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| **Entreprise**  **de forage:** | | |  | | | | | | | | | | | **Procès-verbal d’essai et de réception de sonde(s) géothermique(s)**  **selon SIA 384/6, Chiffre 6.1.2** | | | | | | | | | | |
|  | | |  | | |  | | | | | | | |  | | | | | |  | | | | |
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| **Objet:** | | |  | | | | | | | | | | | **n° de commande:** | | | | | |  | | | | |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| **Sonde géothermique** | | | | | |  |  | | **n°** |  | | | |  | | | | | |  | | | | |
|  |  |  |  | |  |  |  | |  |  | | | |  | | | | | |  | | | | |
| Numéro d’identification (usine) | | | | | | | | | ID: |  | | | |  | | | | | |  | | | | |
|  |  |  |  | |  |  |  | |  |  | | | |  | | | | | |  | | | | |
| N° de la paire de rouleaux de tubes (p. ex. 0040) | | | | | | | | | n° |  | | | |  | | | | | |  | | | | |
|  | |  |  | |  |  |  | |  |  | | | |  | | | | | |  | | | | |
| Longueur (sonde installée) | | | | | | |  | | m |  | | | |  | | | | | |  | | | | |
|  |  |  |  | |  |  |  | |  |  | | | |  | | | | | |  | | | | |
| Diamètre extérieur / épaisseur de la paroi | | | | | | | | | mm |  | / | |  |  | / | | |  | |  | / | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| **Remplissage** | | | | Standard: 100 kg bentonite,  200 kg ciment, 900 l eau | | | | Date | |  | | | |  | | | | | |  | | | | |
|  | | | | | | | | | | Bentonite | Ciment | | Eau | Bentonite | Ciment | | | Eau | | Bentonite | Ciment | | | Eau |
|  | | | | | | | | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  | | | | | | | | | |  |  | |  |  |  | | |  | |  |  | | |  |
| Quantité en **kg** bentonite, ciment, eau | | | | | | | | | |  |  | |  |  |  | | |  | |  |  | | |  |
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|  | | | | | | | | | |  | | |  |  | | | | |  |  | | |  | |
| ou mélange fini: marque, eau / 100 kg | | | | | | | | | |  | | |  |  | | | | |  |  | | |  | |
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|  | | | | | | | | | |  | |  | |  | | |  | | |  | |  | | |
| Remarque au remplissage: Essai d’étanchéité exécutable selon B2, tableau 4: oui / non | | | | | | | | | |  | | 🞎 oui | |  | | | 🞎 oui | | |  | | 🞎 oui | | |
| 🞎 non | | 🞎 non | | | 🞎 non | | |
| Quantité totale remplissage en **kg** / poids spécifique en **kg/m3** | | | | | | | | | |  | |  | |  | | |  | | |  | |  | | |
|  | | | | | | | | | |  | |  | |  | | |  | | |  | |  | | |
|  | | | | | | | | | | oui / non | | m sous terrain | | oui / non | | | m sous terrain | | | oui / non | | m sous terrain | | |
|  | | | | | | | | | |  | |  | |  | | |  | | |  | |  | | |
| Rempli au niveau terrain : **oui** / si non jusqu’ à **m** sous terrain | | | | | | | | | |  | |  | |  | | |  | | |  | |  | | |
|  | | | | | | | | | |  | |  | |  | | |  | | |  | |  | | |
| **Essai de débit** | | | | | | Date de l’essai | | | |  | | | |  | | | | | |  | | | | |
|  |  |  |  | |  |  |  | |  | ct.1/ci.2 | ct.1 | | ct.2 | ct.1/ci.2 | ct.1 | | | ct.2 | | ct.1/ci.2 | ct.1 | | | ct.2 |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| Débit d’eau | | | | | | | l / min | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| Différence de pression | | | | | | |  | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  | | | | | | |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| Pression calculée (selon tableaux) | | | | | | |  | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| Condition remplie: | | | | |  |  | oui / non | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| **Essai d’étanchéité** | | | | | | Date de l’essai | | | |  | | | |  | | | | | |  | | | | |
| SIA 384/6 | | | | | | | | | | Valeur mesurée | | | | Valeur mesurée | | | | | | Valeur mesurée | | | | |
| Précision de lecture 0.01 bar | | | | |  |  |  | |  | ct.1/ci.2 | ct.1 | | ct.2 | ct.1/ci.2 | ct.1 | | | ct.2 | | ct.1/ci.2 | ct.1 | | | ct.2 |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| Déroulement | | Procédé d’essai pour: | | | | | | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
| en minutes | | (dépend de la longueur de la sonde et de la densité du remplissage; cf. B2, tableau 4) | | | | | | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  | Remplir la sonde avec de l’eau | | | | | | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| 0 | | Mettre sous pression d’essai | | | | | | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| 10 | | Pression fin du maintien pression | | | | | | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| 60 | | Fin chute de pression | | | | | | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  | (chute de pression admissible selon fabricant) | | | | | | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  | Pression après baisse de pression | | | | | | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  | (baisse 10% de pression d’essais, min. 1 bar) | | | | | | |  |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  | Quantité de l’eau èvacuée | | | | | | | l |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  | (selon B2, tableau 5) | | | | | | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| 70 | | Pression mesurée | | | |  |  | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| 80 | | Pression mesurée | | | |  |  | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| 90 | | Pression fin de l’essais principal | | | | | | | bar |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| Condition remplie: | | | | |  |  | oui / non | | |  |  | |  |  |  | | |  | |  |  | | |  |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |  | |  |  | | |  |
| **Réception** | | | Norme SIA 118 | | | |  | |  |  | Contremaître: | | | |  | | | | | | | | | |
|  |  |  |  | |  |  |  | |  |  |  | |  |  |  | | | | | | | | | |
| Lieu et date: | | |  | | | | | | |  | Direction des travaux: | | | | |  | | | | | | | | |
|  | | |  | |  |  |  | |  |  |  | |  | |  | | |  | |  |  | | |  |