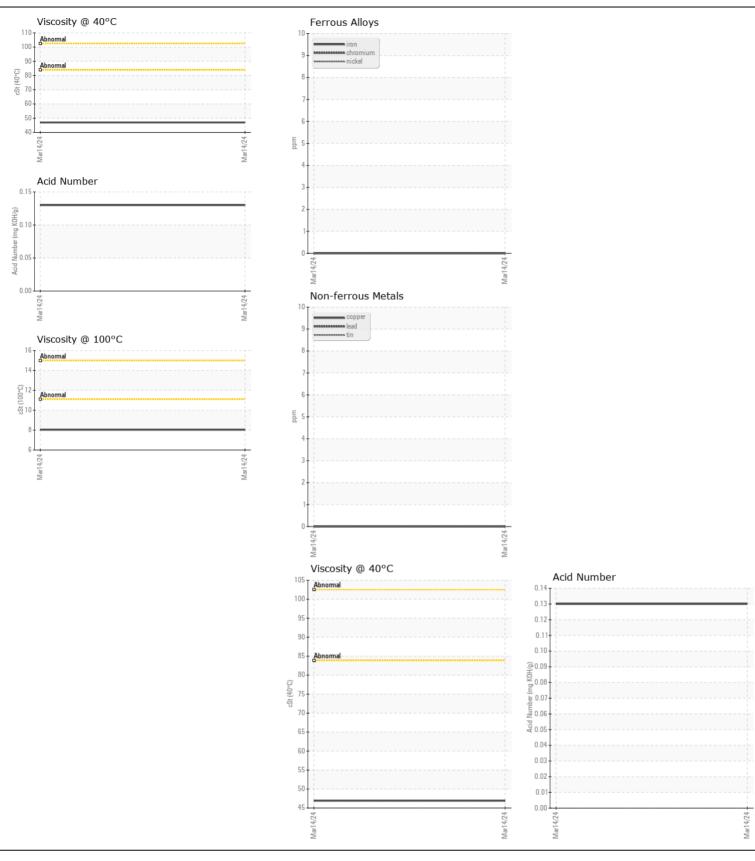


WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id **24C1304 AS-110**

| New (Unused) Oil | | | | | | | |
|--|----------------------|----------|----------------------------|-----------|-------------|----------|----------|
| {not provided} (GAL) | | | | | | | |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| This is a baseline read-out on the submitted sample. | Sample Number | | Client Info | | HPL0001084 | | |
| | Sample Date | | Client Info | | 14 Mar 2024 | | |
| | Machine Age | hrs | Client Info | | 0 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Not Changd | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | NORMAL | | |
| WEAR | Iron | ppm | ASTM D5185m | | 0 | | |
| | Chromium | ppm | ASTM D5185m | | 0 | | |
| | Nickel | ppm | ASTM D5185m | | 0 | | |
| | Titanium | ppm | ASTM D5185m | | 0 | | |
| | Silver | ppm | ASTM D5185m | | 0 | | |
| | Aluminum | ppm | ASTM D5185m | | 1 | | |
| | Lead | ppm | ASTM D5185m | | 0 | | |
| | Copper | ppm | ASTM D5185m | | 0 | | |
| | Tin | ppm | ASTM D5185m | | 0 | | |
| | Vanadium | ppm | ASTM D5185m | | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 2 | | |
| | Potassium | ppm | ASTM D5185m | >20 | 0 | | |
| | Water | ррпп | WC Method | 720 | NEG | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | | *Visual | | NEG | | |
| FLUID CONDITION | O a altrona | | ACTM DE10E | | | | |
| | Sodium Boron | ppm | ASTM D5185m ASTM D5185m | | 0 | | |
| | Barium | ppm | ASTM D5185m | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | | 4 | | |
| | Manganese | ppm | ASTM D5185m | | 0 | | |
| | Magnesium | ppm | ASTM D5185m | | 0 | | |
| | Calcium | ppm | ASTM D5185m | | 220 | | |
| | Phosphorus | ppm | ASTM D5185m | | 477 | | |
| | Zinc | ppm | ASTM D5185m | | <1 | | |
| | Sulfur | ppm | ASTM D5185m | | 1959 | | |
| | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.13 | | |
| | Visc @ 40°C | cSt | ASTM D445 | | 46.91 | | |
| | Visc @ 100°C | cSt | ASTM D445 | | 8.03 | | |
| | Viscosity Index (VI) | | ASTM D2270 | | 143 | | |
| | Tibook (VI) | - 5010 | | | | | |







Report Id: HIGMAN [WUSCAR] 06122836 (Generated: 03/22/2024 07:55:14) Rev: 1

Laboratory Sample No.

Lab Number : 06122836 Unique Number: 10936987

: HPL0001084

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Mar 2024 **Tested**

: 22 Mar 2024 Diagnosed

: 22 Mar 2024 - Jonathan Hester Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

HIGH PERFORMANCE LUBRICANTS LLC 500 S SPRUCE ST

MANTENO, IL US 60950 Contact: DAVID WARD

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

sampledata@hplubricants.com T: (815)468-3535 F: x: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)