WEAR CONTAMINATION FLUID CONDITION

NORMAL MARGINAL ABNORMAL

TA Machines

TA621 Sany SW3054CD00128 Wheel loader

Diesel Engine

DIESEL ENGINE OIL SAF 15W40 (--- GAL)

| Sample Jate | DIESEL ENGINE OIL SAE 15W40 (GAL) | | | | | | | |
|--|---|---------------------------------------|--------|---------------|-----------|-------------|----------|----------|
| Sample Number Client Info New York Sample Number Sam | RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Sample Date Machine Age hrs Cilent Info 210 | We advise that you check the fuel injection system. Resample at the next service interval to monitor. | Sample Number | | Client Info | | LW0009076 | | |
| Machine Age hrs Cilent Info 210 | | Sample Date | | Client Info | | 31 May 2024 | | |
| Filter Age | | | hrs | Client Info | | | | |
| Filter Age | | Oil Age | hrs | Client Info | | 210 | | |
| Oil Changed Client Info Not Changed Filter Changed Sample Status Status | | | | | | | | |
| Filter Changed Client Info N/A | | | | | | Not Changd | | |
| NEAR | | | | | | | | |
| Iron | | _ | | | | | | |
| Chromium ppm ASTM D5168m >20 2 | | · · · · · · · · · · · · · · · · · · · | | | | | | |
| Nicke | WEAR | | ppm | ASTM D5185m | >100 | | | |
| Titanium ppm ASTIM DSISES | All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >20 | 2 | | |
| Silver ppm ASTM D5185m >3 <1 Aluminum ppm ASTM D5185m >20 8 Lead ppm ASTM D5185m >300 <1 Copper ppm ASTM D5185m >300 12 Tin ppm ASTM D5185m >300 12 Vanadium ppm ASTM D5185m >0 Vanadium | | Nickel | ppm | ASTM D5185m | >4 | <1 | | |
| Aluminum ppm ASTM D5185m >20 8 | | Titanium | ppm | ASTM D5185m | | <1 | | |
| Lead | | Silver | ppm | ASTM D5185m | >3 | <1 | | |
| Copper | | Aluminum | ppm | ASTM D5185m | >20 | 8 | | |
| Tin | | Lead | ppm | ASTM D5185m | >40 | <1 | | |
| Vanadium ppm ASTM 05185m 0 0 | | Copper | ppm | ASTM D5185m | >330 | 12 | | |
| White Metal Scalar "Visual NONE N | | Tin | ppm | ASTM D5185m | >15 | <1 | | |
| Silicon ppm ASTM DS185m >25 14 | | Vanadium | ppm | ASTM D5185m | | 0 | | |
| Silicon ppm ASTM D5185m >25 14 | | White Metal | scalar | *Visual | NONE | NONE | | |
| Potassium ppm ASTM D5185m >20 5 Fuel % ASTM D5254 >5 A 3.8 Glycol WC Method >0.2 NEG Glycol WC Method NEG Soot % % ASTM D7844 >3 0.1 Nitration Abs/cm ASTM D7844 >3 0.1 Nitration Abs/cm ASTM D7845 >20 4.5 Sulfation Abs/cm ASTM D7845 >20 4.5 Sulfation Abs/cm ASTM D7845 >30 16.1 Silt Scalar Visual NONE NONE Debris Scalar Visual NONE NONE Appearance Scalar Visual NORML NONE Appearance Scalar Visual NORML NORML Appearance Scalar Visual NORML NORML NORML Appearance Scalar Visual NORML NORML ASTM D5185m 250 18 ASTM D5185m 10 1 1 ASTM D5185m 10 2 1 ASTM D5185m 10 253 ASTM D5185m 150 326 ASTM | | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Potassium ppm ASTM D5185m >20 5 Fuel % ASTM D5254 >5 A 3.8 Glycol WC Method >0.2 NEG Glycol WC Method NEG Soot % % ASTM D7844 >3 0.1 Nitration Abs/cm ASTM D7844 >3 0.1 Nitration Abs/cm ASTM D7845 >20 4.5 Sulfation Abs/cm ASTM D7845 >20 4.5 Sulfation Abs/cm ASTM D7845 >30 16.1 Silt Scalar Visual NONE NONE Debris Scalar Visual NONE NONE Appearance Scalar Visual NORML NONE Appearance Scalar Visual NORML NORML Appearance Scalar Visual NORML NORML NORML Appearance Scalar Visual NORML NORML ASTM D5185m 250 18 ASTM D5185m 10 1 1 ASTM D5185m 10 2 1 ASTM D5185m 10 253 ASTM D5185m 150 326 ASTM | | | | | | | | |
| Fuel % ASTM D3524 >5 A 3.8 Water WC Method >0.2 NEG Glycol WC Method >0.2 NEG Soot % % 'ASTM D7844 >3 0.1 Nitration Abs/mm 'AsTM D7845 >30 16.1 NONE NONE NORML | Light fuel dilution occurring. | | • • | | | | | |
| Valer | | | | | | | | |
| Glycol Scot % % | | | % | | | | | |
| Soot % | | | | | >0.2 | | | |
| Nitration | | | | | | | | |
| Sulfation Abs/.1mm *ASTM D7415 >30 16.1 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML | | | % | | | | | |
| Silt scalar *Visual NONE NONE NONE NORML | | | | | | | | |
| Debris Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NORML NORML Scalar *Visual NORML NORML Scalar *Visual NORML NORML Scalar *Visual NORML NORML Scalar *Visual Scala | | | | | | 1 | | |
| Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM | | | scalar | | | | | |
| Appearance Scalar *Visual NORML NORM | | Debris | scalar | | NONE | NONE | | |
| Codor Scalar *Visual NORML NORML NORML Scalar *Visual NORML NORML | | Sand/Dirt | scalar | *Visual | | | | |
| Emulsified Water Scalar *Visual >0.2 NEG | | Appearance | scalar | *Visual | NORML | | | |
| Sodium ppm ASTM D5185m >158 4 | | Odor | scalar | *Visual | NORML | | | |
| Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. Barium ppm ASTM D5185m 10 <1 Molybdenum ppm ASTM D5185m 100 19 Magnesium ppm ASTM D5185m 450 253 Calcium ppm ASTM D5185m 3000 1297 Phosphorus ppm ASTM D5185m 1150 828 Sulfur ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Dxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | Emulsified Water | scalar | *Visual | >0.2 | NEG | | |
| Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. Barium ppm ASTM D5185m 10 <1 Molybdenum ppm ASTM D5185m 100 19 Magnesium ppm ASTM D5185m 450 253 Calcium ppm ASTM D5185m 3000 1297 Phosphorus ppm ASTM D5185m 1150 828 Sulfur ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Dxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | ELLID CONDITION | Codium | nnm | ACTM DE10Em | . 150 | 4 | | |
| Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. Barium ppm ASTM D5185m 10 19 | FLUID CUNDITION | | | | | 10 | | |
| Molybdenum ppm ASTM D5185m 100 19 | Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. | | | | | | | |
| Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 450 253 Calcium ppm ASTM D5185m 3000 1297 Phosphorus ppm ASTM D5185m 1150 828 Zinc ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | | | | | | | |
| Magnesium ppm ASTM D5185m 450 253 Calcium ppm ASTM D5185m 3000 1297 Phosphorus ppm ASTM D5185m 1150 828 Zinc ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | - | | | 100 | | | |
| Calcium ppm ASTM D5185m 3000 1297 Phosphorus ppm ASTM D5185m 1150 828 Zinc ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | | | | 150 | | | |
| Phosphorus ppm ASTM D5185m 1150 828 Zinc ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | • | | | | | | |
| Zinc ppm ASTM D5185m 1350 920 Sulfur ppm ASTM D5185m 4250 4465 Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | | | | | | | |
| Sulfur ppm ASTM D5185m 4250 4465 Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | · | | | | 1 | | |
| Oxidation Abs/.1mm *ASTM D7414 >25 9.0 Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | | | | | | | |
| Base Number (BN) mg KOH/g ASTM D2896 8.5 4.9 | | | | | | | | |
| (| | | | | | | | |
| VISC @ 100°C CSL ASTM D440 14.4 8.3 | | , , | | | | | | |
| | | visc @ 100°C | 001 | MO 1 IVI D445 | 14.4 | 6.5 | | |





Laboratory Sample No.

: LW0009076 Lab Number : 06211390 Unique Number : 11084254

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Jun 2024 **Tested** : 19 Jun 2024

: 19 Jun 2024 - Don Baldridge Diagnosed

Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel, 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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