

OIL ANALYSIS REPORT

Sample Rating Trend





EDLTAY TAYM01BE (S/N 1256576)Component_

Biogas Engine

CHEVRON HDAX 9500 GAS ENGINE OIL 40 (180 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

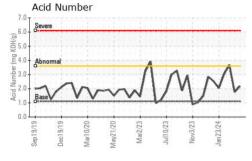
Fluid Condition

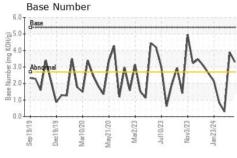
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

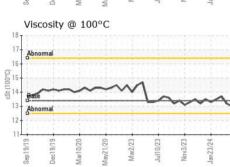
| | | 32010 00020 | 10 Maleuzu Mayeuzu | WHELDES GUEDES HOVEDES | OBILOZY | |
|--|---------------------------------|--|--------------------------------------|--------------------------------|-----------------------------------|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0901613 | WC0901578 | WC0901655 |
| Sample Date | | Client Info | | 13 Mar 2024 | 05 Mar 2024 | 21 Feb 2024 |
| Machine Age | hrs | Client Info | | 54540 | 8189 | 54540 |
| Oil Age | hrs | Client Info | | 401 | 247 | 54340 |
| Oil Changed | | Client Info | | Not Changd | Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |
| CONTAMINATION | ١ | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >4.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | | NEG | NEG | NEG |
| Glycol | | WC Method | 7.2 | NEG | NEG | NEG |
| | | | 11 11 11 | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >15 | 4 | 1 | 3 |
| Chromium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | | 2 | 2 | 3 |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >4 | 2 | 2 | 6 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 1 | 1 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 7 | 5 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | 8 | 6 | 8 |
| Calcium | ppm | ASTM D5185m | | 1749 | 1717 | 1945 |
| Phosphorus | ppm | ASTM D5185m | | 265 | 239 | 258 |
| Zinc | ppm | ASTM D5185m | | 297 | 306 | 352 |
| Sulfur | ppm | ASTM D5185m | | 3617 | 2680 | 4279 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >181 | 9 | 6 | 33 |
| Sodium | ppm | ASTM D5185m | >20 | 3 | <1 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 7 | 11 |
| | ppiii | 710 1111 00 100111 | | • | | |
| INFRA-RED | ррііі | method | limit/base | current | history1 | history2 |
| INFRA-RED Soot % | % | | | | | |
| | | method | limit/base | current | history1 | history2 |
| Soot % | % | method *ASTM D7844 | limit/base | current 0 | history1 | history2 0.1 |
| Soot % Nitration | % Abs/cm Abs/.1mm | method *ASTM D7844 *ASTM D7624 | limit/base >2 >20 | current 0 5.0 | history1 0 4.9 | history2 0.1 5.2 |
| Soot % Nitration Sulfation FLUID DEGRADA | % Abs/cm Abs/.1mm | method *ASTM D7844 *ASTM D7624 *ASTM D7415 method | limit/base >2 >20 >30 limit/base | current 0 5.0 20.0 current | history1 0 4.9 18.1 history1 | history2 0.1 5.2 31.8 history2 |
| Soot % Nitration Sulfation FLUID DEGRADA Oxidation | % Abs/cm Abs/.1mm TION Abs/.1mm | method *ASTM D7844 *ASTM D7624 *ASTM D7415 method *ASTM D7414 | limit/base >2 >20 >30 limit/base >25 | current 0 5.0 20.0 current 9.3 | history1 0 4.9 18.1 history1 8.6 | history2 0.1 5.2 31.8 history2 14.4 |
| Soot % Nitration Sulfation FLUID DEGRADA | % Abs/cm Abs/.1mm | method *ASTM D7844 *ASTM D7624 *ASTM D7415 method *ASTM D7414 | limit/base >2 >20 >30 limit/base | current 0 5.0 20.0 current | history1 0 4.9 18.1 history1 | history2 0.1 5.2 31.8 history2 |



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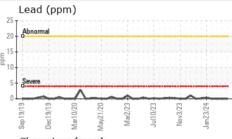


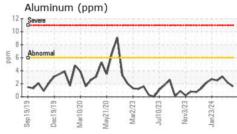


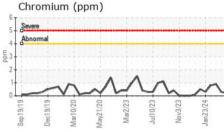
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| | | | | | | |

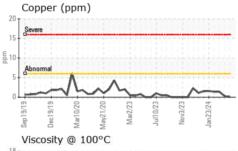
| FLUID PROPER | THES | method | | | riistory i | History2 |
|--------------|------|-----------|------|------|------------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 13.4 | 13.0 | 13.2 | 13.7 |

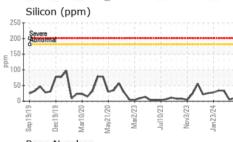
| Seve | re | | | | | | |
|----------|------------|----------|----------|---------|----------|---------|------------|
| 5 - Abn | ormal | | | | | | |
| 0 | ~ | | / | | | | |
| 5- | | M | N | 50 | | | |
| | | A - | | V | ~ | ~ | ~ |
| ر ا | | | | | | | |
| Sep19/19 | Dec19/19 - | Mar10/20 | May21/20 | Mar2/23 | Jul10/23 | Nov3/23 | Jan23/24 - |

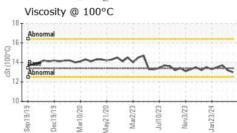


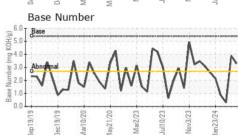
















Certificate L2367

Laboratory Sample No.

: WC0901613 Lab Number : 06123243 Unique Number: 10937394

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

Received **Tested**

Diagnosed

: 19 Mar 2024 : 20 Mar 2024

: 22 Mar 2024 - Sean Felton

EDL NA Recips-Taylor County TAYLOR COUNTY POWER STATION, COUNTY ROAD 33 & STEWART ROAD

MAUK, GA US 31058 Contact: STEVEN BABB

Test Package : MOB 2 To discuss this sample report, contact Customer Service at 1-800-237-1369.

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

steven.babb@edlenergy.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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