WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

LINKBELT BRONE 149

Component Diesel Engine

PETRO CANADA 15W40 (--- GAL)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|---|--|--|--|---|---|
| Sample Number | | Client Info | | WC0893829 | | |
| Sample Date | | Client Info | | 11 Mar 2024 | | |
| Machine Age | hrs | Client Info | | 3700 | | |
| | hrs | Client Info | | | | |
| • | hrs | | | | | |
| - | | | | _ | | |
| | | Client Info | | _ | | |
| Sample Status | | | | NORMAL | | |
| Iron | ppm | ASTM D5185m | >100 | 8 | | |
| | | | | | | |
| Nickel | | | | 0 | | |
| Titanium | | | | <1 | | |
| Silver | | | >3 | <1 | | |
| Aluminum | ppm | | | 3 | | |
| Lead | ppm | ASTM D5185m | >40 | 4 | | |
| Copper | ppm | ASTM D5185m | >330 | 2 | | |
| Tin | ppm | ASTM D5185m | >15 | 1 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| White Metal | scalar | *Visual | NONE | NONE | | |
| Yellow Metal | scalar | *Visual | NONE | NONE | | |
| 0 | | AOTH DE LOS | 0.5 | | | |
| | • • | | | | | |
| | ppm | | | | | |
| | | | | | | |
| | | | >0.2 | | | |
| | 0/ | | . 2 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | - | | | |
| • • | | | | | | |
| | | *Visual | | | | |
| | | | | | | |
| Sodium | ppm | ASTM D5185m | | 0 | | |
| Boron | ppm | | | 22 | | |
| | ppm | ASTM D5185m | | 2 | | |
| • | ppm | | | | | |
| | ppm | | | | | |
| _ | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | . 05 | | | |
| Oxidation | Abs/.1mm | | >25 | | | |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.3 | | |
| | Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Silicon Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium | Sample Number Sample Date Machine Age hrs Oil Age hrs Filter Age hrs Oil Changed Filter Changed Sample Status Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Yellow Metal scalar Silicon ppm Potassium ppm Fuel Water Glycol Soot % % Nitration Abs/cm Sulfation Abs/.1mm Silt scalar Sand/Dirt scalar Sand/Dirt scalar Appearance odor scalar Emulsified Water scalar Sodium ppm Boron ppm Barium ppm Manganese ppm Magnesium ppm Magnesium ppm Calcium ppm Phosphorus zinc ppm Sulfur ppm Sulfur ppm Sulfur ppm Sulfur ppm | Sample Number Sample Date Machine Age Oil Age hrs Client Info Sample Status Iron ppm ASTM D5185m Chromium ppm ASTM D5185m Nickel ppm ASTM D5185m Titanium ppm ASTM D5185m Aluminum ppm ASTM D5185m Copper ppm ASTM D5185m Tin ppm ASTM D5185m Vanadium ppm ASTM D5185m White Metal yellow Metal scalar Yellow Metal Scalar Yellow Metal Scalar Yellow Metal Soot % WC Method Water WC Method Water WC Method Water WC Method Soot % Nitration Abs/Imm *ASTM D7624 Sulfation Abs/Imm *ASTM D5185m Boron ppm ASTM D5185m ASTM D | Sample Number Sample Date Client Info Sample Date Client Info Machine Age hrs Client Info Oil Age hrs Client Info Filter Age hrs Client Info Oil Changed Client Info Filter Changed Client Info Sample Status Iron ppm ASTM D5185m >100 Chromium ppm ASTM D5185m >20 Nickel ppm ASTM D5185m >3 Aluminum ppm ASTM D5185m >20 Lead ppm ASTM D5185m >20 Lead ppm ASTM D5185m >20 Lead ppm ASTM D5185m >3 Aluminum ppm ASTM D5185m >3 Aluminum ppm ASTM D5185m >3 Tin ppm ASTM D5185m >15 Vanadium ppm ASTM D5185m >15 Vanadium ppm ASTM D5185m >15 Vanadium ppm ASTM D5185m >20 Lead ppm ASTM D5185m >20 Copper ppm ASTM D5185m >15 Vanadium ppm ASTM D5185m >25 Potassium ppm ASTM D5185m >22 Fuel WC Method >5 Water WC Method >5 Water WC Method >0.2 Glycol WC Method Soot % 'ASTM D7624 >20 Sulfation Abs/.nm 'ASTM D7415 >30 Silt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NONE Appearance scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NONE Appeara | Sample Number Client Info WC0893829 Sample Date Client Info 3700 Machine Age hrs Client Info 257 Filter Age hrs Client Info 257 Cill Changed Client Info Changed Filter Changed Client Info Changed Sample Status Client Info Changed Iron ppm ASTM D5185m >100 8 Chromium ppm ASTM D5185m >20 1 Nickel ppm ASTM D5185m >4 0 Titanium ppm ASTM D5185m >3 <1 | Sample Number Client Info MC0893829 |





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Unique Number: 10939562

: WC0893829 Lab Number : 06125411

Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

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.

C.L. BENTON & SONS INC

706 38TH AVE N MYRTLE BEACH, SC US 29577

Contact: NEIL neil@clbenton.com

T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Received

Tested

: 21 Mar 2024

: 22 Mar 2024

: 22 Mar 2024 - Wes Davis