

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
TRANSFER OF WATER RIGHT

RECEIVED
JUL 14 1997

TRANSFER NO. 5030
WATER RIGHT NO(S). 35-04271/35-08635/35-08679

Department of Water Resources
Eastern Region

This is to certify that: **NORTH FORK ENERGY INC**
PO BOX 5405
BOISE ID 83705

has requested a change to the above captioned water right(s). This change in water right(s) is authorized pursuant to the provisions of Section 42-222, Idaho Code, provided the conditions listed below are met.

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Right No. 35-04271 :			
FISH PROPAGATION	01/01 to 12/31	50.00 CFS	
Priority: 06/01/1945			
Right No. 35-08635 :			
FISH PROPAGATION	01/01 to 12/31	0.72 CFS	520.3 AF
Priority: 12/17/1986			
Right No. 35-08679 :			
COMMERCIAL	01/01 to 12/31	1.00 CFS	420.5 AF
Priority: 12/26/1988			
TOTAL:		*51.72 CFS	

SOURCE

GROUNDWATER
SPRING

BOOM CREEK

LOCATION OF POINT(S) OF DIVERSION:

** NENE , Sec. 24, Township 04S, Range 32E
NWNE , Sec. 24, Township 04S, Range 32E
SWNE , Sec. 24, Township 04S, Range 32E
- SENE , Sec. 24, Township 04S, Range 32E
NWSENE , Sec. 24, Township 04S, Range 32E
BINGHAM County

PLACE OF USE: COMMERCIAL

Right No. 35-08679 :

TWN RGE SEC

04S 32E 24

SWNE

SENE

TRANSFER NO. 5030
WATER RIGHT NO(S). 35-04271/35-08635/35-08679

PLACE OF USE: FISH PROPAGATIONRight Nos. 35-04271/35-08635 :TWN RGE SEC

04S 32E 24	SWNE	SENE	SWSW
	SESW		
25	NENW	NWNW	
26	NENE	SWNE	SENE

CONDITIONS OF APPROVAL AND REMARKS

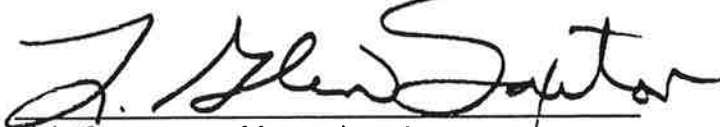
1. Approval of this transfer in no way confirms claimed Right No. 35-04271.
2. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
3. The change authorized by this transfer shall be accomplished within one (1) year of the date of this approval.
4. Failure to comply with the conditions of this transfer is cause for the director to issue an order to show cause why the approval of the transfer should not be rescinded.
5. Approval of this transfer does not preclude the opportunity for review of the validity of the water right(s) in the ongoing Snake River Basin Adjudication.
6. After specific notification by the department, the right holder shall annually report the amount of water diverted to the department.
7. When water used under this right is discharged into the natural channel, settling ponds must be maintained which are capable of reducing the silt load to such a level that the quality of water will not be impaired for other beneficial uses.
8. Water used under this right when discharged into a natural channel or subsurface system shall meet Idaho Water Quality Standards.
- * 9. The total instantaneous diversion of water from all points of diversion under Transfer No. 5030 shall not exceed 51.72 cfs.
10. Prior to diversion of water under this approval, the right holder shall provide a means of measurement acceptable to the Department from all authorized points of diversion and point(s) of effluent discharge to allow determination of total diversion and discharge.
11. Use of water for fish propagation shall be non-consumptive and is subject to policies set forth in the State of Idaho Water Plan, including Policy No. 5G.
12. The use of water under Right No. 35-08679 shall not give rise to any claim against the holder of a senior water right based upon the theories of forfeiture, abandonment, adverse possession, waiver, equitable estoppel, estoppel by laches or customary preference.

TRANSFER NO. 5030
WATER RIGHT NO(S). 35-04271/35-08635/35-08679

CONDITIONS OF APPROVAL AND REMARKS

13. The Director retains jurisdiction of Right No. 35-08679 to incorporate the use into a water district, require streamflow augmentation or other action needed to protect prior surface water and groundwater rights.
14. Commercial use is for a fish processing plant.
15. Place of use is known as Crystal Springs Trout Ranch.
- ** 16. A spring is located within NWSENE and ten (10) wells within the NE1/4, S24, T04S, R32E.

Dated this 30th day of June, 1997.


Chief, Water Allocation Bureau

MEMORANDUM

TO: FILE NOS. 35-04271/08635/08679

FROM: PAM SKAGGS^{PS}/STATE OFFICE

SUBJECT: TRANSFER NO. 5030

DATE: June 30, 1997

=====

Transfer No. 5030 adds points of diversion and source, and changes the place of use under Right Nos. 35-04271, 35-08635 and 35-08679. The transfer reflects the addition of multiple new artesian wells in an attempt to restore the original discharge rates and describes the place of use as it currently exists.

Both groundwater and spring are identified as sources under each right. The combined system provides water for fish propagation and commercial use at a fish hatchery and processing plant known as Crystal Springs Trout Ranch. No new uses were added to any of the rights.

Recommended conditions include relative licensing conditions (trust water, discharge/water quality, nonconsumptive), drilling permit requirements, multiple wells/measuring devices, future annual reporting, non-confirmation of claim, and standard transfer conditions.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No. 5030

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1

Name of applicant North Fork Energy Inc. Phone 208-328 2306Post Office address P.O. Box 5405 Boise, ID 83705**A. PURPOSE OF TRANSFER**

1. ☐ Change point of diversion ☒ Add diversion point ☒ Change place of use
☒ Change nature of use ☐ Change period of use ☐ Other _____
2. Describe the reason for the proposed changes To correct actual place of use and to add existing and new artesian well points of diversion to restore original discharge rates

B. DESCRIPTION OF RIGHT(S) OR PORTION THEREOF, AFTER THE REQUESTED CHANGE

1. Right Number	Priority	Amount (cfs/ac-ft)	Nature of Use	Period of Use
<u>35-04271</u>	<u>06/01/1945</u>	<u>50.0</u>	<u>Fish Prop. and Rec.</u>	<u>01-01</u> to <u>12-31</u>
<u>35-08679</u>	<u>12/26/1988</u>	<u>1.0</u>	<u>Comm. fish prop & Rec.</u>	<u>01-01</u> to <u>12-31</u>
<u>35-08635</u>	<u>12/17/1986</u>	<u>0.72</u>	<u>Fish Prop & Rec.</u>	<u>01-01</u> to <u>12-31</u>
				to _____

2. Total amount of water being transferred 51.72 cubic feet per second and/or _____ acre-feet per annum.
3. Source of water Springs and artesian wells tributary to Boom Creek
4. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge	County	Local name for diversion
	SE	NE		24	4S	32E	BINGHAM	Spring (existing)
	SW	NE		24	4S	32E	BINGHAM	Hatchery I well (existing)
	SE	NE		24	4S	32E	BINGHAM	Well (Processing Plant) (existing)
	SE NE NW SW	NE NE NE NE		24	4S	32E	BINGHAM	Wells (up to 8) to be drilled

5. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
4S	32E	24			HC	HC							HR	HR					
4S	32E	25					HR	HR											
4S	32E	26	HR		HR	HR													

Total acres _____

PART 1

6. General Information:

- a. Description of diversion system Spring and artesian wells. Flow from wells is or will be piped to the head of raceways or to the processing plant or hatchery. Discharge from raceways flows down Boom Creek to American Falls Reservoir
- b. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts?
No Yes _____
- c. Describe the effect on the land now irrigated if the place of use is changed pursuant to this transfer:

- d. Remarks:
Additional points of diversion are necessary to provide flexibility to the water supply system for the fish facility and to restore discharge allowable under existing licenses and claims

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Transfer of Water Rights No. _____
And said application is hereby _____, subject to the following limitations and conditions:

Witness my hand this _____ day of _____, 19 _____

PART 2**A. DESCRIPTION OF RIGHT AS RECORDED:**

Water Right No. 35-04271

STAGE: STATUTORY CLAIM

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>
FISH PROPAGATION	01/01 to 12/31	50.00 CFS

<u>SOURCE</u>	<u>TRIBUTARY OF</u>
SPRING	BOOM CREEK

Priority: 06/01/1945

LOCATION OF POINT(S) OF DIVERSION:SENE , Sec. 24, Township 04S, Range 32E
BINGHAM CountyPLACE OF USE: FISH PROPAGATIONTWN RGE SEC

04S 32E 24 SWNE

CONDITIONS/REMARKS:

PART 2**A. DESCRIPTION OF RIGHT AS RECORDED:**

Water Right No. 35-08679

STAGE: LICENSE

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
COMMERCIAL	01/01 to 12/31	1.00 CFS	420.5 AF

SOURCE

GROUNDWATER

Priority: 12/26/1988

LOCATION OF POINT(S) OF DIVERSION:SENE , Sec. 24, Township 04S, Range 32E
BINGHAM CountyPLACE OF USE: COMMERCIALTWN RGE SEC

04S 32E 24

SENE

CONDITIONS/REMARKS:

1. The use of water under this right shall not give rise to any claim against the holder of a senior water right based upon the theories of forfeiture, abandonment, adverse possession, waiver, equitable estoppel, estoppel by laches or customary preference.
2. The Director retains jurisdiction of the right to incorporate the use into a water district, require streamflow augmentation or other action needed to protect prior surface water and groundwater rights.
3. Return flow if discharged to a subsurface system must be authorized by a separate injection well permit, and return flow if discharged to a surface water system shall meet Idaho Water Quality Standards.
4. Commercial use is for a fish processing plant.

PART 2**A. DESCRIPTION OF RIGHT AS RECORDED:**

Water Right No. 35-08635

STAGE: LICENSE

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FISH PROPAGATION	01/01 to 12/31	0.72 CFS	520.3 AF

SOURCE

GROUNDWATER

Priority: 12/17/1986

LOCATION OF POINT(S) OF DIVERSION:SWNE , Sec. 24, Township 04S, Range 32E
BINGHAM CountyPLACE OF USE: FISH PROPAGATIONTWN RGE SEC

04S 32E 24 SWNE

CONDITIONS/REMARKS:

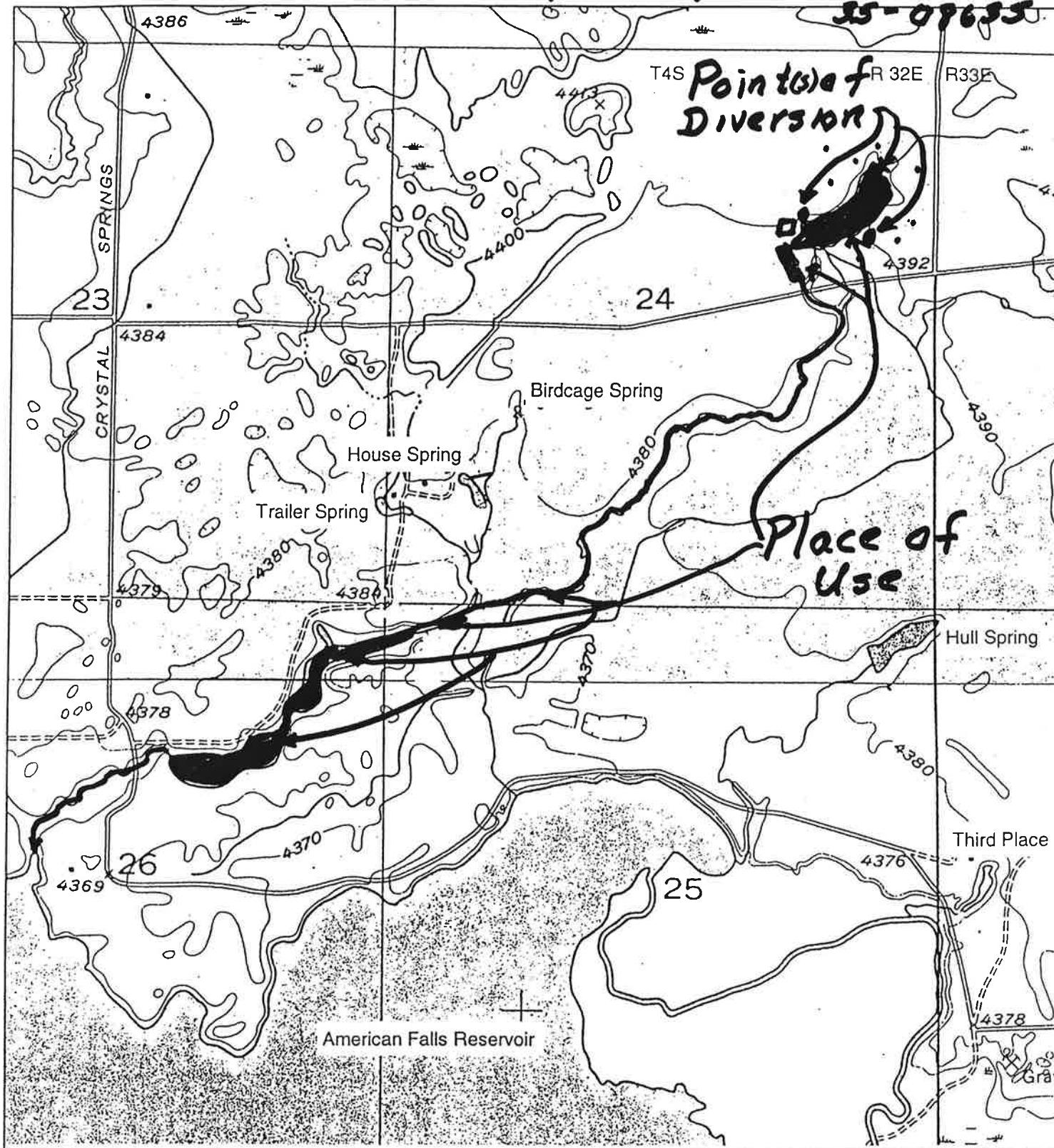
1. Measuring devices of a type approved by this Department shall be maintained at the point of diversion and point of effluent discharge.
2. When water used under this right is discharged into the natural channel, settling ponds must be maintained which are capable of reducing the silt load to such a level that the quality of water will not be impaired for other beneficial uses.
3. Water used under this right when discharged into a natural channel or subsurface system shall meet Idaho Water Quality Standards.
4. Use of water under this right shall be non-consumptive.
5. Use of water under this right is subject to policies set forth in the State of Idaho Water Plan, including Policy No. 5G.
6. Place of use is known as Crystal Springs Trout Ranch.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF WATER RIGHT
PART 3

- A. Draw a map or attach a USGS map indicating the new point(s) of diversion and/or the new place of use for rights described in part 1. Clearly depict the land by section, township and range number.

See attached portion of USGS Quad sheet and survey map by Harper-Leavitt Engineering Inc.

NORTH FORK ENERGY - CRYSTAL SPRINGS 35-09271 35-08679 35-09633



PART 3

B. CHANGES IN NATURE OF USE

1.	<u>New Nature of Use</u>	<u>Amount</u> (cfs/ac-ft)	<u>Hours/days/year</u>	<u>Period of Use</u>
	Commercial, Fish prop & Rec(35-08635)	0.72	24	01-01 to 12-31
	Fish Prop & Recreation (35-04271)	50.0	24	01-01 to 12-31
	Commercial, Fish prop & Rec(35-08679)	1.0	24	01-01 to 12-31

2. Quantity and quality of return flows and location of discharge:

Entire flow from springs and wells discharges into American Falls reservoir

3. Describe the effects on other water uses resulting from the proposed change:

There are no diversions downstream of this facility and no change in net use will occur

I hereby assert that no one will be injured by such change and that the change does not constitute an enlargement in use of the original right. The information contained in this application is true to the best of my knowledge.

I understand that any willful misrepresentations made in this application may result in voiding its approval.

Subscribed and sworn to before me this 2nd day of December, 19 96.

NORTH FORK ENERGY, INC.
August R. Linsbury TREASURER
(Signature of Applicant)

[Signature]
(Notary Public)

My commission expires 7/12/2001

FOR DEPARTMENT USE ONLY

Transfer contains 8 pages and attachments

Received by Jo Date 12-14-96 Protest filed by

Prelim. check by Fee 100.00

Receipted by AWJ #E02285 Date 12-11-96

Published in Morning News & statewide Copies of protest forwarded by

Pub. dates March 27 & April 3, 1997 Hearing held by Date

Watermaster recommendation requested on Recommended for ! Approval ! Denial

 rec'd. by

Copy of transfer sent to lien holder

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF THE WATER RIGHT TRANSFERS) COMMENTS AND
FOR WATER RIGHT CLAIM 35- 04271 AND A35-1130) EVIDENCE OF
37-07097, 37-07098, 37-08679, AND 37-08635 IN THE) RICHARD EGGLESTON
NAME OF NORTH FORK ENERGY INC .)

COMES NOW, Richard Eggleston, and provides the following comments and evidence in this matter:

1. During the period 1970 through 1978, I was employed by Clear Springs Trout Company which leased and operated the Crystal Springs Trout Farm. I assisted in the operation of this facility as well as other facilities in eastern Idaho for Clear Springs Trout Company.
- 2 At the main hatchery, the Big Pond was used as the clean water source for the hatchery and raceways. The hatchery was fully utilized and refrigerated water used when necessary. There was adequate water from the main spring and Big Pond to utilize all of the raceways at the main hatchery site. The artesian well at the hatchery was flowing and was utilized in the hatchery.
- 3 The raceways at the main hatchery consisted of 3 sets of concrete raceways about 90 feet wide at the main hatchery. The raceways were 6 feet to 32 feet wide by four feet deep and the water was adequate to run $\frac{1}{2}$ to $\frac{3}{4}$ cfs per foot of width which is adequate discharge for the loading used. These raceways were designed to utilize all of the available flow from the Big Pond which was estimated over the boards at 50 cfs.
- 4 Water from the main hatchery complex flowed south and west through the stream channel historically referred to as Boom Creek. This section of channel was cleaned and maintained as a reaeration reach.
- 5 The concrete structure in the SESW Sec 24 was used to sort spawners and the large earthen pond in the stream near the structure was used for raising spawners.
- 5 The ponds in the SWSW Sec 24 and the NWNW Sec 25 were all used for production of 14 to 16 inch trout. Big ponds were seined using 150 ft seines across the ponds. The raceways, well, and earthen ponds in the Bird Cage and Trailer areas as well as at the House ponds were utilized for production. Generally, the raceways were used for fingerlings and the larger ponds for market size fish.
6. The big ponds in the NWNW Sec25 and in the NENE Sec 26 were harvested for production and the structures used for grading of fish from the big ponds. The small hatchery and raceway were used for fingerlings.
- 7 In the SWNE and SENE Sec 26 , the big pond was stocked and screened and utilized for recreational fishing for fee.
- 8 The Third Place spring and three wells were used for production and the hatchery at Third Place with the artesian well was used for fingerling

R. Eggleston

rearing. During the 1970-78 period, the artesian well in the Third Place pond was flowing with sufficient discharge to raise the water level approximately 4 feet above the pond water surface. During a visit to Third Place in 1995, the discharge from the spring and the 3 artesian wells was significantly lower than during the 1970-78 period.

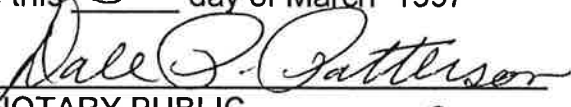
10 In 1995 the flow of water at the home place was significantly lower than in 1970-78. Flow appeared to be not more than 50 percent of what it used to be.

11 During the 1970-78 period, water temperature in Boom Creek at the County road was consistently 50-55oF. In 1995, at the lower flows, the water temperature at one time reached 78oF. It is apparent that the water in 1995 is of lower quality as evidenced by murky water, more cattails and decrease in gravel substrate in the stream.

DATED this 25th day of March, 1997


Richard Eggleston

SUBSCRIBED and SWORN to before me this 5th day of March 1997


NOTARY PUBLIC

Residing at: Twin Falls

My Commission Expires: 12/22/99



445327

BI BINGHAM COUNTY RECORDER
BLACKFOOT, IDAHO

PLEASE RECORD AND RETURN TO:
Richard D. Heaton
PO Box 5405
Boise ID 83705

FEE 1500 DEP SEP

96 JUN 27 AM 11:04

RECORDED AT THE REQUEST OF

North Fork Energy

MAIL TAX STATEMENTS TO:
NORTH FORK ENERGY, INC.
P.O. Box 5405
Boise, Idaho 83705

WARRANTY DEED

For Value Received WESTERN STAR FARMS, INC., an Idaho corporation, the Grantor, does hereby grant, bargain, sell and convey unto NORTH FORK ENERGY, INC., an Idaho corporation, the Grantee, whose address is 4414 S. Gekeler Lane, Boise, Idaho 83705 the following described premises, in BINGHAM COUNTY, IDAHO more particularly described in Exhibit "A" attached hereto and by this reference incorporated herein.

TO HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, its successors and assigns forever. The Grantor does hereby covenant to and with the Grantee that they are the owner in fee simple of said premises; that it is free from all encumbrances except current year's taxes, levies, and assessments, and except restrictions, reservations and easements of record and easements visible upon the premises, and that it will warrant and defend the same from all lawful claims whatsoever.

DATED: April 25, 1996

GRANTOR:

WESTERN STAR FARMS, INC.

By:

Charles B. Beymer
Charles B. Beymer, President

STATE OF IDAHO)
County of ADA) ss

On this 25th day of April, 1996, before me, the undersigned Notary Public for the state of Idaho, personally appeared Charles B. Beymer, President of **WESTERN STAR FARMS, INC.**, the corporation which executed the foregoing document, known to me or identified to me to be the person whose name is subscribed to the foregoing, and acknowledged to me that he executed the same for and on behalf of the corporation and in its name.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.



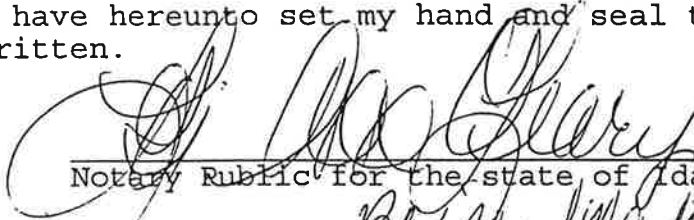

Notary Public for the state of Idaho
Residing at: Boss, Idaho
My commission expires: 7/17/2001

EXHIBIT A

THAT PORTION OF THE FOLLOWING LEGAL DESCRIPTION

PARCEL I:

Part of the NE¼ of Section 24, Township 4 South, Range 32 East, Boise Meridian, Bingham County, Idaho, described as:

Beginning at a point on the West line of a county road that is S 0°13'14" W 1001.26 feet along the section line and N 89°40'08" W 57.90 feet from the Northeast corner of said Section 24 and running thence S 1°11'42" W 1128.14 feet along said West line to the North line of a county road; thence S 80°53'08" W 813.33 feet along said North line; thence S 81°36'36" W 753.22 feet along said North line; thence N 2°55'53" W 1377.93 feet; thence S 89°40'08" E 1642.24 feet to the point of beginning.

PARCEL II:

Part of Section 24, 25 and 26, Township 4 South, Range 32 East, Boise Meridian, Bingham County, Idaho, described as:

Beginning at a point on the south line of a county road that is S 0°13'14" W 2179.74 feet along the section line and West 83.95 feet from the Northeast corner of said Section 24 and running thence S 81°36'31" W 1192.27 feet along said South line; thence S 78°49'32" W 1368.55 feet; thence S 79°16'11" W 402.03 feet; thence S 89°24'11" W 198.67 feet; thence S 89°59'48" W 2075.55 feet along said South line to the West line of said Section 24; thence leaving said county road S 0°32'53" W 2618.34 feet along the section line to the Southwest corner of said Section 24; thence N 89°28'36" W 1325.23 feet along a fence line; thence S 1°04'04" W 1268.04 feet along said fence; thence S 55°28'37" W 90.03 feet; thence N 89°46'17" W 958.92 feet along said fence line to the East line of a county road; thence S 5°14'03" E 379.68 feet along said East line; thence S 16°10'45" W 198.21 feet; thence S 56°11'16" W 256.70 feet; thence S 0°11'21" W 546.83 feet; thence S 53°20'44" E 115.52 feet along said East line to the North line of said county road; thence S 88°50'14" E 561.72 feet along said North line; thence S 87°40'11" E 380.70 feet; thence S 84°18'14" E 186.12 feet; thence S 80°40'02" E 265.21 feet; thence N 80°18'38" E 732.64 feet; thence S 89°24'55" E 271.34 feet; thence N 84°41'36" E 213.19 feet; thence N 69°59'04" E 200.75 feet; thence N 59°36'35" E 521.39 feet; thence N 53°39'50" E 263.65 feet; thence N 31°17'57" E 502.46 feet; thence N 81°43'25" E 787.30 feet; thence S 89°36'24" E 702.19 feet; thence S 64°24'39" E 620.55 feet; thence S 69°30'02" E 233.65 feet; thence S 84°26'23" E 323.64 feet; thence S 74°29'47" E 1219.71 feet; thence S 75°50'39" E 443.76 feet along said North line; thence leaving said county road N 1°30'06" W 110.13 feet; thence N 1°26'14" W 2304.88 feet along a fence line; thence N 1°42'30" W 3088.94 feet along said fence line to the point of beginning.

PARCEL IIA:

Part of Section 25, Township 4 South, Range 32 East, Boise Meridian, Bingham County, Idaho, described as:

Beginning at a point on the Southerly line of a county road that is S 88°51'23" W 104.34 feet from the East ¼ corner of said Section 25 and

EXHIBIT A (Continued)

running thence S 88°51'23" W 435.46 feet along the monumented American Falls Reservoir right-of-way line; thence N 59°21'28" W 624.41 feet along said right-of-way line; thence leaving said right-of-way line N 81°25'15" W 525.11 feet; thence N 70°36'20" W 384.05 feet along an existing fence line; thence N 11°04'21" E 187.45 feet along said fence line to the South line of said county road; thence S 84°13'41" E 354.63 feet along said South line; thence S 74°46'41" E 1242.62 feet along said South line; thence S 38°16'17" E 429.83 feet along said South line to the point of beginning.

PARCEL III:

Part of Section 30, Township 4 South, Range 33 East, Boise Meridian, Bingham County, Idaho, described as:

Beginning at a point that is N 00°04'26" E 377.02 feet along the section line and East 80.90 feet from the West $\frac{1}{4}$ corner of said Section 30 and running thence S 85°45'02" E 511.11 feet; thence S 3°57'29" W 492.04 feet; thence S 65°54'48" W 475.69 feet to the East line of a county road; thence N 23°57'42" W 351.58 feet along said east line; thence N 39°11'07" W 516.08 feet along said East line; thence leaving said East line S 75°50'39" E 443.76 feet; thence N 1°30'06" W 110.13 feet to the point of beginning.

EXCEPT: Beginning at the Northwest corner of Lot 3, in Section 30, Township 4 South, Range 33 East, Boise Meridian, Bingham County, Idaho; thence S 13°40 $\frac{1}{2}$ ' E 584.6 feet to a point, thence S 0°25 $\frac{1}{2}$ ' E 545.3 feet to a point, thence S 31°43' W 260 feet, more or less, to the Southwest corner of said Lot 3, thence N 0°14 $\frac{1}{2}$ ' W along the West line of said Lot 3, 1335.1 feet, more or less, to the Point of Beginning.

Lying within the bounds of Sections 24, 30 and the following described legal:

Section 25:

~~N $\frac{1}{2}$ N $\frac{1}{2}$~~ ; ~~SW $\frac{1}{4}$ NW $\frac{1}{4}$~~ ; ALSO: Beginning at the Southeast corner of NE $\frac{1}{4}$ of said Section; thence N 0°07' W 1336.4 feet, more or less, to the Northeast corner of the S $\frac{1}{2}$ NE $\frac{1}{4}$ of said Section; thence S 89°40' W along the North line of said S $\frac{1}{2}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ NW $\frac{1}{4}$ of said Section, 3945.4 feet, more or less, to the Northwest corner of said SE $\frac{1}{4}$ NW $\frac{1}{4}$; thence S 0°10' W along the West line of said SE $\frac{1}{4}$ NW $\frac{1}{4}$, 403.5 feet to a point; thence N 79°12 $\frac{1}{2}$ ' E 688.8 feet to a point, thence N 87°28 $\frac{1}{2}$ ' E 651.1 feet to a point; thence S 58°24' E 558.7 feet to a point; thence S 37°22' E 386.5 feet to a point; thence N 35°26' E 250.3 feet to a point; thence S 14°34' E 411.8 feet to a point; thence S 74°21 $\frac{1}{2}$ ' E 299.7 feet to a point; thence N 67°11 $\frac{1}{2}$ ' E 391.3 feet to a point; thence S 55°55' E 616.5 feet, more or less, to the South line of said S $\frac{1}{2}$ NE $\frac{1}{4}$ of said Section 25; thence N 89°50' E along said South line of said S $\frac{1}{2}$ NE $\frac{1}{4}$, 503.3 feet, more or less, to the Point of Beginning.

SECTION 26:

NE $\frac{1}{4}$ NE $\frac{1}{4}$, and commencing at the Southeast corner of the NE $\frac{1}{4}$ of Section 26, thence West 160 rods; thence North 67 rods; thence East 13 rods; thence North 13 rods; thence East 147 rods; thence South 80 rods to the Point of Beginning.

EXCEPTING THEREFROM Section 25 and Section 26 hereinabove set out: those certain portions of the above described property deeded to the United States of America as disclosed by Deed dated February 11, 1938, recorded February 26, 1938, as Instrument No. 16078, records of Bingham County, as follows:

TRACT A: A tract of land in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 26, Township 4 South, Range 32 East, Boise Meridian, Bingham County, Idaho, more particularly described as follows: Beginning at a point on the West line of said SW $\frac{1}{4}$ NE $\frac{1}{4}$ that is N 0°04' W 681.8 feet from the Southwest corner of said SW $\frac{1}{4}$ NE $\frac{1}{4}$; thence N 0°04' W along the West line of the SW $\frac{1}{4}$ NE $\frac{1}{4}$ 429.8 feet to a point; thence N 81°48' E 297.5 feet to a point; thence N 49°25' E 288.2 feet to a point; thence S 43°48' E 166.2 feet to a point; thence S 49°19' W 828.0 feet, more or less, to the Point of Beginning.

TRACT B: A tract in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 26 and the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 25, Township 4 South, Range 32 East, Boise Meridian, Bingham County, Idaho, more particularly described as follows: Beginning at the Quarter corner between Sections 25 and 26, thence S 89°13 $\frac{1}{2}$ ' W along the South line of said SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 26, 392.1 feet to a point; thence N 73°40' E 408.5 feet to a point; thence N 69°41' E 349.7 feet to a point; thence S 40°48' W 304.7 feet, more or less, to the South line of said SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 25; thence S 89°51' W along the said South line of SW $\frac{1}{4}$ NW $\frac{1}{4}$ 128.7 feet, more or less, to the Point of Beginning.

TRACT C: A tract of land in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 25, Township 4 South, Range 32 East, Boise Meridian, Bingham County, Idaho, more particularly described as follows: Beginning at the Southeast corner of said SW $\frac{1}{4}$ NW $\frac{1}{4}$; thence S 89°51' W along the South line of said SW $\frac{1}{4}$ NW $\frac{1}{4}$ 1070.9 feet to a point; thence N 55°49' E 981.5 feet to a point; thence N 35°09 $\frac{1}{2}$ ' E 455.4 feet, more or less, to a point on the East line of said SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 25, thence S 0°12' W along the East line of said SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 25, 921 feet, more or less, to the Point of Beginning.

445327

Narrative in Support of Water Right Transfers
North Fork Energy Inc.
C.E. Brockway PhD P.E.

Three water right transfers submitted by North Fork Energy Inc were intended to accomplish two objectives:

1. To provide additional diversion points in order to restore original licensed or claimed discharges from springs and artesian wells
2. Document the historical and current places of use established since the commencement of fish propagation in 1945

Spring and artesian well flows have been decreasing since at least the early 1980's based on measured flows of indicator springs in the area. A 1996 hydrologic report by Brockway Engineering entitled Spring Discharge Patterns and Groundwater Analysis-Crystal Springs Area -Springfield, Idaho documents the groundwater flow patterns in the area and current and the historical flows of indicator springs. A copy of that report is attached. Water measurements of springs and wells and the total flow in Boom Creek(historical local name for Crystal Springs drainage) indicate that flows are below historical flows and lower than licensed discharges. The report also indicates that the non-consumptive water supply can be increased by strategically located artesian wells without decreasing the net historical gain to American Falls Reservoir.

The three transfers address decreasing flows and necessary changes in place of use for three production areas for the facility. The home place which includes hatchery 1, raceways, and the processing plant involves the original spring and two artesian wells covered under two licensed ground water rights and a statutory claim. The second area is a series of springs and one artesian well referred to locally as Bird Cage, House, and Trailer springs. This area involves one beneficial use claim and includes raceways and earthen ponds. Discharge from the home place and the Bird Cage complex flow together into Boom Creek where they have been used in earthen ponds and raceways before discharging to American Falls Reservoir.

The third area is locally called Third Place and involves two licenses including springs and three artesian wells serving a hatchery and raceways and domestic water. Water from this site flows directly into American Falls Reservoir.

Water supplies at all three production sites are below historical and/or licensed flows and the transfers involve additional planned well sites for restoration of the flows.

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Department of Water Resources
Eastern Region

Spring Discharge Patterns and Groundwater Analysis

Crystal Springs Area

Springfield, Idaho

Brockway Engineering, PLLC

September 10, 1996

Introduction

This report presents the results of a groundwater investigation of the Snake River Plain aquifer in the vicinity of Crystal Springs Trout Ranch. The trout facility diverts water from various distinct springs and artesian wells issuing from lowlands just north of American Falls Reservoir approximately two miles south of Springfield, Idaho. After being used in the facility for trout rearing and processing, the water returns to the reservoir via the Crystal drain. A vicinity map is provided in Figure 1, and a map showing the various springs and open channels is given in Figure 2. In addition, a detailed site plan is given in Appendix A, which shows springs, wells, channels, and facilities.

Since approximately the mid-1980s or earlier, spring discharge in the region has been declining, to the point where the full water right of Crystal Springs Trout Ranch cannot be secured and historical production cannot be maintained. Therefore, it is desired to drill an additional well or wells to supplement the existing spring and well discharges.

The purpose of this study is to document discharges and discharge trends at several points from 1989 to the present, and to estimate groundwater table contours and flow lines to determine the impact on the aquifer and the Snake River from additional ground water diversion..

Discharge measurements

Discharge measurements were made at 15 points within the Crystal Springs Ranch water supply and distribution system on four separate occasions. These

points are denoted on Figure 2. Not all points were measured on all occasions. Descriptions of the measurement locations are given in Table 1, and a summary of all measurements is given in Table 2. Some of the discharges are accumulations of other discharges measured. For example, flow at points 2, 3, and 4 should be nearly equal to the flow at point 5.

Table 1. Discharge measurement names and descriptions

Number	Description
1	Crystal Main at old concrete flume
2	Birdcage Spring channel between inflow from House and Trailer springs
3	House pond outflow
4	Trailer pond outflow
5	House + Trailer + Birdcage, i.e. Birdcage channel below inflow from House pond
6	Hatchery 1 at old concrete structure
7	Third Place
8	Birdcage pipe - bypass from Birdcage channel to House ponds
9	Main Hatchery Spring - east raceway
10	Birdcage channel between House and Trailer inflows
11	Head of Birdcage Spring - not including well inflow
12	"CB" Spring - east of Trailer Ponds
13	Processing plant well
14	Hatchery well
15	Hull Spring and artesian well - at River Road

Most discharges were measured using a propeller-type open-channel velocity meter using the standard USGS flow measurement procedure. At points #8 and #13, flow through a pipe was determined by measuring the velocity in the end of the pipe using a current meter and determining the area of flow in the partially full

pipe. At point #14, the flow was measured with a bucket and stopwatch at an overflow into raceways.

Discharges were measured at approximately the same time each year, to minimize fluctuations due to seasonal effects. Many of the measurements show a decrease over the last 7 years. The Hatchery 1 flow (#6) has decreased 37%, and the Main Crystal flow (#1) has decreased 16%. Flows at these two points are good indicators of the overall pattern of the spring flow, since they represent accumulations of several discharges from the aquifer.

Table 2. Summary of discharge measurements

Number	5/16/89	6/7/89	6/6/90	7/29/96
1	43.14		43.65	36.35
2		3.76	3.16	
3		7.04	6.55	9.42
4		6.90	6.28	8.24
5		17.32	23.01	18.67
6		22.48	19.51	14.22
7		6.29	11.44	12.23
8		0.00	0.77	1.54
9			16.47	13.07
10				9.52
11				1.06
12				1.89
13				2.28
14				0.36
15				1.31

During the 1989 and 1990 measurements, the raceways and ponds were maintained at maximum levels for fish production. During the 1996

measurements, there was no commercial fish production in the raceways or main production ponds so the wetted areas were decreased. Larger flows could be expected in 1996 since bank storage was minimized and seepage areas decreased.

At some of the springs, discharge has increased slightly. Flow from House Spring and Trailer Spring has increased 34% and 19%, respectively. This occurred while Birdcage Spring decreased 56% (the flow from Birdcage Spring was found by adding flows 2 and 8, estimating flow 2 by flow 10 minus flow 3 for the 7/29/96 measurement).

A further verification of the general pattern of spring flow in this region may be found from the USGS gauging station on Spring Creek at Sheepskin Road. Spring Creek is a spring-fed stream running northeast to southwest between the Snake River and Fort Hall. Figure 3 shows monthly and annual average flow rates since the gauge was installed in 1980. The pattern clearly shows a peak in 1985, followed by a general downward trend. The periods 1989 - 90 and 1993 - 1995 were periods of recovery, but in general the trend has been downward. Although no known measurements of the Crystal Springs Trout Ranch discharges were made before 1989, they have most likely followed a similar pattern.

The USGS measured and reported daily flows of Crystal Waste Nr. Springfield (Station Number: 13069532) for the period April 1985 through February 1988. This record as shown in Figure 4 is not sufficient to determine a long term trend; however, it appears to show a decline over the period of record.

Groundwater flow analysis

To determine the impact on the aquifer of the construction of an additional artesian well or wells on the site, an analysis of the water table north of American Falls Reservoir was performed. The study area encompasses the entire Crystal Springs site, as shown on Figure 5. Well logs were obtained from microfiche on file with the Idaho Department of Water Resources. The locations of these 21 well logs with respect to the springs and the reservoir are shown on Figure 5. Each grid on this figure represents one 40-acre quarter-section.

Water table information at each well location was estimated by the driller's reported depth to water at the time of drilling. Ground surface elevations for each well were estimated from contour lines on a 7.5-minute USGS quadrangle map. The groundwater elevation was then found by subtracting the depth to water from the estimated ground elevation. Because driller's estimates are often inaccurate, and because the wells were drilled in different years and at different times of the year, some water level data may be inconsistent with the surrounding data. One water table estimate was found to be inconsistent; it was excluded from the analysis. Logs for three artesian wells in this area are on record. The potentiometric surface for an artesian well will be above the ground elevation by some distance. However, the shut-off head was not reported on driller's logs so it is not possible to determine this distance. These three wells were also excluded from the analysis.

Based on the remaining 17 wells, groundwater contours were created using the Surfer contouring package. The resulting groundwater flow pattern is given in Figure 6. Both the water table contour lines and the flow lines are shown. The flow lines indicate the direction of groundwater flow. Within the Crystal Springs Trout Ranch site, the groundwater flow is directly toward the reservoir. Water withdrawn from a well would not impact groundwater users west of the site.

The computed flow directions are consistent with the general flow patterns in the Eastern Snake Plain Aquifer as depicted by the U.S. Geological Survey. Figure 7 is a photocopy of a portion of the map depicted on Hydrologic Information Atlas HA 703 (1988) which shows the water table contours on the Eastern Snake Plain Aquifer during Spring 1980. The area of the Crystal Springs Ranch study is outlined on Figure 7.

Conclusions

Spring flows and artesian well flows which comprise the ground water diversions for fish production on the Crystal Springs Trout Ranch have declined over the last seven years and probably have been declining since a peak in 1985.

The combined discharges utilized by the Crystal Springs Trout Ranch measured in 1989, 1990 and 1996 are below licensed discharges. Diversions could be increased to licensed amounts historically diverted by construction of a strategically located artesian well or wells.

The direction of ground water flow from the Crystal Springs Trout Ranch is toward and into American Falls Reservoir.

Surface flow from all of the Crystal Springs Ranch diversions for fish production returns to the Snake River (American Falls Reservoir) in Section 26 T4S R32E through the Crystal Waste or directly into the reservoir from the Third Place spring channel.

Enhancement of non-consumptive diversions from the aquifer adjacent to the reservoir to historical diversion rates from springs and wells will not change the net historical flow into the reservoir.

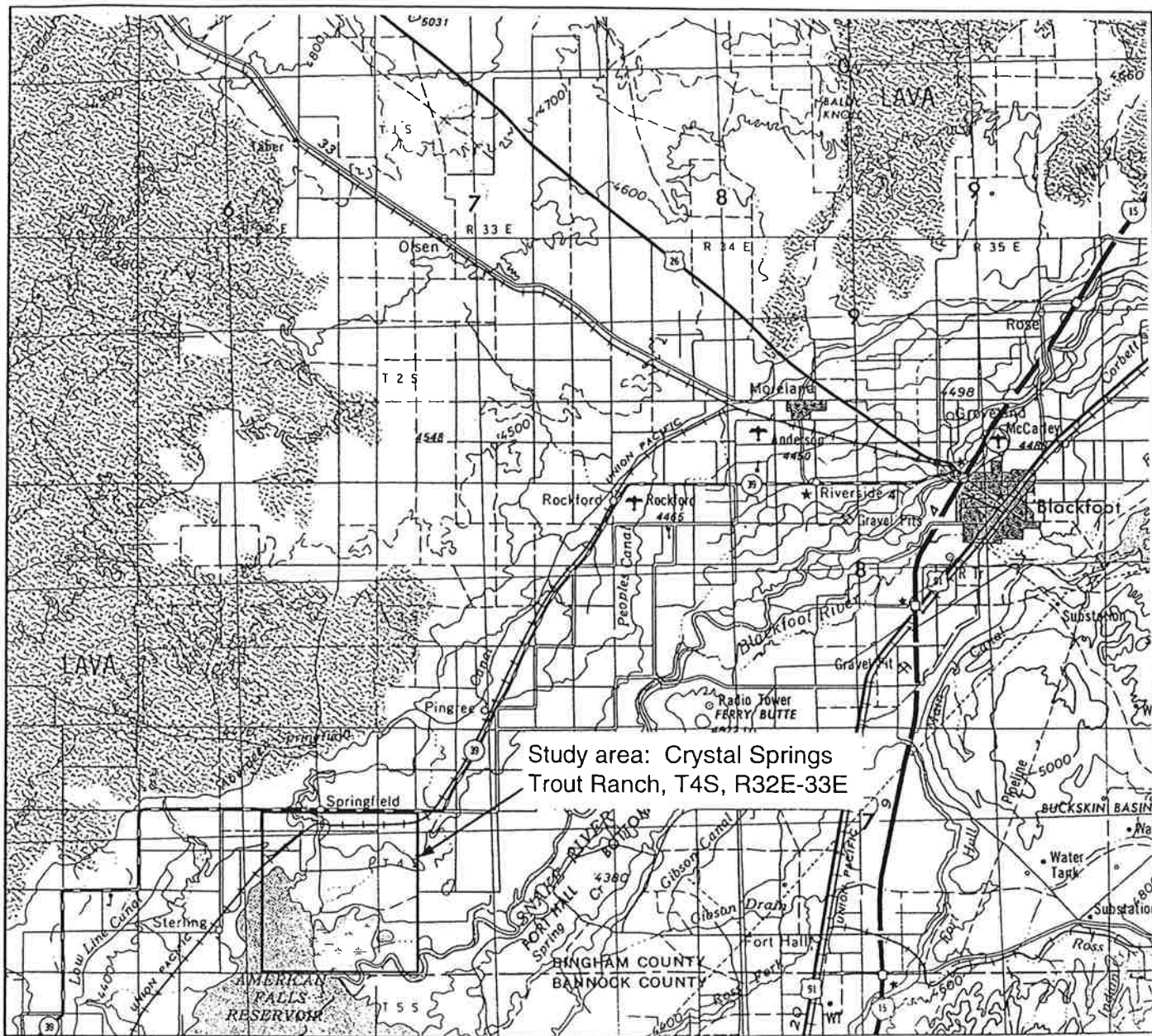


Figure 1. Vicinity map.

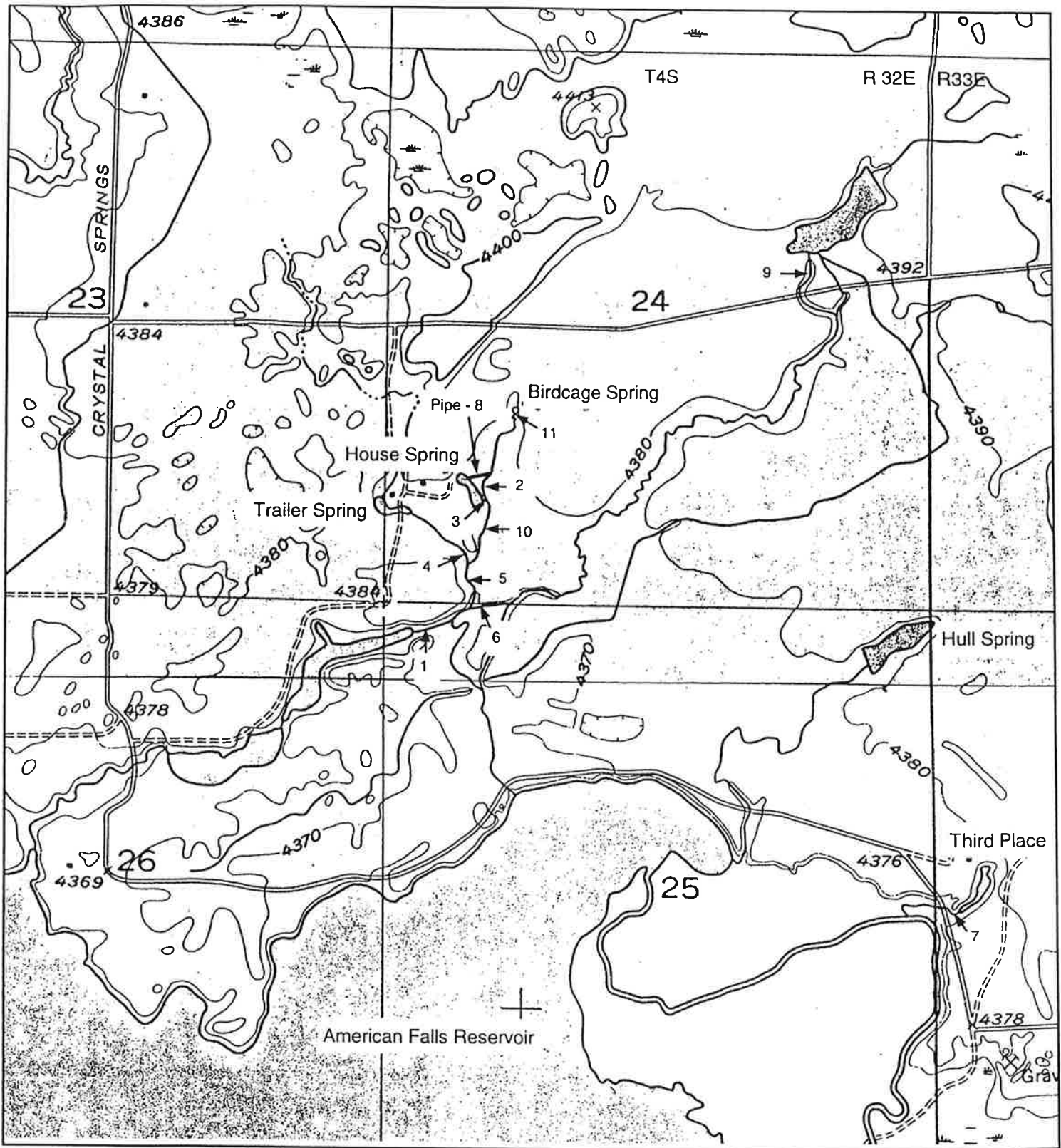


Figure 2. Site plan showing springs and measurement locations.

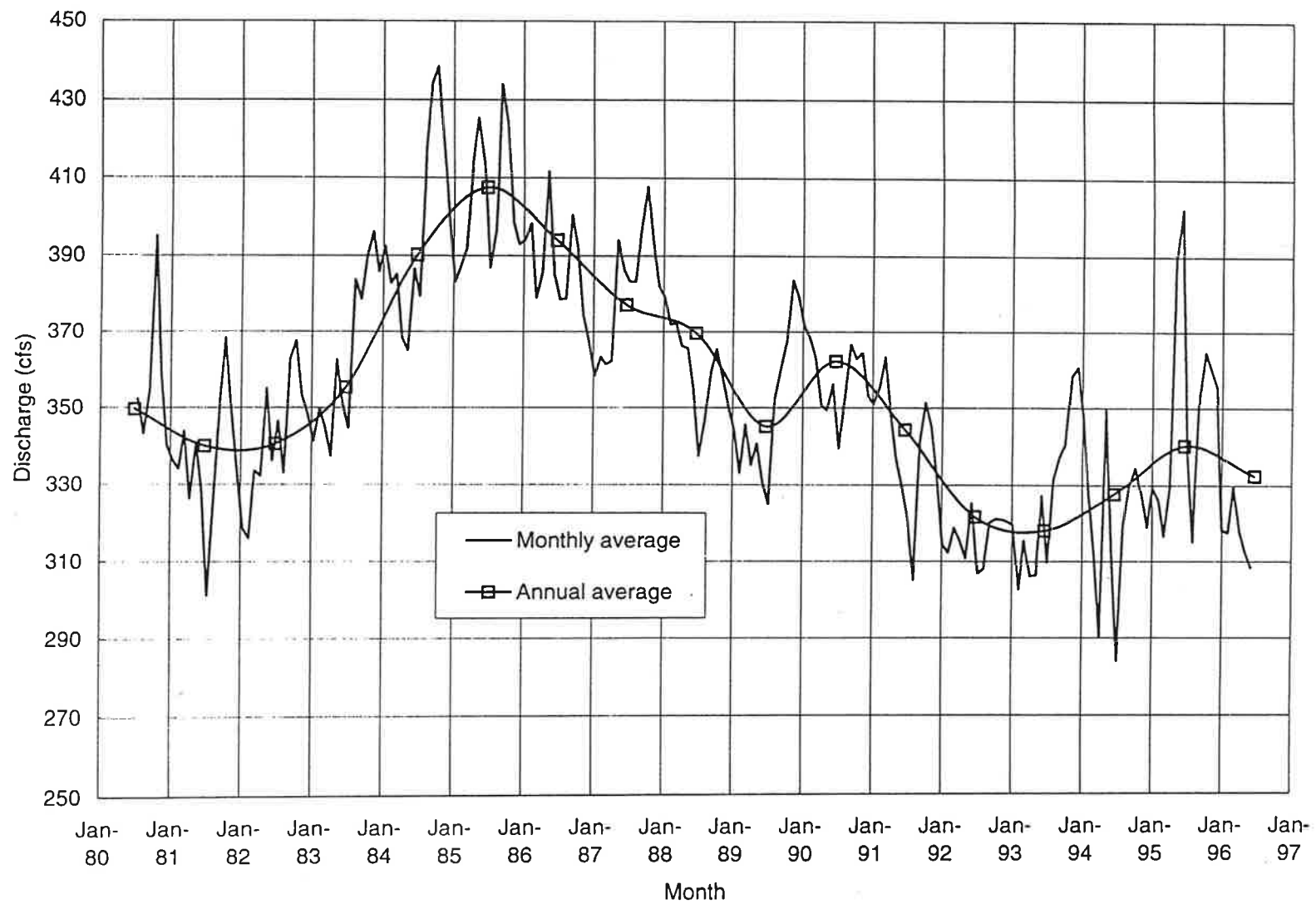


Figure 3. Observed monthly and annual flow in Spring Creek at Sheepskin Road (USGS station 13075983).

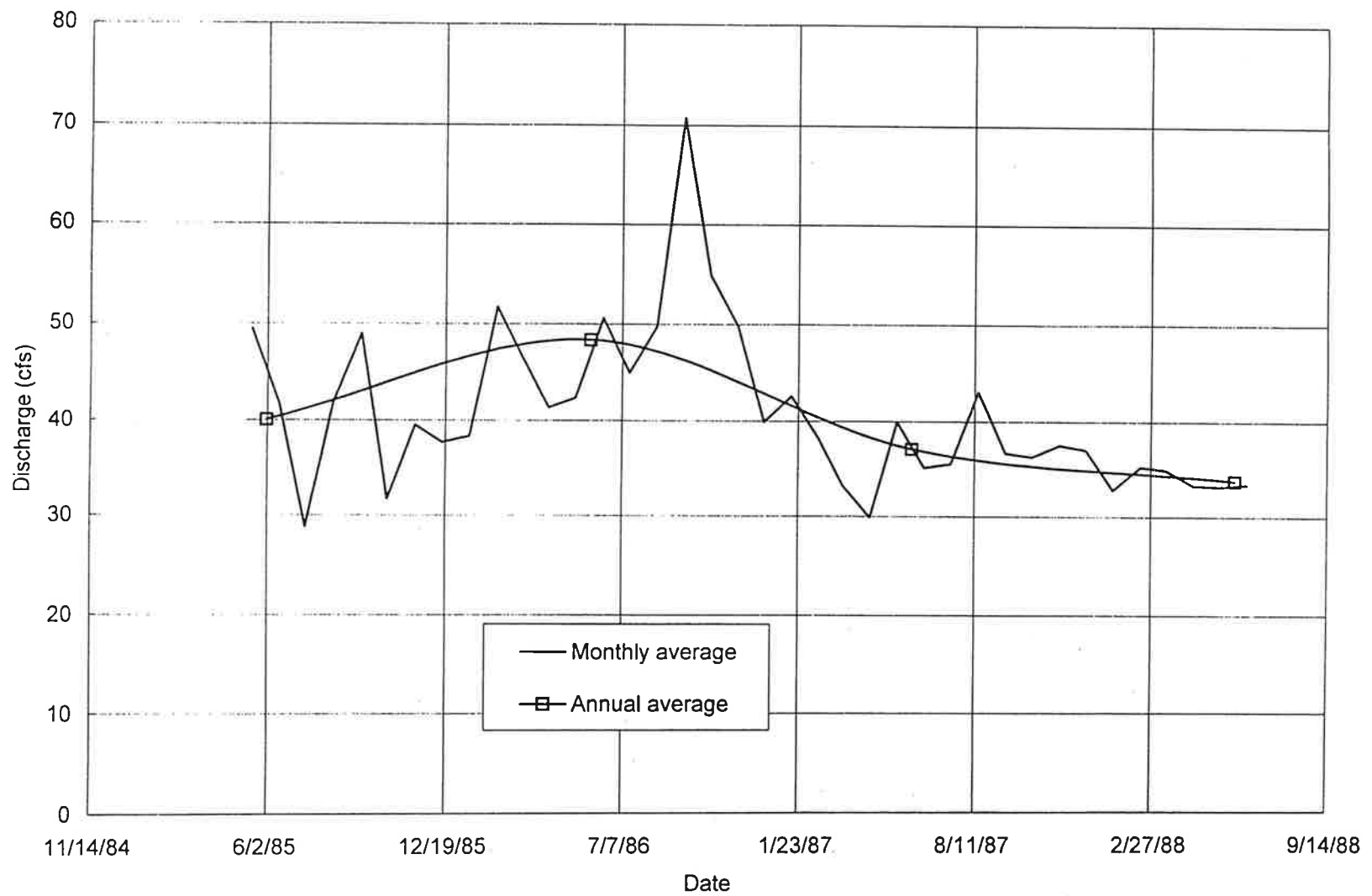


Figure 4. Observed monthly and annual flow in Crystal Waste (USGS station 13069532)

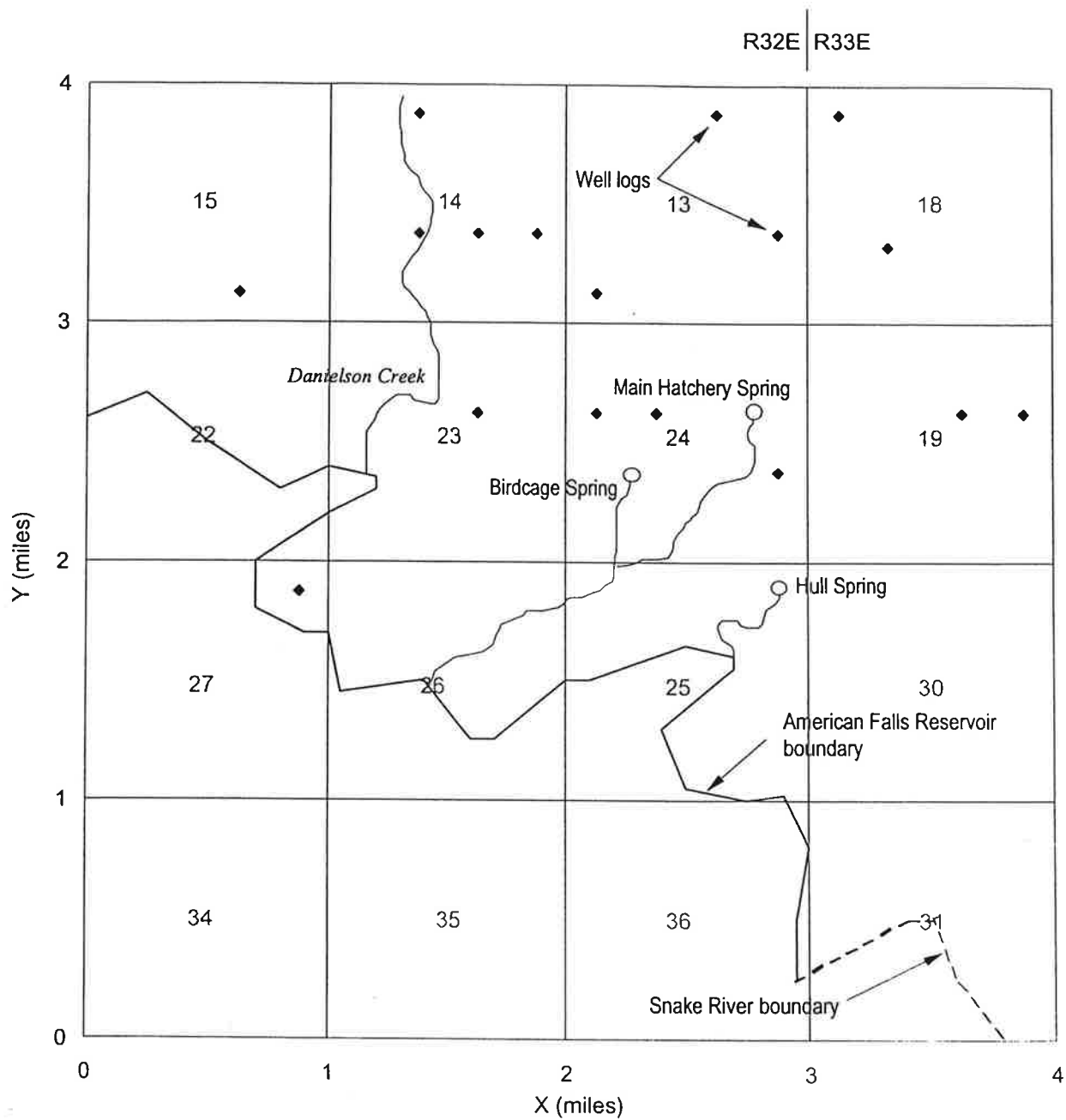


Figure 5. Study area showing major springs and streams, the locations of driller's logs used to estimate aquifer flow patterns, and the constant-elevation boundaries formed by the reservoir and the Snake River.

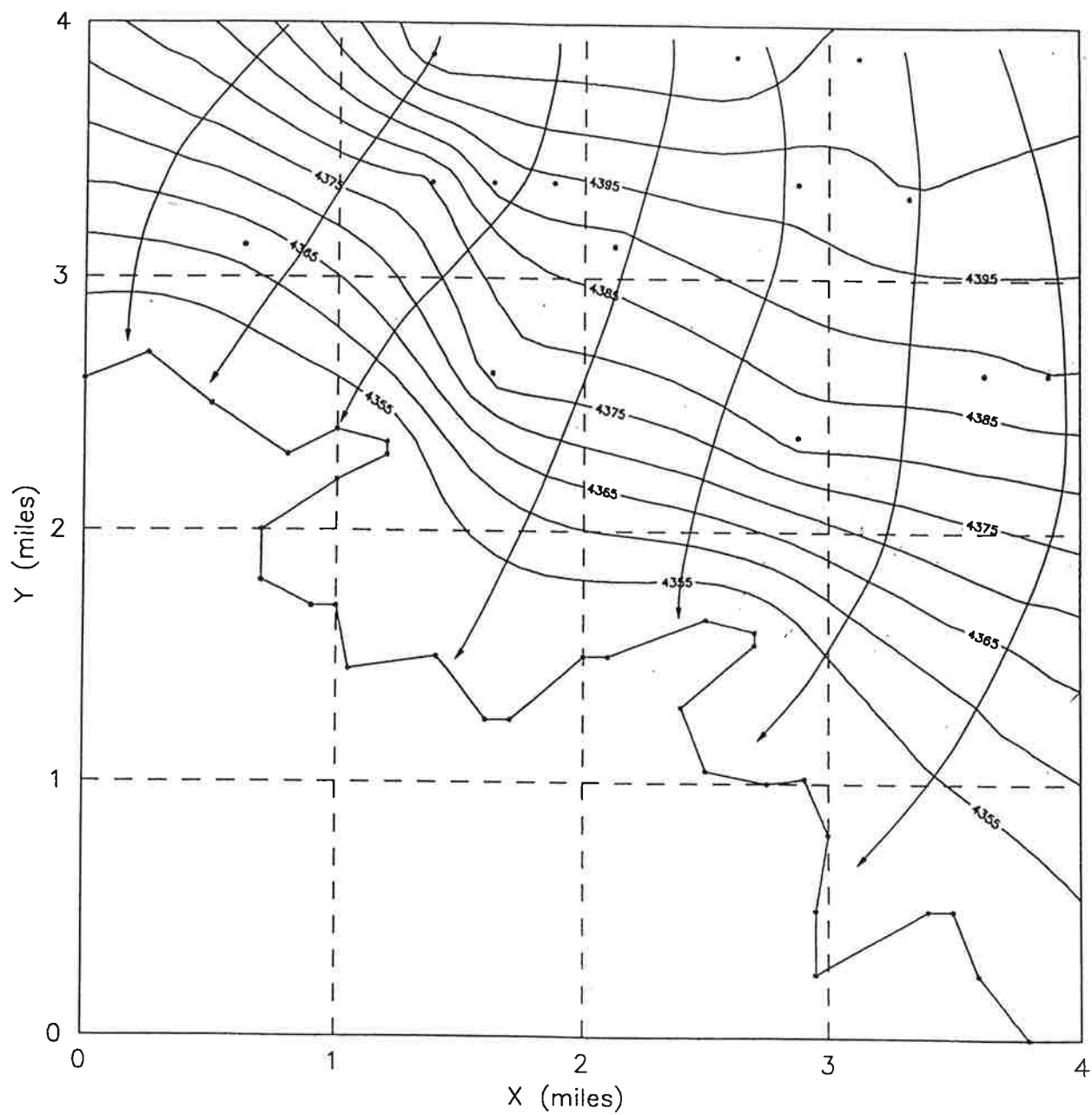


Figure 6. Estimated groundwater contour lines and flow paths.

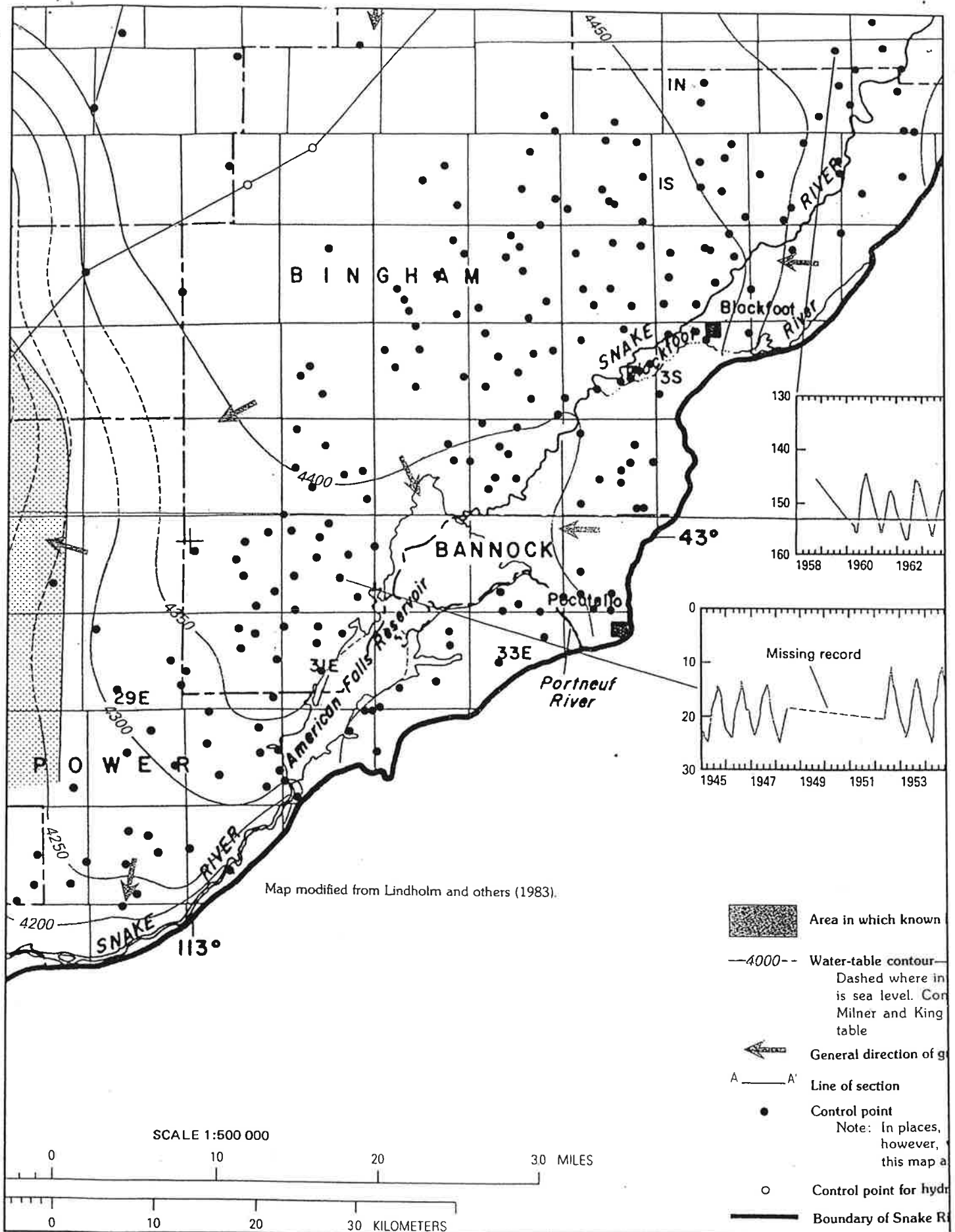


Figure 7. A portion of USGS map HA 703 showing water table contours in Spring 1980 for the Snake Plain Aquifer.

APPENDIX A