

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES

SUPERVISOR OF WELLS INSTRUCTION 1-94
CERTIFICATION OF CASING AND SEALING OF SURFACE CASING

INTRODUCTION

The Supervisor of Wells Act, 1939 PA 61, as amended (Act 61), prohibits oil field practices which may cause pollution, damage to or destruction of fresh water supplies. The purpose of these instructions is to further ensure the protection of fresh ground water. For all wells drilled pursuant to Act 61 after the effective date of these instructions, the Supervisor of Wells will require that a knowledgeable geologist or mud logger determine the proper depth to set surface casing to ensure that the casing will properly seal and protect all fresh water aquifers. The following requirements are issued in conjunction with and in addition to the provisions of Rule 301, 302, 303, 306, and 309 of the Rules promulgated pursuant to Act 61 (Rules), Supervisor's Instruction No. 1-87 (S.I. 1-87) and Special Order No. 2-73, amended (S.O. 2-73). This instruction shall become effective January 15, 1994.

INSTRUCTION

1. Casing shall be run from the surface to a depth no less than:

- a. 100 feet into competent bedrock and
- b. 100 feet below all fresh water aquifers occurring below the glacial drift.

The casing shall be cemented in accordance with the Rules, S.O. 2-73, S.I. 1-87, and Supervisor of Wells requirements.

2. Each application and permit to drill shall provide geologic and depth information necessary to comply with the surface casing requirements stated in #1 above.

3. A knowledgeable geologist or mud logger on site shall determine the proper depth as provided in item #1 at which to set surface casing. To further ensure the protection of fresh ground water supplies, the running of casing and the cementing operation shall be supervised by the drilling rig tool pusher and/or a qualified representative of the permittee.

4. The geologist or mud logger shall enter into the drilling rig daily log book the following:

- a. The depth to bedrock.
- b. The base of other fresh water aquifers as specified by the permit to drill.
- c. The total depth of the surface casing hole.
- d. The signature and name of the geologist/mud logger.

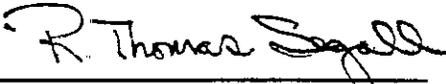
5. The drilling rig tool pusher or qualified representative of the permittee shall enter in the drilling rig daily log book the following:

- a. Depth where surface casing was set.
- b. Amount and volume of cement used.
- c. Amount and volume of cement circulated to surface.
- d. Amount and volume of additional cement used if grouted.
- e. Any problems encountered while running or cementing the surface casing.
- f. The signature and name of the person certifying this information.

6. Within thirty days of the completion of the drilling operation, the permittee of the drilling operation shall furnish a certification of the proper sealing and protection of fresh water aquifers on a form prescribed by the Supervisor of Wells. The certification shall be signed by the geologist or mud logger who determined the depth to set the surface casing and by the permittee or a company officer. The certification shall describe any unusual hole conditions or problems encountered during the drilling or while running or cementing the casing.

Date:

12/15/93


R. THOMAS SEGALL
ASSISTANT SUPERVISOR OF WELLS