | | 958 | 885 | 960 |
| Calcium | ppm | ASTM D5185m | | 1118 | 1055 | 1049 |
| Phosphorus | ppm | ASTM D5185m | | 1032 | 977 | 965 |
| Zinc | ppm | ASTM D5185m | | 1261 | 1165 | 1257 |
| Sulfur | ppm | ASTM D5185m | | 3055 | 2850 | 3332 |
| CONTAMINAN | ITS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | | >25 | 10 | 10 | 13 |
| Sodium | ppm | ASTM D5185m | 00 | <1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m | | 6 | 5 | 6 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | | 0.4 | 0.4 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | | 9.2 | 8.9 | 7.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.9 | 20.1 | 19.6 |
| | | method | | | | history2 |
| FLUID DEGRA | | | minobaoo | | | |
| FLUID DEGRA Oxidation Base Number (BN) | Abs/.1mm mg KOH/g | *ASTM D7414 ASTM D2896 | >25 | 17.6 7.3 | 16.7 7.5 | 15.3 8.5 |



OIL ANALYSIS REPORT

VISUAL



| | | VISUAL | | methoa | iimii/base | current | nistory i | nistory2 |
|--------------------|---|---|-------------------------|--|------------------------------|--------------------------------|-------------------------|--|
| | | 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 |
| Nov4/22 Mar2/23 | Sep26/23 Dec29/23 | Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| M. No | Sep | 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 | | history1 | history2 |
| | | Visc @ 100°C | cSt | ASTM D445 | 15.6 | 13.2 | 13.3 | 13.2 |
| | | GRAPHS | | | | | | |
| | | Ferrous Alloys | | | | | | |
| 122 - | /23 | 16 - iron | | \wedge | | | | |
| Nov4/22 Mar2/23 | Sep26/23 | 14- nickel | | | | | | |
| | | 12 | | | | | | |
| | | E 10 | | | | | | |
| | | 6 - | | | | | | |
| | | 4 | | | | | | |
| | | 2 | | Contraction of the Distance of | | | | |
| | | Sep20/20 | Jul29/22 - Nov4/22 - | Mar2/23 - Sep 26/23 - | Dec29/23 | | | |
| | | Sep2 Mari | Julž | Mai. Sep 2 | Dec2 | | | |
| | | Non-ferrous Meta | ls | | | | | |
| | | 10 copper | | | | | | |
| | | 8 - second lead | | | | | | |
| | | 6 | | | | | | |
| | | m dd | | | - | | | |
| | | 4 | | | annan. | | | |
| | | 2 | | \langle / \rangle | | | | |
| | | Treitment of a second second | | V | | | | |
| | | 21 23 | /22+ | 123 | /23 | | | |
| | | Sep20/20 May6/21 Sep3/21 | Jul29/22 Nov4/22 | Mar2/23 Sep26/23 | Dec29/23 | | | |
| | | Viscosity @ 100°C | | | _ | Door Number | | |
| | | 19 T | | | 10 | Base Number | | |
| | | 18 - Abnormal | | | | \sim | \sim | _ |
| | | 17- | | | (B/H(| 8.0 | | - |
| | | Contraction 16 Base | | | Base Number (mg KOH/g) | 6.0 - | | |
| | | ()16 Base ()015 ()15 ()15 | | | nber (r | | | |
| | | 12 | | | A Nur | 4.0 - | | |
| | | Abnormal | | | as 2 | 2.0 - | | |
| | | 12 | | | | 0.0 | | |
| | | tep20/20 | Jul29/22 - Nov4/22 - | Mar2/23 - Sep26/23 - | | | Jul29/22 - Nov4/22 - | Mar2/23 - Sep26/23 - |
| | | Sep20/20 May6/21 Sep3/21 | Jul2 Nov | Mar2/23 Sep26/23 | Dec29/23 | Sep20/20 May6/21 Sep3/21 | Jul2 Nov | Mar2/23 Sep26/23 |
| | | | | | | | | |
| | | : WearCheck USA - 50 | | | | AVR - | | _EY READY M I 98 GALAXY AV |
| 4 | Laboratory | | Racci | Received : 19 Mar 2024 Tested : 19 Mar 2024 | | | | |
| AB | Laboratory Sample No. Lab Number | : PCA0082870 | | | | | | |
| | Sample No. | : PCA0082870 : 06121920 | Teste | ed :19 | | Wes Davis | | LE VALLEY, M |
| CALLES ON TOPY | Sample No. Lab Number Unique Number Test Package | : PCA0082870 : <mark>06121920</mark> : 10936071 | Teste Diagr | ed : 19 nosed : 19 | 9 Mar 2024 9 Mar 2024 - \ | | APP Conta | US 5512 act: senia zimme enia@gmail.co |

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