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|-----------------------------|-----------|-------------------------|
| Beschreibung der Probenahme | Kennzahl: | 4110/7828/00020         |
|                             | Name:     | Brunnen II Breitenbrunn |

## Probenahme

**Probenahmestelle:** 4110/7828/00020  
**Brunnen II Breitenbrunn**  
**Wassergewinnungsanlage:** BREITENBRUNN  
**Zuständiges Amt:** Wasserwirtschaftsamt Kempten  
  
**Überwachtes Objekt:** Landesmessnetz GWBeschaffenheit 2016 WWA KE  
**Datum der Überwachung:** 23.04.2016  
**Untersuchungslabor:** Wasserwirtschaftsamt Kempten  
**Art der Untersuchung:** Landesmessnetz GWBeschaffenheit (LMN)  
**Probennummer:** 223495  
**Datum der Probenahme:** 25.04.2016 11:45  
**Analyse zu prüfen:** nein  
**Erfassende Verwaltung:** WWA

## Messwerte

| Schlüssel: | PV: | Parameter:           | Einheit: | Wert:      | auffällig: |
|------------|-----|----------------------|----------|------------|------------|
| 0111       | A   | Dummy                | -        | B          |            |
| 0116       | A   | s-PSM-GC-MS          | -        | B          |            |
| 0117       | A   | PSM-HPLC-DAD         | -        | B          |            |
| 0121       | A   | Metalle-ICP-MS       | mg/l     | B          |            |
| 0124       | A   | PSM-Metaboliten      | -        | B          |            |
| 0803       | A   | Anlagenzustand       | -        | 4          |            |
| 0807       | A   | GW-stand in Ruhe     | m u. MP  | 2,31       |            |
| 0808       | A   | Entnahmetiefe        | m u. MP  | B          |            |
| 0809       | A   | Abgesenkter GW-stand | m u. MP  | 2,76       |            |
| 0810       | A   | Freipump-Dauer       | h        | 0,75       |            |
| 0811       | A   | Freipump-Förderung   | l/s      | 16         |            |
| 1021       | A   | Wassertemp.(vor Ort) | °C       | 10,0       |            |
| 1026       | A   | Färbung              | -        | 10         |            |
| 1027       | A   | Färbung (SPAK 436nm) | l/m      | <0,10      |            |
| 1028       | A   | SPAK 254 nm          | l/m      | 0,70       |            |
| 1031       | A   | Trübung              | -        | 100        |            |
| 1042       | A   | Geruch               | -        | 100        |            |
| 1061       | A   | pH-Wert (vor Ort)    | -        | 7,5        |            |
| 1084       | A   | LF (20 °C) vor Ort   | µS/cm    | 636        |            |
| 1085       | A   | LF (20 °C) im Labor  | µS/cm    | 644        |            |
| 1111       | A   | Li                   | mg/l     | 0,00120    |            |
| 1112       | A   | Na                   | mg/l     | 14         |            |
| 1113       | A   | K                    | mg/l     | 2,6        |            |
| 1114       | A   | Rb                   | mg/l     | 0,000353   |            |
| 1115       | A   | Cs                   | mg/l     | <0,0000100 |            |
| 1117       | A   | La                   | mg/l     | <0,0000100 |            |
| 1120       | A   | Be                   | mg/l     | <0,0000500 |            |
| 1121       | A   | Mg                   | mg/l     | 26,0       |            |
| 1122       | A   | Ca                   | mg/l     | 101        |            |
| 1123       | A   | Sr                   | mg/l     | 0,231      |            |
| 1124       | A   | Ba                   | mg/l     | 0,0562     |            |

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|      |   |              |        |             |
|------|---|--------------|--------|-------------|
| 1131 | A | Al           | mg/l   | <0,00500    |
| 1133 | A | Ti           | mg/l   | <0,00200    |
| 1137 | A | Sn           | mg/l   | <0,000500   |
| 1138 | A | Pb           | mg/l   | 0,0000743   |
| 1141 | A | V            | mg/l   | 0,000269    |
| 1142 | A | As           | mg/l   | 0,000382    |
| 1145 | A | Sb           | mg/l   | <0,0000500  |
| 1147 | A | Bi           | mg/l   | <0,0000100  |
| 1151 | A | Cr-ges       | mg/l   | <0,000500   |
| 1155 | A | Mo           | mg/l   | 0,000173    |
| 1158 | A | W            | mg/l   | <0,0000100  |
| 1161 | A | Cu           | mg/l   | 0,000745    |
| 1162 | A | Ag           | mg/l   | <0,00000500 |
| 1164 | A | Zn           | mg/l   | 0,0137      |
| 1165 | A | Cd           | mg/l   | <0,0000100  |
| 1166 | A | Hg-ges.      | mg/l   | <0,0000050  |
| 1171 | A | Mn           | mg/l   | <0,0010     |
| 1179 | A | Nb           | mg/l   | <0,00000200 |
| 1182 | A | Fe           | mg/l   | <0,0050     |
| 1186 | A | Co           | mg/l   | 0,0000419   |
| 1188 | A | Ni           | mg/l   | 0,000346    |
| 1191 | A | Y            | mg/l   | <0,0000100  |
| 1201 | A | Ce           | mg/l   | <0,0000100  |
| 1206 | A | Te           | mg/l   | <0,000100   |
| 1208 | A | Tl           | mg/l   | <0,0000500  |
| 1211 | A | B            | mg/l   | 0,0105      |
| 1213 | A | SiO2         | mg/l   | 9,4         |
| 1218 | A | Se           | mg/l   | <0,00100    |
| 1244 | A | NO3          | mg/l   | 27          |
| 1246 | A | NO2          | mg/l   | <0,02       |
| 1248 | A | NH4          | mg/l   | <0,030      |
| 1263 | A | o-PO4        | mg/l   | 0,028       |
| 1281 | A | O2-gelöst    | mg/l   | 9,2         |
| 1313 | A | SO4          | mg/l   | 13          |
| 1321 | A | F            | mg/l   | <0,1        |
| 1331 | A | Cl           | mg/l   | 26          |
| 1360 | A | U            | µg/l   | 0,889       |
| 1362 | A | Th           | µg/l   | <0,0100     |
| 1472 | A | KS 4,3       | mmol/l | 6,28        |
| 1477 | A | KB 8,2       | mmol/l | 0,52        |
| 1524 | A | DOC          | mg/l   | <0,5        |
| 2226 | A | MCPA         | µg/l   | N0,05       |
| 2227 | A | Mecoprop     | µg/l   | N0,05       |
| 2228 | A | Dichlorprop  | µg/l   | N0,05       |
| 2229 | A | 2,4-D        | µg/l   | N0,05       |
| 2230 | A | 2,4,5-T      | µg/l   | N0,05       |
| 2231 | A | 2,4-DB       | µg/l   | N0,05       |
| 2232 | A | MCPB         | µg/l   | N0,05       |
| 2233 | A | Fenoprop     | µg/l   | N0,05       |
| 3010 | A | Propiconazol | µg/l   | N0,05       |
| 3011 | A | Triadimenol  | µg/l   | N0,03       |

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|      |   |                      |      |       |
|------|---|----------------------|------|-------|
| 3040 | A | Pendimethalin        | µg/l | N0,03 |
| 3051 | A | Atrazin              | µg/l | 0,030 |
| 3052 | A | Simazin              | µg/l | N0,01 |
| 3053 | A | Terbuthylazin        | µg/l | N0,01 |
| 3054 | A | Desethylatrazin      | µg/l | 0,010 |
| 3055 | A | Desethylsimazin      | µg/l | N0,02 |
| 3057 | A | Desmetryn            | µg/l | N0,02 |
| 3058 | A | Metribuzin           | µg/l | N0,03 |
| 3059 | A | Terbutryn            | µg/l | N0,01 |
| 3060 | A | Cyanazin             | µg/l | N0,01 |
| 3061 | A | Propazin             | µg/l | N0,01 |
| 3062 | A | Sebuthylazin         | µg/l | N0,01 |
| 3063 | A | Desethylterbuthylaz. | µg/l | N0,02 |
| 3068 | A | Metalaxyl            | µg/l | N0,03 |
| 3071 | A | Terbumeton           | µg/l | N0,03 |
| 3072 | A | Flurochloridon       | µg/l | N0,03 |
| 3075 | A | Tebuconazol          | µg/l | N0,05 |
| 3076 | A | Imidacloprid         | µg/l | N0,02 |
| 3077 | A | Esfenvalerat         | µg/l | N0,02 |
| 3078 | A | Difenoconazol        | µg/l | N0,05 |
| 3079 | A | Desethylsebuthylazin | µg/l | N0,03 |
| 3080 | A | 2,6-Dichlorbenzamid  | µg/l | N0,02 |
| 3081 | A | i-Propylphenylharnst | µg/l | N0,02 |
| 3082 | A | me-harn-i-propphenyl | µg/l | N0,05 |
| 3083 | A | harn-dichlorphenyl   | µg/l | N0,03 |
| 3084 | A | me-harn-di-Cl-phenyl | µg/l | N0,05 |
| 3089 | A | DMSA                 | µg/l | N0,05 |
| 3090 | A | Prochloraz           | µg/l | N0,03 |
| 3101 | A | Diuron               | µg/l | N0,02 |
| 3102 | A | Bentazon             | µg/l | N0,05 |
| 3103 | A | Atraton              | µg/l | N0,03 |
| 3104 | A | Chloridazon          | µg/l | N0,01 |
| 3105 | A | Hexazinon            | µg/l | N0,05 |
| 3107 | A | Isoproturon          | µg/l | N0,02 |
| 3108 | A | Metamitron           | µg/l | N0,02 |
| 3109 | A | Metobromuron         | µg/l | N0,02 |
| 3110 | A | Metoxuron            | µg/l | N0,02 |
| 3111 | A | Chlortoluron         | µg/l | N0,02 |
| 3113 | A | Methabenzthiazuron   | µg/l | N0,02 |
| 3115 | A | Linuron              | µg/l | N0,03 |
| 3116 | A | Monolinuron          | µg/l | N0,02 |
| 3117 | A | Dimefuron            | µg/l | N0,03 |
| 3122 | A | Ethidimuron          | µg/l | N0,03 |
| 3125 | A | Diflubenzuron        | µg/l | N0,02 |
| 3137 | A | Alachlor             | µg/l | N0,03 |
| 3140 | A | Metolachlor          | µg/l | N0,03 |
| 3144 | A | Carbetamid           | µg/l | N0,02 |
| 3145 | A | Tebutam              | µg/l | N0,05 |
| 3147 | A | Dicamba              | µg/l | N0,05 |
| 3148 | A | Triclopyr            | µg/l | N0,05 |
| 3150 | A | Bromacil             | µg/l | N0,05 |

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|      |   |                      |      |       |
|------|---|----------------------|------|-------|
| 3155 | A | Ioxynil              | µg/l | N0,05 |
| 3157 | A | Bromoxynil           | µg/l | N0,05 |
| 3159 | A | Fluroxypyr           | µg/l | N0,05 |
| 3160 | A | Fluroxypyr-1-mhester | µg/l | N0,05 |
| 3161 | A | Haloxifyfop          | µg/l | N0,05 |
| 3170 | A | Prosulfocarb         | µg/l | N0,03 |
| 3171 | A | Pirimicarb           | µg/l | N0,03 |
| 3180 | A | Metazachlor          | µg/l | N0,03 |
| 3183 | A | Kresoxim-methyl      | µg/l | N0,03 |
| 3184 | A | Epoxiconazol         | µg/l | N0,05 |
| 3185 | A | Azoxystrobin         | µg/l | N0,03 |
| 3187 | A | Aclonifen            | µg/l | N0,05 |
| 3188 | A | Carbendazim          | µg/l | N0,05 |
| 3189 | A | Propaquizafop        | µg/l | N0,03 |
| 3196 | A | Mefenpyr-diethyl     | µg/l | N0,05 |
| 3205 | A | Ethofumesat          | µg/l | N0,03 |
| 3215 | A | Flurtamone           | µg/l | N0,03 |
| 3228 | A | Boscalid             | µg/l | N0,05 |
| 3291 | A | Azoxystrobin_1       | µg/l | N0,05 |
| 3292 | A | Terbuthylazin_1      | µg/l | 0,080 |
| 3293 | A | Terbuthylazin_2      | µg/l | N0,05 |
| 3294 | A | Metolachlor_3        | µg/l | N0,05 |
| 3296 | A | Metolachlor_4        | µg/l | N0,05 |
| 3301 | A | Thiacloprid_1        | µg/l | N0,05 |
| 3302 | A | Dimethenamid_3       | µg/l | N0,05 |
| 3304 | A | Chloridazon_1        | µg/l | N0,05 |
| 3305 | A | Chloridazon_2        | µg/l | N0,05 |
| 3307 | A | Metazachlor_1        | µg/l | N0,05 |
| 3308 | A | Metazachlor_2        | µg/l | N0,05 |
| 3310 | A | Dimethachlor_2       | µg/l | N0,05 |
| 3311 | A | Metolachlor_2        | µg/l | N0,05 |
| 3312 | A | Metolachlor_1        | µg/l | 0,10  |
| 3313 | A | Chlorthalonil_1      | µg/l | N0,05 |
| 3314 | A | Chlorthalonil_5      | µg/l | N0,05 |
| 3315 | A | Dimethachlor_5       | µg/l | N0,05 |
| 3324 | A | Dimoxystrobin        | µg/l | N0,05 |
| 3328 | A | Metalaxyl_1          | µg/l | N0,05 |
| 3329 | A | Metalaxyl_2          | µg/l | N0,05 |
| 3339 | A | Metolachlor_7b       | µg/l | N0,05 |

PV: Probenvorbehandlung

(N: Nachweisgrenze (nicht nachweisbar); B: nicht beobachtet;

&lt;: unter Bestimmungsgrenze; &gt;: über der Bestimmungsgrenze, nicht quantifizierbar)