Woodchip Bioreactors

The Search for No Nitrates

**Bioreactor ID: 17099**

**Capacity: 96 m3**

**Installation year: 2016**

**Fill material: 100% woodchips**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test date** | **Flow rate**  **(L/sec)** | **Nitrates in**  **(gN/m3 per day)** | **Nitrates out**  **(gN/m3 per day)** |
| May 2019 | 4.0 | 60 | 16 |
| April 2020 | 5.0 | 59 | 23 |
| June 2021 | 4.5 | 51 | 19 |
| April 2022 | 6.0 | 65 | 28 |

1: Psuedomonas aeruginosa

2: bioreactor sample 1

3: bioreactor sample 2

4. bioreactor sample 3

5. bioreactor sample 4

GEL A

Woodchip Bioreactors

The Search for No Nitrates

**Bioreactor ID: 80332**

**Capacity: 115 m3**

**Installation year: 2018**

**Fill material: 50% woodchips + 50% corn cobs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test date** | **Flow rate**  **(L/sec)** | **Nitrates in**  **(gN/m3 per day)** | **Nitrates out**  **(gN/m3 per day)** |
| May 2019 | 3.0 | 70 | 21 |
| April 2020 | 3.5 | 65 | 24 |
| June 2021 | 4.5 | 50 | 16 |
| April 2022 | 5.0 | 60 | 26 |

1: Psuedomonas aeruginosa

2: bioreactor sample 1

3: bioreactor sample 2

4. bioreactor sample 3

5. bioreactor sample 4

GEL B

Woodchip Bioreactors

The Search for No Nitrates

**Bioreactor ID: 01221**

**Capacity: 80 m3**

**Installation year: 2019**

**Fill material: 100% corn cobs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test date** | **Flow rate**  **(L/sec)** | **Nitrates in**  **(gN/m3 per day)** | **Nitrates out**  **(gN/m3 per day)** |
| May 2019 | 3.5 | 65 | 34 |
| April 2020 | 4.0 | 55 | 29 |
| June 2021 | 6.5 | 50 | 19 |
| April 2022 | 4.0 | 68 | 31 |

1: Psuedomonas aeruginosa

2: bioreactor sample 1

3: bioreactor sample 2

4. bioreactor sample 3

5. bioreactor sample 4

GEL C

Woodchip Bioreactors

The Search for No Nitrates

**Bioreactor ID: 56996**

**Capacity: 160 m3**

**Installation year: 2015**

**Fill material: 100% woodchips**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test date** | **Flow rate**  **(L/sec)** | **Nitrates in**  **(gN/m3 per day)** | **Nitrates out**  **(gN/m3 per day)** |
| May 2019 | 4.0 | 56 | 31 |
| April 2020 | 4.0 | 65 | 40 |
| June 2021 | 4.5 | 48 | 26 |
| April 2022 | 5.5 | 60 | 37 |

1: Psuedomonas aeruginosa

2: bioreactor sample 1

3: bioreactor sample 2

4. bioreactor sample 3

5. bioreactor sample 4

GEL D