

EXHIBIT "A"
STATE OF MONTANA
BEFORE THE DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

IN THE MATTER OF APPLICATION
FOR BENEFICIAL WATER USE
PERMIT NO. 3907-g76LJ,
WILLIAM J. KESLER

FILMED
APR 3 1990

FINDINGS OF FACT, CONCLUSIONS
OF LAW, AND ORDER

The Proposed Findings of Fact, Conclusions of Law, and Order in this matter as entered on August 14, 1975, by the Hearing Examiner, are hereby adopted as the Final Findings of Fact, Conclusions of Law, and the Final Order.

ORDER

1. The Applicant's Permit is granted allowing the appropriation of 450 gallons per minute of water and not to exceed 200 acre-feet per annum. The water is to be diverted by means of a well, approximately 395 feet deep, at a point in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 5, Township 27 North, Range 21 West, and used for new irrigation on 60 acres in said Section 5 and supplemental irrigation on 14 acres in Section 5 from April 1 to October 15, inclusive, of each year.
2. The Applicant's Permit is granted subject to the following conditions:
 - a. That, an accurate pressure gage be installed on the well.
 - b. That static pressure heads be recorded monthly in the Applicant's well, beginning on March 15 and ending on November 15, annually until further notified by the Department.
 - c. That all periods of diversion as well as quantities of water diverted be recorded and reported to the Department.

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3. The Applicant's Permit is granted subject to all prior existing water rights. These rights will be protected by a static water level monitoring program administered by the individual well owners. These wells will be measured on the same schedule as stated in No. 2.

4. These measurements shall be reported to the Department on November 30 of each year.

Done this 10th day of October, 1975

Orin Ferris
Administrator, Water Resources Division
DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

NOTICE: Section 89-8-100, R.C.M. 1947, provides that a person who is aggrieved by a final decision of the Department is entitled to a hearing before the Board of Natural Resources and Conservation. A person desiring a hearing before the Board pursuant to this section must notify the Department in writing within ten (10) days of the final decision.

Address: Department of Natural Resources and Conservation
Natural Resources Building
32 South Ewing
Helena, MT 59601

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MONT. DEPT. OF NATURAL
RESOURCES & CONSERVATION

BEFORE THE DEPARTMENT
OF
NATURAL RESOURCES & CONSERVATION
OF THE STATE OF MONTANA

IN THE MATTER OF APPLICATION
FOR BENEFICIAL WATER USE PERMIT
NO. 3907-g76LJ, WILLIAM J. KESLER

PROPOSAL FOR DECISION

Pursuant to the Montana Water Use and Administrative Procedures Acts, after due notice, a hearing was held May 12, 1975, at Kalispell, Montana, for the purposes of hearing objections to the above-named application.

The applicant, Mr. William J. Kesler, appeared at the hearing and presented testimony. He was represented by counsel, Mr. Leonard Kaufman, Esq., of Kalispell, Montana; Soil Scientist Mr. John Cloninger; Mr. Arnold Kallestead, industrial engineer, and well driller, Mr. William Osborne, appeared as witnesses for the applicant.

Mr. William W. Thompson, Mr. Howard V. Hammer, Mr. Paul R. Palmer, Mr. Bruce A. Moon, Mr. Victor A. Sistok, Mr. Clarence A. Hoffman, Mr. and Mrs. Anthony Buechel, Mr. Gary G. Christianson, Mr. and Mrs. Leslie L. Tyler all filed timely objections to the application. Mr. William W. Thompson, Mr. Howard V. Hammer, Mr. Victor Sistok, and Mr. Gary Christianson all appeared at the hearing and presented testimony.

The applicant offered into evidence a plan designating the areas to be irrigated, a design guide used in planning the system, and a topographic map of the general area surrounding the well. These were marked as Applicant's Exhibits 1, 2, and 3 and were received into evidence without objection.

Mr. Roy Harding had not filed an objection to the application, but appeared at the hearing and presented testimony.

Mr. Tom Patton, geologist with the Department, appeared at the hearing and presented testimony.

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PROPOSED FINDINGS OF FACT

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1. On October 15, 1974, the applicant submitted with the Department an Application for Beneficial Water Use Permit seeking to appropriate 450 gallons per minute of water and not to exceed 200 acre-feet per annum in Flathead County, Montana. The water is to be diverted by means of a well approximately 350 feet deep at a point in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 5, Township 27 North, Range 21 West, and used for new irrigation on 66 acres and supplemental water on 28 acres in said Section 5, and containing a total of 94 acres, more or less, from April 1 to October 15, inclusive, of each year.

2. On April 23, 1975, Mr. William W. Thompson submitted a timely objection to the application on grounds that the proposed diversion would adversely affect his prior existing well by depleting the aquifer. On April 28, 1975, Mr. Howard V. Hammer, Mr. Paul R. Palmer, and Mr. Bruce A. Moon submitted a timely objection to the application on the grounds that the proposed diversion would adversely affect the well on their property by lowering the water table. On April 11, 1975, Mr. Clarence A. Hoffman submitted a timely objection to the application on the grounds that the proposed diversion would adversely affect his well by depleting the aquifer. On April 11, 1975, Mr. and Mrs. Anthony Buechel submitted a timely objection to the application on the grounds that the proposed diversion would adversely affect their well by lowering the static water level. On March 28, 1975, Mr. Gary Christianson submitted a timely objection to the application on the grounds that the proposed diversion would adversely affect his well by lowering the water table. On April 15, 1975, Mr. Victor A. Sistok submitted a timely objection to the application on the grounds that the proposed diversion would adversely affect his well. On April 17, 1975, Mr. and Mrs. Leslie L. Tyler submitted a timely objection to the application on the grounds that the proposed well would lower the static water level in their spring.

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3. The land of the applicant and the land of all of the objectors who appeared at the hearing is located in the Patrick Creek Valley. Since 1948 the applicant has customarily irrigated 140 acres of hay land from the source of Patrick Creek. In recent years, the flow of water in Patrick Creek has been insufficient for the applicant to fulfill his customary water usage. By this application, the applicant, Mr. Kesler, seeks to sprinkle irrigate approximately 60 acres of the 140 acres which he customarily irrigated from the source of Patrick Creek. The applicant asked the Soil Conservation Service engineers to design a system by which he would obtain more water to irrigate his property so that he could raise the same number of livestock as he did customarily. The SCS engineers suggested that Mr. Kesler drill a well and designed a sprinkler irrigation system for approximately 60 of the 140 acres customarily irrigated. The soil of these 60 acres is called prospect loam, is of the highest quality and is particularly susceptible to irrigation. It is deep permeable soil and is not steeply sloped. The application of water by sprinkler irrigation to these 60 acres will substantially increase production of hay from these 60 acres. The system is adequately designed according to standard irrigation guides as is evidenced by Applicant's Exhibit No. 3, a SCS sprinkler irrigation design guide Form, MT No. 119. The applicant, Mr. Kesler, hired Mr. William F. Osborne of Liberty Drilling Co. to drill a well in the vicinity of the 60 acres intended to be irrigated by means of a well. The applicant, Mr. Kesler, testified that there are 14 acres of pasture land uphill from the proposed well which he would like to return into the production of hay if water is available.

4. The applicant's irrigation well is in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 5, Township 27 North, Range 21 West. The well is 395 feet deep and flowed 400 gallons per minute at ground level when it was completed in May of 1974. The pumping water level was estimated to be 9 feet below the land surface while yielding 490 gallons per minute. The well is obtaining its water from fractured bedrock known as the Siyeh Formation composed of blocky to massive dark grey to bluish grey, siliceous

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limestone and dolomite mixed with grey to yellow-green argillite and grey quartzite. The objector's wells are all west of the applicant's well, in Section 7, Township 27 North, Range 21 West, from 125 to 440 feet deep, and obtaining their water from the Siyeh Formation. All water enters these wells from fractures in the bedrock and seems to be under artesian pressure.

Table I illustrates some details of Mr. Kesler's and other wells in the immediate area. Please note that T. W. stands for Test Well, and that O.W. stands for Old Well.

TABLE I

All numbers are in feet.
May 12, 1975

<u>Owner</u>	<u>Distance From Irr. Well</u>	<u>Elev.</u>	<u>Elev. SWL</u>	<u>Elev. Bottom</u>	<u>Elev. First Water</u>
Kesler T.W.	500	3090	**	2803*	2828*
Kesler	0	3090	F	2695	2852
Wyant O.W.	1500	3160	N	3070	N
Wyant	1500	3160	3103.9	2811	2979
Christianson	1825	3140	Z	Z	Z
Thompson	2400	3200	3126.6	3075	3097
Hammer	2600	3140	DRY	3115	*
Sistok	3700	3170	3115.1	3005	3070
Buechle	6500	3350	N	3090	3110
Hoffman	N	N	N	N	N

- * - Did not penetrate bedrock
- ** - Cap welded over well
- Z - Well inaccessible
- F - Flowing well
- N - Not measured
- SWL - Static water level

Wells in fractured bedrock are extremely difficult to evaluate. Some of the basic assumptions for well hydraulics are not met and therefore the application of standard procedures is not possible. For example, a standard assumption is that if you have a well at point A and a well at point B and these wells are some distance apart; you can assume that conditions in the aquifer at or between these two points are basically the same. In this case, however, conditions are not the same between the wells, even though there may be a hydrologic connection. The transmissibility in the applicant's

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well is approximately 38,000 gallons per day per foot. However, most of the transmissibilities in the surrounding wells range from 1,000 to 2,000 gallons per day per foot. The aquifer properties are therefore variable. It is unknown just how much hydraulic connection there is between the fractures supplying water to the applicant's well and the fractures which supply water to the objector's wells. Therefore, the possible effects of this well are uncertain on surrounding wells penetrating the same aquifer. If there are not good hydraulic connections between the fractures which supply water to all the wells, there would be very little or no effect. However, it is possible that there is a certain amount of hydraulic connection in these fractures and that pumping of the Kesler well could dewater some of these fractures. Should this dewatering be extensive enough, some of the objectors could be harmed. At this point, however, it is not possible to state positively one way or another what will happen if the Kesler well is pumped. Because of the NW-SE alignment of the apparent major faulting in the area, the radius of influence would be expected to be elongate in these directions.

From the Proposed Findings of Fact, the Proposed Conclusions of Law are hereby made.

PROPOSED CONCLUSION OF LAW

1. Under the provision of Section 89-880, R.C.M., 1947, a Permit is required to appropriate water from the proposed well.
2. There are unappropriated waters in the source of supply.
3. The rights of prior appropriators will be protected, if this Permit is conditioned to protect those rights.
4. The proposed means of diversion are adequate.
5. The proposed use of water for production of hay is a beneficial use.
6. The proposed use will not interfere unreasonably with other planned uses or developments for which a permit has been issued or for which water has been reserved.

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7. The criteria for issuance of a permit set forth at Section 89-885, R.C.M., 1947, have been met.
 8. The application for beneficial water use permit may be granted in accordance with the provisions of Chapter 8 of Title 89 of the Laws of the State of Montana.

Based on the above Proposed Findings of Fact and Conclusion of Law, the following Order is proposed.

PROPOSED ORDER

1. The applicants permit is granted allowing the appropriation of 450 gallons per minute of water and not to exceed 200 acre-feet per annum. The water is to be diverted by means of a well, approximately 395 feet deep, at a point in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 5, Township 27 North, Range 21 West, and used for new irrigation on 60 acres in said Section 5 and supplemental irrigation on 14 acres in Section 5 from April 1 to October 15, inclusive, of each year.
2. The applicant's permit is granted subject to the following conditions.
 - ** That an accurate pressure guage is installed on the well.
 - ** That static pressure heads be recorded monthly in the applicant's well beginning on March 15 and ending on November 15 annually until further notified by the Department.
 - ** That all periods of diversion as well as quantities of water diverted be recorded and reported to the Department.
3. The applicant's permit is granted subject to all prior existing water rights. These rights will be protected by a static water level monitoring program administered by the individual well owners. These wells will be measured on the same schedule as stated in No. 2.
4. These measurements shall be reported to the Department on November 30, of each year.

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NOTICE

This is a Proposed Order and will become final when accepted by the Administrator of the Water Resources Division of the Department of Natural Resources and Conservation. Written exceptions to this proposed order shall be filed with the Department within ten (10) days of receipt of same. Upon receipt of any written exceptions by the Department, opportunity will be provided to file briefs and to make oral arguments before the Administrator of the Water Resources Division.

Dated this 14th day of August, 1975.

James A Lewis
Hearing Examiner