

Lubricant Analysis Report

North America: +1-877-808-3750

Latin America: +1-317-808-3750 / +502-3093-6466 (WhatsApp)

Europe: +1-317-808-3750



Overall report severity based on comments.

| Account Information | Component Information | Sample Information | | | | | |
|---|---|---|--|--|--|--|--|
| Account Number: 153995-0000-0000 | Component ID: HYUNDAI/HX2202/2017 E | Tracking Number: 23249R06301 | | | | | |
| Company Name: BOOM AND BUCKET | Secondary ID: HHKHK601HH000429 | Lab Number: S-067804 | | | | | |
| Contact: ADAM LAWRENCE/KRIS HUFF | Component Type: DIESEL ENGINE | Lab Location: Salt Lake City | | | | | |
| Address: C/O SAMIR SHAH 71 PARK | Manufacturer: Information Requested | Data Analyst: ARF | | | | | |
| DRIVE | Model: Information Requested | Sampled: 26-Oct-2023 | | | | | |
| ATHERTON, CA 94027 US | Application: UNKNOWN | Received: 31-Oct-2023 | | | | | |
| Phone Number: 213-463-5980/775-225-3529 | Sump Capacity: | Completed: 07-Nov-2023 | | | | | |
| | | | | | | | |
| Filter Information | Miscellaneous Information | Product Information | | | | | |
| Filter Type: Information Requested | | Product Manufacturer: Information Requested | | | | | |
| Micron Rating: 0 | | Product Name: Information Requested | | | | | |
| | N is at a SEVERE LEVEL. Fuel dilution may be saysed | Viscosity Grade: Information Requested | | | | | |

Check for source of FUEL LEAK. Fuel is at a SEVERE LEVEL. Fuel dilution may be caused by component faults related to injectors, ignition/timing, or excessive blow-by. Additional causes include heavy throttle application, engine lugging, frequent short trips and excessive idling. LUBRICANT and FILTER CHANGE is suggested if not done at sampling time. Base number is flagged, however without complete lubricant information, the starting point for this lubricant cannot be determined. In order to properly compare data to the correct standards, please provide COMPONENT MANUFACTURER and MODEL, and the FLUID MANUFACTURER, PRODUCT NAME, and VISCOSITY GRADE. Unit and/or lubricant TIME missing. Please provide missing application and sump information. Resample at half interval.

| | Wear Metals (ppm) | | | | | | | | | | ntamin tals (p _l | | Multi-Source Metals (ppm) | | | | | | Additive Metals (ppm) | | | | | |
|----------|-------------------|----------|--------|----------|--------|------|-----|---------|--------|----------|--------------------------------|--------|---------------------------|----------|------------|----------|-----------|---------|-----------------------|-----------|---------|--------|------------|------|
| Sample # | Iron | Chromium | Nickel | Aluminum | Copper | Lead | Tin | Cadmium | Silver | Vanadium | Silicon | Sodium | Potassium | Titanium | Molybdenum | Antimony | Manganese | Lithium | Boron | Magnesium | Calcium | Barium | Phosphorus | Zinc |
| 1 | 23 | 1 | 0 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 61 | 0 | 0 | 0 | 4 | 907 | 1027 | 0 | 982 | 1157 |

| | | Sample | e Inforr | mation | | | | | Contaminants | Fluid Properties | | | | | | |
|--------------|-------------|--------------|-------------|-------------|------------|-----------------|--------------|----------|--------------|------------------|-------------------|---------------------|---------|----------|--------------|--------------|
| # elune | ate Sampled | ate Received | . Lube Time | - Unit Time | ube Change | Lube - Added | ilter Change | Fuel | Soot | Water | Viscosity 40°C | Viscosity 100 °C | a Acid | Base No. | sq Oxidation | sq Nitration |
| \ \(\infty\) | | | n | n | ニニ | gal | 证 | % | % | % | cSt | cSt | KOH / g | KOH/g | cm | 0.1mm |
| 1 | 26-Oct-2023 | 31-Oct-2023 | 0 | 0 | Unk | 0 | Unk | 7.9 - GC | 0.1 - E2412 | <.1 - FTIR | | 11.4 | | 3.33 | 17 | 10 |

| L | _ | | , , , | | | • | | 0 | | · | | | | | |
|---|----------|----------------------------------|------------------------|-----------------------------|------------------------------|------------------------|--------------------|----------------------------------|------------------------------|------------------------------|-------------|--|--|--|--|
| [| | | | | Add | litional | Testing | | | | | | | | |
| | Sample # | opo OSI Based On 4/6/14 | mL A oarticles / | o ^ particles / mL | OL A particles / mL | mL ^ particles / | 7particles / mL | & K ^ particles / mL | OZ ^ particles / mL | 00 A particles / mL | Test Method | | | | |
| | 1 | / / | | | | | | | | | | | | | |

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Results relate only to the items tested. Missing fluid or component information limits the evaluation. No warranty is expressed or implied. Measurement uncertainty available upon request.