

OIL ANALYSIS REPORT



Sample Rating Trend





Recommendation

Contamination

Fluid Condition

Wear

oil.

Machine Id

Resample at the next service interval to monitor.

There is no indication of any contamination in the

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

All component wear rates are normal.

acceptable for the time in service.

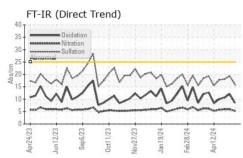
BRCM01BE (S/N GZJ00658) Biogas Engine

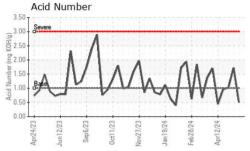
CHEVRON HDAX 9500 GAS ENGINE OIL 40 (--- GAL)

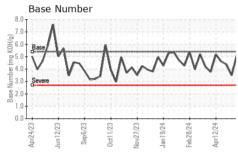
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|---|--|---|----------------------------------|---|---|---|
| Sample Number | | Client Info | | WC0760844 | WC0760828 | WC0760825 |
| Sample Date | | Client Info | | 10 May 2024 | 03 May 2024 | 26 Apr 2024 |
| Machine Age | hrs | Client Info | | 76572 | 76426 | 76204 |
| Oil Age | hrs | Client Info | | 57 | 471 | 249 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | SEVERE | MARGINAL |
| CONTAMINATIO | N | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | <u>\</u> 4 0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | 2 1.0 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| WEAR METALS | | | line it /le e e e | - | - | |
| | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >14 | <1 | 3 | 2 |
| Chromium | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | - | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >5 | 1 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >8 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >5 | 0 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >3 | 0 | 4 | A 3 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 7 | 7 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 10 | 6 | 6 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 14 | 27 | 24 |
| Calcium | ppm | ASTM D5185m | | 1836 | 1931 | 1690 |
| Phosphorus | ppm | ASTM D5185m | | 270 | 315 | 299 |
| Zinc | ppm | ASTM D5185m | | 325 | 369 | 352 |
| Sulfur | ppm | ASTM D5185m | | 2125 | 2743 | 2282 |
| | | | | | | |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| | ppm | method ASTM D5185m | limit/base | current 56 | history1 | history2 138 |
| Silicon | | | | | | |
| Silicon Sodium | ppm | ASTM D5185m | >180 | 56 | ▲ 221 | 138 |
| | ppm ppm | ASTM D5185m ASTM D5185m | >180 >20 | 56 2 | ▲ 221 2 | 138 0 |
| Silicon Sodium Potassium | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | >180 >20 >20 | 56 2 2 | ▲ 221 2 2 | 138 0 2 |
| Silicon Sodium Potassium INFRA-RED | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m method | >180 >20 >20 | 56 2 2 current | ▲ 221 2 2 history1 | 138 0 2 history2 |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 | >180 >20 >20 | 56 2 2 current 0 | ▲ 221 2 2 history1 0 | 138 0 2 history2 0 |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm % Abs/cm Abs/.1mm | ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 | >180 >20 >20 | 56 2 2 current 0 5.3 | ▲ 221 2 2 history1 0 5.9 | 138 0 2 history2 0 5.9 18.1 |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA | ppm ppm ppm % Abs/cm Abs/.1mm | ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415 | >180 >20 >20 limit/base | 56 2 2 current 0 5.3 16.0 | ▲ 221 2 2 history1 0 5.9 19.3 | 138 0 2 history2 0 5.9 |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation | ppm ppm ppm % Abs/cm Abs/cm | ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415 method *ASTM D7414 | >180 >20 >20 limit/base | 56 2 2 current 0 5.3 16.0 current | ▲ 221 2 2 history1 0 5.9 19.3 history1 | 138 0 2 history2 0 5.9 18.1 history2 |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm % Abs/cm Abs/.1mm | ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415 method *ASTM D7414 | >180 >20 >20 limit/base | 56 2 2 current 0 5.3 16.0 current 8.5 | ▲ 221 2 2 history1 0 5.9 19.3 history1 12.1 | 138 0 2 history2 0 5.9 18.1 history2 10.6 |

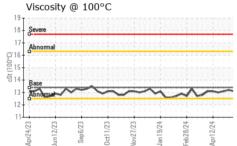


OIL ANALYSIS REPORT









| VISUAL | | method | limit/base | current | history1 | history2 |
|--|----------------------------|--|--|---------------------------------|--|----------------------|
| Yellow Metal | scalar scalar scalar | *Visual *Visual *Visual | NONE NONE | NONE NONE NONE | MODER NONE NONE | NONE NONE NONE |
| | scalar | *Visual | NONE | NONE | NONE | NONE |
| | scalar | *Visual | NONE | NONE | NONE | NONE |
| | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Ddor | scalar | *Visual | NORML | NORML | NORML | NORML |
| | scalar | *Visual | | NEG | NEG | NEG |
| | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERTI | | method | limit/base | current | history1 | history2 |
| | cSt | ASTM D445 | 13.4 | 13.1 | 13.2 | 13.1 |
| GRAPHS Iron (ppm) | | | | Lead (ppm) | | |
| Tababa provincia a segura de la composición de | | Dansaal | 15 | T1000000000000000 | | |
| Severe | | (real rates) | 10 | Severe | | |
| Abnormal | | | mdd | Abnormal | 1~ | |
| - MA | m | M. | 5 | N | N | M |
| un 12/23 | 1/23 | 3/24 - | | Apr24/23 un12/23 Sep6/23 | 1/23 | 8/24 |
| Apr24/23 Jun12/23 Sep6/23 Oct11/23 | Nov27/23 | Jan 19/24 Feb 28/24 Aor12/24 | 5 | Apr24/23 Jun12/23 Sep6/23 | Oct11/23 Nov27/23 Jan19/24 | Feb28/24 Apr12/24 |
| Aluminum (ppm) | | | r | Chromium (p | pm) | |
| Severe | | | 4 | Severe | | |
| Abnormal A | | | _ 3 | Abnormal | | |
| Abnormal | | | | | | |
| ~M | sa | \sim | 1 | | | |
| | | | | | | ~ |
| 24/23 12/23 66/23 | 27/23 | 19/24 28/24 | 0 | 24/23 | 27/23 | 28/24 |
| Apr24/23 Jun12/23 Sep6/23 | Nov27/23 | Jan 19/24 Feb28/24 Aor12/24 | 0 | Apr24/23 | 0ct11/23 | Feb28/24 |
| Copper (ppm) | Nov27/23 | Jan 19/24 | 400 | Sep6/23 | 0ct11/23 Nov27/23 | Feb28/24 |
| E271 H200 Copper (ppm) | Nov27/23 | Jan 19/24 Feb 28/24 Apri 2/24 | | | 0ct11/23 | Feb28/24 |
| Copper (ppm) | Nov27/23 - | Jan 19/24 + Feb28/24 + April 2/24 + | 400 | | 0dt11/23 | Feb28/24 |
| E271H20dy Copper (ppm) | Nov21/23 | Jan 19/24 | 400 | | 0ct11/23 | Feb28/24 |
| Copper (ppm) | Nov27/23 | Feb28/24 | 400 300 | Silicon (ppm) | 0dt11/23 | MM |
| E214130 | | h | 400 300 토 200 100 | Silicon (ppm) | M | MM |
| Apr24/23 Jun12/23 Sep6/23 Cobber (bbw) Sep6/23 Oct11/23 | | Jan 19/24 - Jan 19/24 - Jan 19/24 - Feb 28/24 - Feb 28 | 400 300 토 200 100 | Api24/23 Jun12/23 Sep6/23 | 0ct11/23 0ct11/23 0ct11/23 Nov27/23 Nov27/23 Jan19/24 0ct11/23 | MM |
| EZIF204 Copper (ppm) Copper (ppm) EZIF204 EZIF204 EZIF204 Viscosity @ 100°C | | h | 400 300 夏200 100 ~ 0 80 | Silicon (ppm) | M | MM |
| Copper (ppm) EZITIAN Copper (ppm) Copper (ppm) EZITIAN Copper (ppm) Copper (ppm) | | h | 400 300 夏200 100 ~ 0 80 | Api24/23 Jun12/23 Sep6/23 | M | MM |
| EZUFZION Copper (ppm) Copper (ppm) EZUFZION | | h | 400 300 夏200 100 ~ 0 80 | Api24/23 Jun12/23 Sep6/23 | M | MM |
| EZITIDO Copper (ppm) Severe Abnomal EZITIDO Copper (ppm) EZITIDO EZITIDO EZITIDO Viscosity @ 100°C | | h | 400 300 夏200 100 ~ 0 80 | Api24/23 Jun12/23 Sep6/23 | M | MM |
| EZUFZION Copper (ppm) Copper (ppm) EZUFZION | | h | 400 300 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Silicon (ppm) | M | MM |
| EZIHIPO EZI | CIT23-0V | h | 400 300 Et 200 100 0 (b)(HOJ bul) 4.0 upquiny eeg 0.0 | Silicon (ppm) | M | Feb28/24 |

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **EDL NA Recips-Brown County** Sample No. : WC0760844 BROWN COUNTY POWER STATION, 9427 BEYERS RD Received : 14 May 2024 Lab Number : 06178990 Tested : 15 May 2024 GEORGETOWN, OH Unique Number : 11030316 Diagnosed : 16 May 2024 - Don Baldridge US 45121 Test Package : MOB 2 Contact: MITCHELL BUTLER Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Mitchell.Butler@edlenergy.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T:

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

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Submitted By: BRETT PONTIUS

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