

January 4, 1995

en

Steve Stadel
Westerberg Drilling, Inc.
36728 S. Kropf Road
Molalla, OR 97038

Dear Steve:

The Water Resources Department has received your request for special standards on the Meadowcroft Farm irrigation well located in Township 3S, Range 2E, Section 34 of Clackamas County (start card number 51406).

This is a permitted well with the condition that water can only be appropriated from the Columbia River Basalt (CRB) underlying the Troutdale aquifer system. The well is currently 1280 feet deep and enters the CRB at 1258 feet, encounters a clay layer from 1260 to 1262 feet, and reenters the CRB at 1262. The well has a 110 foot surface seal and an underreamed seal from 380 to 400 feet on the upper 10 inch casing. An 11 inch hole was underreamed from 1250 to 1269 feet on the outside of 8 inch casing.

Due to casing advancement problems, you are proposing to seal the 8 inch casing to 1262 feet, or only 2 feet into the CRB rather than the normal 5 feet. Your request is hereby approved. The underreamed seal from 1258 to 1262 feet will effectively seal off the upper Troutdale aquifer system and prevent commingling of dissimilar waters.

In addition, it is my opinion that the well meets the condition of the water right permit. Any water produced from this well in its current construction will be from the CRB exclusively.

If you have any questions concerning this letter, please contact me by phone at (503) 396-3121 x254, by fax at (503) 396-6233 or by letter at 290 N Central Street, Coquille, OR 97423.

Sincerely,



Rob Carter
Well Construction Specialist

cc: Dave Jarrett, Watermaster
Richard Edwards, Well Inspector
Application File G-13406

c:\wp51\ee94\meadowcr



W-SS
remark for
lower seal



36728 S. Kropf Rd., Molalla, OR 97038 • Phone: (503) 829-2526 FAX (503) 829-7514

Rob Carter
Water Master's Office
Coos County Court House
Coquille, OR 97423

Subject: Special Standards Request for Start Card #51406, Permit #G11752, District 16.

Dear Rob:

As per our telephone conversation on December 23, 1994, I am submitting this information and a request for Special Well Construction Standards on the above referenced well.

The well construction consists of 10" casing set to 400' with a continuous cement grout seal from 0-110' in 14" bore hole. In addition the 10" casing is underreamed and cement grout sealed from 380-400' at the bottom. 8" casing and bore hole was advanced to the Columbia River Basalt (the intended aquifer specified in permit). The basalt was anticipated at 800-900' below ground surface but was not encountered until 1258'. A 2' thick layer of hard grey basalt was hit from 1258-1260', clay from 1260-1262' and hard grey basalt again at 1262'. Exploratory test hole was drilled to approx. 1280' and remains in basalt. The hole was underreamed through the basalt layer at 1258-1260' and casing was moved below into the clay layer at 1260'. Underreaming continued through the clay layer and into the basalt to terminate at 1267'. The casing would not move into the second layer of basalt and was jacked back and underreaming was again done. The hole into the basalt appears to have some alignment problems with the casing. Some damage was done to the drive shoe but was mitigated by the use of a casing swedge. After re-underreaming, casing will advance to 1262' (2' into lower basalt section) and will only move with extreme force. Because of the extreme force in either driving or jacking back casing I am concerned with possible casing problems if this method continues. I am requesting Special Construction Standards to grout the casing in place with 2' into the lower basalt versus the normal 5'. Enclosed is a diagram of the well construction. Please contact me if you need additional information.

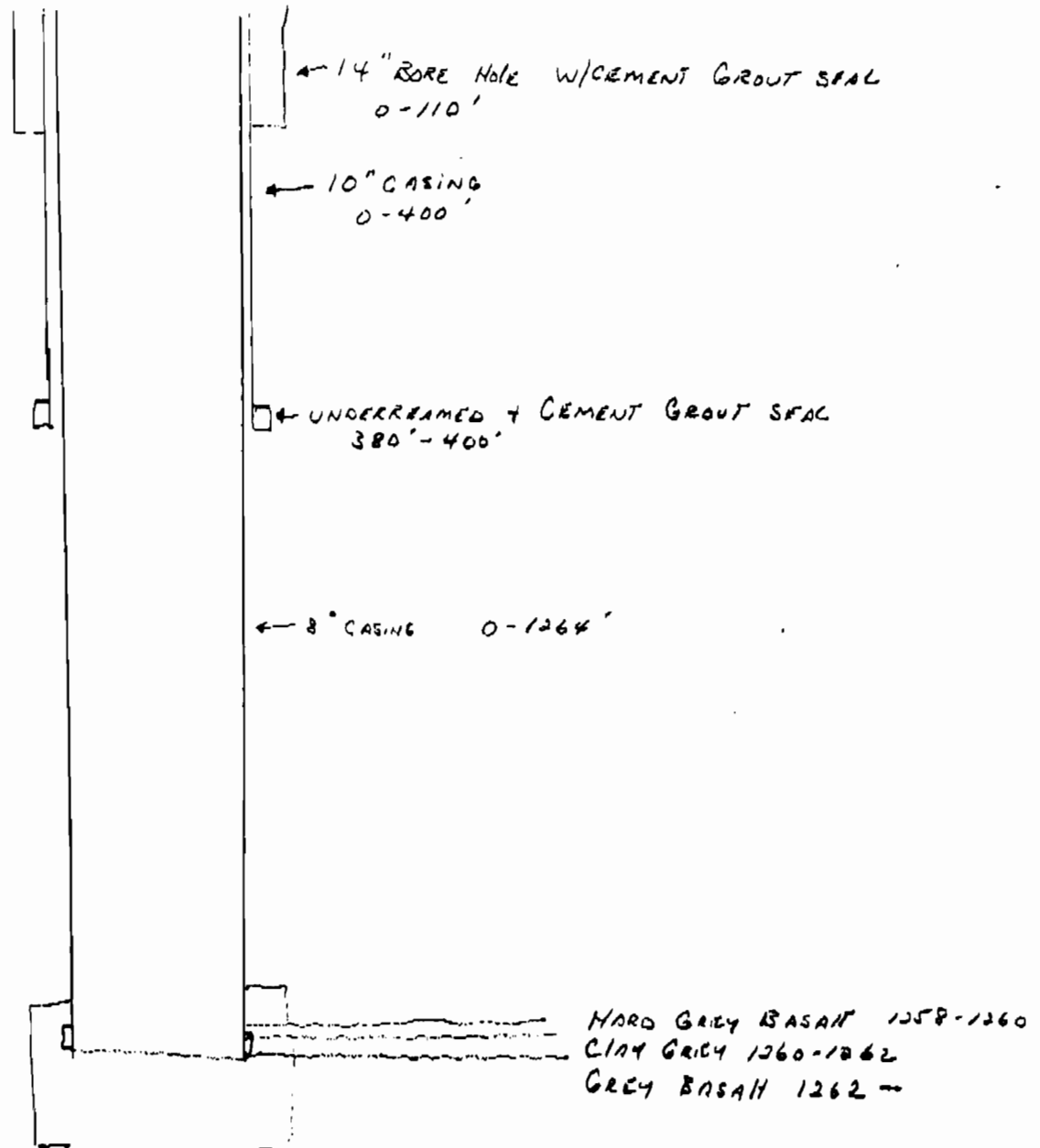
Sincerely,

Steven N. Stadeli



Westerberg Drilling, Inc.
36728 S. Kropf Rd.
Molalla, OR 97038
829-2526

36728 S. Kropf Rd., Molalla, OR 97038 • Phone: (503) 829-2526 FAX (503) 829-7514



CASING WILL NOT MOVE
PAST 1262. THE DRILL HOLE
FROM 1250-1269 WILL BE
GROUTED W/NEAT CEMENT

STATE OF OREGON

COUNTY OF CLACKAMAS

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

MEADOWCROFT FARM
15568 SOUTH CARUS ROAD
OREGON CITY, OREGON 97045

503-632-3220

to use the waters of A WELL in the BEAVER CREEK BASIN for AGRICULTURAL USE AND IRRIGATION OF 29.2 ACRES.

This permit is issued approving Application G-13406. The date of priority is MAY 11, 1993. The use is limited to not more than 300 GALLONS PER MINUTE, or its equivalent in case of rotation, measured at the well.

The well is located as follows:

SW 1/4 NE 1/4, SECTION 34, T 3 S, R 2 E, W.M.; 1740 FEET SOUTH AND 1550 FEET WEST FROM THE EASTERLY NORTHEAST CORNER OF DLC 49.

The amount of water used for agricultural use is limited to a diversion of 0.15 cubic foot per second per acre. For the irrigation of containerized nursery plants, the amount of water diverted is limited to ONE-FORTIETH of one cubic foot per second (or its equivalent) and 5.0 acre feet per acre per year. For the irrigation of in ground nursery plants the amount of water diverted is limited to ONE-EIGHTIETH of one cubic foot per second (or its equivalent) and 2.5 acre feet per acre per year. The use of water for agricultural use may be made at anytime of the year that the use is beneficial. For the irrigation of any other crop, the amount of water diverted is limited to ONE-EIGHTIETH of one cubic foot per second (or its equivalent) and 2.5 acre feet per acre during the irrigation season of each year. The period of allowed use for irrigation is March 1 through October 31.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

A description of the proposed place of use under this permit is as follows:

SW 1/4 NE 1/4 17.2 ACRES
SE 1/4 NE 1/4 12.0 ACRES

SECTION 34

TOWNSHIP 3 SOUTH, RANGE 2 EAST, W.M.

The well shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

GROUNDWATER PRODUCTION IS ALLOWED ONLY FROM THE COLUMBIA RIVER BASALT (WHICH LIES BELOW AN ALLUVIAL AQUIFER [THE TROUTDALE AQUIFER]).

Measurement, recording and reporting conditions:

- A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.
- B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

PAGE TWO

- C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

The water user shall report a March static water level in the well(s) to the Groundwater/Hydrology Section of the Water Resources Department by April 15 of each year. The measurement shall be made and calculations detailed by a certified water rights examiner, registered professional geologist, certified engineering geologist, or professional engineer.

Use of water from the well(s) shall not be allowed if the well(s) displays an (A) average water level decline of 3 or more feet per year for 5 consecutive years, or (B) a water level decline of 15 or more feet in fewer than 5 consecutive years, or (C) a water level decline of 25 or more feet, or (D) a hydraulic interference decline of 25 or more feet in any neighboring well with senior priority which provides water for an authorized use.

The Water Resources Department has determined that the initial water level in the well(s) are those of the initial March report. That is the level from which the cited declines in (A), (B) and (C) above will be referenced.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Actual construction work shall begin on or before May 10, 1995 and shall be completed on or before October 1, 1996. Complete application of the water shall be made on or before October 1, 1997.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

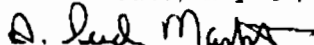
This permit is for beneficial use of water without waste. The water user is advised that new regulations may require use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director of the Water Resources Department has found that the proposed use of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Issued this date, May 10, 1994.


A. REED MARBO

Water Resources Department
Martha O. Pagel
Director

Application G-13406 Water Resources Department
Basin 2 Volume
MGMT.CODES 4EG, 4EW

PERMIT G-11752
District 16