

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER USE PERMIT SUMMARY REPORT**

Applicant: MITCH BAUM

Application Log No.: 33,071 and 33.072 and 33,073

Mitch Baum, for Summit Farms Farmland, LLC (Iowa DNR Log No. 33,071, 33,072, and 33,073) requests three permits authorizing withdrawal of water as follows:

(log 33,071) from two proposed Mississippian Limestone wells, each approximately 400 feet deep, located in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 21, T89N, R22W, Hardin County, Iowa, in the maximum quantity of 583 acre-feet per year at a maximum rate of 800 gallons per minute, all during the period April 1 to September 30 of each year for irrigation of up to 583 acres of general farm crops such as corn and soybeans on said land.

(log 33,072) from one proposed Mississippian Limestone well, approximately 400 feet deep, located in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 36, T89N, R21W, Hardin County, Iowa, in the maximum quantity of 343 acre-feet per year at a maximum rate of 800 gallons per minute, all during the period April 1 to September 30 of each year for irrigation of up to 343 acres of general farm crops such as corn and soybeans on said land.

(log 33,073) from two proposed Mississippian Limestone wells, each approximately 400 feet deep, located in the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 19, T89N, R22W, Hardin County, Iowa, in the maximum quantity of 746 acre-feet per year at a maximum rate of 800 gallons per minute, all during the period April 1 to September 30 of each year for irrigation of up to 746 acres of general farm crops such as corn and soybeans on said land.

These proposed permits represent incorporation of Mississippian wells, for a use of water at the above-referenced agricultural facility. This is to facilitate increased crop production.

1. According to information submitted by the applicant, the water source consists of an Mississippian Limestone wells, approximately 400 feet deep, with 12-inch diameter casing, and 800 gallon per minute capacity pump. Irrigation to these general crops (primarily corn and soybeans) is supplied by a center pivot apparatus, to be located in the vicinity of the well site.
2. Water is available in this portion of Hardin County according to Departmental records and experience with this formation.
3. The department's information on the Mississippian aquifer in this area is limited, but it is assumed that the aquifer extends from about 65 feet to 240 feet from the ground surface. The Mississippian formation has supplied the (nearby) city of Iowa Falls with adequate amounts of water withdrawal for many years without report of negative impacts to surrounding users of the aquifer.
4. Because of the moderate transmissivity value of the aquifer, the requested increases in permitted water withdrawal quantity and rate could negatively impact the nearby surrounding wells. Therefore, the placement of the proposed well is of critical importance. Before putting the new well into operation, it should be thoroughly tested to determine the impact on nearby surrounding wells. In any event, the interests of individuals using water for domestic purposes, as well as those persons benefiting from permitted water uses, are amply protected, in the event of substantial injury, pursuant to Section 455B.271, Code of Iowa.
5. Iowa Geological Survey records, and information submitted by the applicant, indicate the nearest known neighboring non-regulated users are located in excess of ¼ mile from the applicant's proposed withdrawal site. These private wells are likely of similar depths to the applicant's, or shallower, mostly located in the Iowa River alluvial. Whereas the users are a significant distance apart as to prevent the likelihood of interference, the Department does not anticipate any negative impacts upon any nearby users as a result from the proposed withdrawal from the applicant. In any event, the interests of individuals using water for domestic purposes, as well as those persons benefiting from existing permits, are amply protected, in the event of substantial injury, pursuant to Section 455B.271, Code of Iowa.
6. The ability and intent of the applicant to devote a reasonable amount of water to a beneficial use seem evident. There is no evidence that the use of water pursuant to a permit granted in accordance with the conclusions contained herein will constitute a waste of the water resources of the State, will be incompatible with the state comprehensive plan for water resources, will impair

the effect of pollution control laws of this State or the navigability of and navigable watercourse, or will be detrimental to the public interest or to the interests of property owners with prior or superior rights who might be affected.

THEREFORE:

The requested use of water conforms to the relevant criteria in Division III, Part 4, Chapter 455B, Code of Iowa and Chapter 52 of Part 567, Iowa Administrative Code. No adverse effect upon other water users is foreseen at this time. No well interference has been noted. Following publication of notice and subject to revisions in response to comments that may be submitted, the attached draft permit should be issued for a period of ten years.

Water Supply Engineering
Section

Date: