

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

PC HYDREX AW 46 - PCA05920945

New (Unused) Oil Fluid {not provided} (--- GAL)

DIAGNOSIS

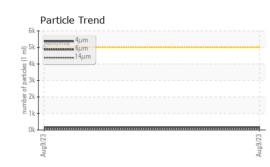
Recommendation

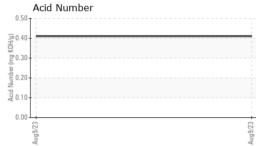
This is a baseline read-out on the submitted sample.

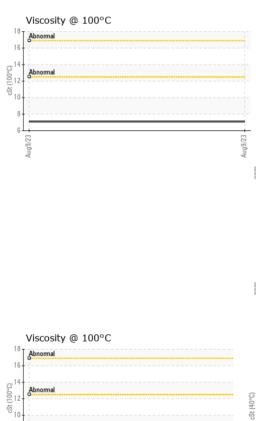
| SAMPLE INFOR | | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | innin base | PCA05920945 | | |
| Sample Date | | Client Info | | 09 Aug 2023 | | |
| Machine Age | hrs | Client Info | | 03 Aug 2023 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | 1110 | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| WEAR METAL | \$ | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Iron | ppm | ASTM D5185m | >5 | 0 | | |
| Chromium | ppm | ASTM D5185m | >5 | 0 | | |
| Nickel | ppm | ASTM D5185m | >5 | 0 | | |
| Titanium | ppm | ASTM D5185m | _ | 0 | | |
| Silver | ppm | ASTM D5185m | >5 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >5 | 0 | | |
| Lead | ppm | ASTM D5185m | >5 | 0 | | |
| Copper | ppm | ASTM D5185m | >5 | 0 | | |
| Tin | ppm | ASTM D5185m | >5 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | | |
| Barium | ppm | ASTM D5185m | | 1 | | |
| Molybdenum | ppm | ASTM D5185m | | 0 | | |
| Manganese | ppm | ASTM D5185m | | 0 | | |
| Magnesium | ppm | ASTM D5185m | | 1 | | |
| Calcium | ppm | ASTM D5185m | | 53 | | |
| Phosphorus | ppm | ASTM D5185m | | 321 | | |
| Zinc | ppm | ASTM D5185m | | 433 | | |
| Sulfur | ppm | ASTM D5185m | | 847 | | |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 0 | | |
| Sodium | ppm | ASTM D5185m | | 0 | | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | | |
| FLUID CLEANL | INESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >5000 | 172 | | |
| Particles >6µm | | ASTM D7647 | >1300 | 40 | | |
| Particles >14µm | | ASTM D7647 | >160 | 6 | | |
| Particles >21µm | | ASTM D7647 | >40 | 3 | | |
| Particles >38µm | | ASTM D7647 | >10 | 1 | | |
| Particles >71µm | | ASTM D7647 | >3 | 1 | | |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 15/12/10 | | |
| FLUID DEGRAD | DATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.41 | | |



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| VISUAL | | method | limit/b | ase | current | history1 | histor | y2 |
|---------------------|----------|------------|-------------------------|--|--------------|----------------|-------------|-------------------|
| hite Metal | scalar | *Visual | NONE | N | IONE | | | |
| ellow Metal | scalar | *Visual | NONE | N | IONE | | | |
| recipitate | scalar | *Visual | NONE | N | IONE | | | |
| ilt | scalar | *Visual | NONE | N | IONE | | | |
| ebris | scalar | *Visual | NONE | N | IONE | | | |
| and/Dirt | scalar | *Visual | NONE | N | IONE | | | |
| ppearance | scalar | *Visual | NORM | L N | IORML | | | |
| dor | scalar | *Visual | NORM | L N | IORML | | | |
| mulsified Water | scalar | *Visual | | N | IEG | | | |
| ree Water | scalar | *Visual | | N | IEG | | | |
| FLUID PROPE | RTIES | method | limit/b | ase | current | history1 | histor | y2 |
| isc @ 40°C | cSt | ASTM D445 | | 4 | 5.11 | | | |
| isc @ 100°C | cSt | ASTM D445 | | | .09 | | | |
| iscosity Index (VI) | Scale | ASTM D2270 | | | 16 | | | |
| • • • • | | | limit# | | - | history | hiotor | |
| SAMPLE IMAG | ES | method | limit/b | ase | current | history1 | histor | y2 |
| | | | | | AV | | | |
| olor | | | | | | no image | no imag | е |
| | | | | 6 | | | | |
| | | | | 1 | | | | _ |
| | | | | | | | | |
| ottom | | | | 1 | NOME Y | no image | no imag | е |
| | | | | | South State | | | |
| GRAPHS | | | | | | | | |
| Ferrous Alloys | | | | Ра ^{491,520} т | rticle Count | | | 2 |
| iron | | | | | | | | T21 |
| chromium nickel | | | | 122,880 - Sever | | | | -24 |
| | | | | 30,720 | | | | -23 |
| | | | | 7,680 Abno | rmal | | | -2 |
| Aug9/23 | | | Aug9/23 . (per 1 ml) | r • 1 | | | | |
| Auç | | | Aug9/23 | 1,920 - | 1 | | | 18 |
| Non-ferrous Metals | 5 | | article | 480 - | 1 | | | -21 -18 -18 |
| copper | | | er of p | 120 | | | | -14 |
| sessesses lead | | | qunu | | 1 | | | -12 |
| | | | | 30- | | | | 12 |
| | | | | 8- | | | | -10 |
| 1/23 | | | 1/23 | 2- | | | | -8 |
| Aug9/23 | | | Aug9/23 | | | | | |
| Viscosity @ 40°C | | | | 0 4μ | | 4μ 21μ | 38µ 7 | 11µ |
| Abnormal | | | | АС ⊊0.50 т | id Number | | | |
| Abnormal | | | | Q 0.40 | | | | - |
| | | | | E 0.30 | | | | |
| | | | | 2 0.20 | | | | |
| | | | _ | Action Number (mg K0H/0) 0.40 0.40 mg K0H/0 0.30 0.20 mg K0H/0 0.10 0.10 mg K0H/0 0.00 mg K0H/0 0 mg K0 0 mg K0H/0 0 mg K0 0 mg | | | | |
| Aug 9/23 | | | Aug9/23 | Aug9/23 | | | | |
| Аи | | | Au | Aut | | | | |
| VearCheck USA - 5 | 01 Madi | son Ave Co | NC 0 | 7513 | | NADA AMERICA L | | S II |
| | | | | | FLINU CA | | ODITIO ANTS | 21 |
| PCA05920945 | Received | d :10/ | Aug 202 | 3 | | | | |

Test Package To discuss this sample report, contact Customer Service at 1-800-237-1369. Jason.schaben@HFSinclair.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number**

Т:

F: