



MR ROB PIGGOTT
TRADE EFFLUENT SERVICES
HUGMOOR HOUSE
HUGMOOR
LLANYPWLL
WREXHAM LL13 9YE

F990

Please quote above code for all enquiries

ENCIRC ELTON

SLUDGE CAKE

CAKE ANALYSIS RESULTS (Metric Units)

Sample Reference : SLUDGE CAKE

Sample Matrix : CAKE

The sample submitted was of adequate size to complete all analysis requested.

The sample will be kept as the dry ground sample for at least 1 month.

Laboratory References

Report Number 97365
Sample Number 132958

Date Received 17-MAR-2022

Date Reported 04-APR-2022

ANALYTICAL RESULTS

| Determinand on a DM basis unless otherwise indicated | Units | Result | Amount per fresh tonne | Amount applied at an equivalent total Nitrogen application of 250 kg N/ha | Units |
|--|-------|--------|---------------------------|---|-----------|
| pH 1:6 [Fresh] | | 6.84 | | | |
| Oven Dry Matter | % | 8.81 | 88.10 | 3083 | kg DM |
| Total Nitrogen | % w/w | 8.11 | 7.14 | 250 | kg N |
| Ammonium Nitrogen | mg/kg | 6581 | 0.58 | 20.29 | kg NH4-N |
| Nitrate Nitrogen | mg/kg | <10 | < 0.01 | | kg NO3-N |
| Total Phosphorus (P) | % w/w | 1.85 | 3.73 | 130.59 | kg P2O5 |
| Total Potassium (K) | % w/w | 0.725 | 0.77 | 26.82 | kg K2O |
| Total Magnesium (Mg) | % w/w | 0.259 | 0.38 | 13.25 | kg MgO |
| Total Sulphur (S) | % w/w | 1.69 | 3.72 | 130.24 | kg SO3 |
| Total Copper (Cu) | mg/kg | 29.7 | < 0.01 | | kg Cu |
| Total Zinc (Zn) | mg/kg | 337 | 0.03 | 1.04 | kg Zn |
| Total Sodium (Na) | % w/w | 1.04 | 1.24 | 43.22 | kg Na2O |
| Total Calcium (Ca) | mg/kg | 8240 | 0.73 | 25.40 | kg Ca |
| Equivalent field application rate | | — | 1.00 | 34.99 | tonnes/ha |

The above equivalent field application rate for total nitrogen of 250 kg/ha has been provided purely for guidance purposes only. Organic manures should be used in accordance with the Defra Code of Good Agricultural Practice and where required within the specific regulatory guidance for the spreading of that material to land. To get the most benefit from your organic manures it is recommended that you follow the principles as set out in Defra's Fertiliser Manual (RB209) or as directed by a FACTS qualified adviser.

Released by *Myles Nicholson*

Date *04/04/22*

NRM Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS
Tel: +44 (0) 1344 886338 Fax: +44 (0) 1344 890972 Email: enquiries@nrm.uk.com www.nrm.uk.com



MR ROB PIGGOTT
TRADE EFFLUENT SERVICES
HUGMOOR HOUSE
HUGMOOR
LLANYPWLL
WREXHAM LL13 9YE

F990

Please quote above code for all enquiries

ENCIRC ELTON

SLUDGE CAKE

CAKE ANALYSIS RESULTS (Metric Units)

Sample Reference : SLUDGE CAKE

Sample Matrix : CAKE

The sample submitted was of adequate size to complete all analysis requested.

The sample will be kept as the dry ground sample for at least 1 month.

Laboratory References

Report Number 97365
Sample Number 132958

Date Received 17-MAR-2022

Date Reported 04-APR-2022

ANALYTICAL RESULTS

| Determinand on a DM basis unless otherwise indicated | Units | Result |
|--|-------|--------|
| Conductivity 1:6 [Fresh] | uS/cm | 466 |
| Total Lead (Pb) | mg/kg | 4.23 |
| Total Cadmium (Cd) | mg/kg | <0.1 |
| Total Mercury (Hg) | mg/kg | <0.1 |
| Total Nickel (Ni) | mg/kg | 21.1 |
| Total Chromium (Cr) | mg/kg | 65.6 |
| Water Soluble Magnesium | mg/kg | 27.6 |
| Water Soluble Phosphorus | mg/kg | 3245 |
| Water Soluble Potassium | mg/kg | 2101 |

Released by *Myles Nicholson*

Date *04/04/22*

NRM Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS
Tel: +44 (0) 1344 886338 Fax: +44 (0) 1344 890972 Email: enquiries@nrm.uk.com www.nrm.uk.com

How does your sample analysis compare with the 'standard' figures for organic manures?

| Farmyard Manure | Dry Matter (% DM) | Total Nitrogen (Kg N/t) | Total Phosphate (Kg P2O5/t) | Total Potash (Kg K2O/t) | Total Sulphur (Kg SO3/t) | Total Magnesium (Kg MgO/t) |
|------------------------|----------------------|----------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------|
| Cattle FYM | 25 | 6.0 | 3.2 | 9.4 | 2.4 | 1.8 |
| Pig FYM | 25 | 7.0 | 6.0 | 8.0 | 3.4 | 1.8 |
| Sheep FYM | 25 | 7.0 | 3.2 | 8.0 | 4.0 | 2.8 |
| Duck FYM | 25 | 6.5 | 5.5 | 7.5 | 2.6 | 2.4 |
| Horse FYM | 25 | 5.0 | 5.0 | 6.0 | 1.6 | 1.5 |
| Goat FYM | 40 | 9.5 | 4.5 | 12.0 | 2.8 | 1.8 |

Notes: The 'standard' phosphate & potash availability figures to the next crop grown from Defra's Fertiliser Manual are 60% & 90% respectively.

| Poultry Manure | Dry Matter (% DM) | Total Nitrogen (Kg N/t) | Total Phosphate (Kg P2O5/t) | Total Potash (Kg K2O/t) | Total Sulphur (Kg SO3/t) | Total Magnesium (Kg MgO/t) |
|-----------------------|----------------------|----------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------|
| | 20 | 9.4 | 8.0 | 8.5 | 3.0 | 2.7 |
| | 40 | 19.0 | 12.0 | 15.0 | 5.6 | 4.3 |
| | 60 | 28.0 | 17.0 | 21.0 | 8.2 | 5.9 |
| | 80 | 37.0 | 21.0 | 27.0 | 11.0 | 7.5 |

Notes: The 'standard' phosphate & potash availability figures to the next crop grown from Defra's Fertiliser Manual are 60% & 90% respectively.

| Cattle & Pig Slurries | Dry Matter (% DM) | Total Nitrogen (Kg N/m3) | Total Phosphate (Kg P2O5/m3) | Total Potash (Kg K2O/m3) | Total Sulphur (Kg SO3/m3) | Total Magnesium (Kg MgO/m3) |
|----------------------------------|----------------------|-----------------------------|---------------------------------|-----------------------------|------------------------------|--------------------------------|
| Cattle slurry | 6.0 | 2.6 | 1.2 | 2.5 | 0.7 | 0.6 |
| Dirty water (from cattle) | 0.5 | 0.5 | 0.1 | 1.0 | 0.1 | 0.1 |
| Separated cattle slurries | | | | | | |
| - strainer box liquid | 1.5 | 1.5 | 0.3 | 1.5 | ND | ND |
| - weeping wall liquid | 3.0 | 2.0 | 0.5 | 2.3 | ND | ND |
| - mechanically separated liquid | 4.0 | 3.0 | 1.2 | 2.8 | ND | ND |
| - solid portion after separation | 20.0 | 4.0 | 2.0 | 3.3 | ND | ND |
| Pig slurry | 4.0 | 3.6 | 1.5 | 2.2 | 0.7 | 0.7 |
| Separated pig slurry - liquid | 3.0 | 3.6 | 1.1 | 2.0 | ND | ND |
| Separated pig slurry - solid | 20.0 | 5.0 | 3.7 | 2.0 | ND | ND |

Notes: ND = no data.

The 'standard' phosphate & potash availability figures to the next crop grown from Defra's Fertiliser Manual are 50% & 90% respectively (50% & 100% for dirty water).

| Biosolids | Dry Matter (% DM) | Total Nitrogen (Kg N/t) | Total Phosphate (Kg P2O5/t) | Total Potash (Kg K2O/t) | Total Sulphur (Kg SO3/t) | Total Magnesium (Kg MgO/t) |
|------------------|----------------------|----------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------|
| Digested cake | 25 | 11.0 | 11.0 | 0.6 | 8.2 | 1.6 |
| Thermally dried | 95 | 40.0 | 55.0 | 2.0 | 23.0 | 6.0 |
| Lime stabilised | 25 | 8.5 | 7.0 | 0.8 | 7.4 | 2.4 |
| Composted | 40 | 11.0 | 10.0 | 3.0 | 6.1 | 2.0 |

Notes: The 'standard' phosphate & potash availability figures to the next crop grown from Defra's Fertiliser Manual are 50% & 90% respectively.

| Other Organic Manures | Dry Matter (% DM) | Total Nitrogen (Kg N/t) | Total Phosphate (Kg P2O5/t) | Total Potash (Kg K2O/t) | Total Sulphur (Kg SO3/t) | Total Magnesium (Kg MgO/t) |
|---------------------------------|----------------------|----------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------|
| Composts | | | | | | |
| Green compost | 60 | 7.5 | 3.0 | 6.8 | 3.4 | 3.4 |
| Green/food compost | 60 | 11.0 | 4.9 | 8.0 | 5.1 | 3.4 |
| Mushroom compost | 35 | 6.0 | 5.0 | 9.0 | ND | ND |
| Digestates | | | | | | |
| Food-based whole | 4.1 | 4.8 | 1.1 | 2.4 | 0.7 | 0.2 |
| Food-based separated liquor | 3.8 | 4.5 | 1.0 | 2.8 | 1.0 | 0.2 |
| Food-based separated fibre | 27.0 | 8.9 | 10.2 | 3.0 | 4.0 | 2.2 |
| Farm-sourced whole | 5.5 | 3.6 | 1.7 | 4.0 | 0.8 | 0.6 |
| Farm-sourced separated liquor | 3.0 | 1.9 | 0.6 | 2.5 | <0.1 | 0.4 |
| Farm-sourced separated fibre | 24.0 | 5.6 | 4.7 | 6.0 | 1.2 | 1.8 |
| Paper Crumble | | | | | | |
| Chemically / physically treated | 40 | 2.0 | 0.4 | 0.2 | 0.6 | 1.4 |
| Biologically treated | 30 | 7.5 | 3.8 | 0.4 | 2.4 | 1.0 |
| Water Treatment Cake | | | | | | |
| Water treatment cake | 25 | 2.4 | 3.4 | 0.4 | 5.5 | 0.8 |
| Food industry 'wastes' | | | | | | |
| Dairy waste | 4 | 1.0 | 0.8 | 0.2 | ND | ND |
| Soft drinks waste | 4 | 0.3 | 0.2 | Trace | ND | ND |
| Brewing waste | 7 | 2.0 | 0.8 | 0.2 | ND | ND |
| General food waste | 5 | 1.6 | 0.7 | 0.2 | ND | ND |

Notes: ND = no data.

The 'standard' figures for the above organic manures have been taken from Defra's Fertiliser Manual 2017 (RB209) 9th edition and the corresponding PLANET version 3 software. Further information on fertiliser recommendations for organic manures can be obtained from the Fertiliser Manual or from a FACTS qualified adviser.