

A3

WATER RIGHT NO. 35-08691

Priority: February 2, 1989 **Maximum Diversion Rate:** 1.60 CFS
Maximum Diversion Volume: 320.0 AF

This is to certify, that DAVID STOLWORTHY
 BRENDA STOLWORTHY

1320 N 375 E
 SHELLEY ID 83427

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated February 2, 1989; and has submitted Proof of Beneficial Use on March 4, 1991. An examination indicates that the works have a diversion capacity of 5.540 cfs of water from a **GROUNDWATER** source, and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	04/01 to 10/31	1.60 CFS	320.0 AF

LOCATION OF POINT(S) OF DIVERSION: SWNWSE , Sec. 21, Township 01N, Range 36E
 BINGHAM County

PLACE OF USE: IRRIGATION

<u>TWN</u>	<u>RGE</u>	<u>SEC</u>	<u>ACRES</u>	<u>ACRES</u>	<u>ACRES</u>	<u>TOTAL</u>
01N	36E	21	SWSE 2	Lot 4 (SESE) 8		10
		28	Lot 1 (NENE) 38	NWNE 14	Lot 2 (SENE) 9	70
			Lot 3 (NESE) 9			
Total number of acres irrigated:						80

CONDITIONS OF APPROVAL AND REMARKS

1. The maximum diversion volume is defined as the maximum allowable volume of water that may be diverted annually from the source under this right. The use of water confirmed by this right is limited to the amount that can actually be beneficially used. The maximum diversion volume may be adjusted to more accurately describe the beneficial use or to implement accepted standards of diversion and use efficiency.
2. This water right is appurtenant to the described place of use.
3. This right is subject to all prior water rights and may be forfeited by five years of non-use.
4. Modifications to or variance from this license shall be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
5. 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.

WATER RIGHT NO. 35-08691

CONDITIONS OF APPROVAL AND REMARKS

6. 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.
7. This right when combined with Rights 35-07000F and 35-07419 shall provide no more than .02 cfs per acre nor more than 4.0 afa for the lands above.
8. The following rights are also diverted through the point of diversion described above: 35-07000F and 35-07419.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. Witness the seal and signature of the Director, affixed at Boise, this _____ day of _____, 19____.

KARL J. DREHER, Director

Ident. No. 35-08691

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name: DAVID STOLWORTHY
Address: 1320 N. 375 E. 208-357-7085
SHELLEY, ID 83427
OR
Name: BRENDA STOLWORTHY 208-357-7085
Address: 1320 N. 375 E.
SHELLEY, ID 83427

2. Source: GROUNDWATER Trib. to:

3. Location of point of diversion:

Township	Range	Section	1/4 of 1/4 of 1/4	Lot	County
01N	36E	21	SW NW SE		BINGHAM

4. Water will be used for the following purposes:

Purpose	From	To	CFS	(or)	AFA
IRRIGATION	04/01	11/01	1.600		

5. Total quantity appropriated is:
1.600 CFS (and/or)

AFA

6. Proposed diverting works:

- Description of ditches, flumes, pumps, headgates, etc.
EXISTING 200' WELL WITH MAINLINE INTO HANDLINE SPRINKLER SYSTEM
- Height of storage dam feet; active reservoir capacity
acre-feet; total reservoir capacity acre-feet; period of
year when water will be diverted to storage: to inclusive.
- Proposed well diameter is 20 inches; proposed depth of well is 200
feet.
- Is groundwater with a temperature greater than 90F being sought? NO

7. Time required for the completion of the works and application of
the water to the proposed beneficial use is 1 years.

DO NOT FILM

Ident. No. 35-08691
Page 2

8. Description of proposed uses:
IRRIGATION OF NEW GROUND FROM AN EXISTING SYSTEM

9. Description of place of use:

Township	Range	Section	1/4 of 1/4	Lot	Use	Acres
01N	36E	21	SW	SE	IRR	2.0
			SE	SE	IRR	12.0
Total Section Acres						14.0
		28	NE	NE	IRR	37.0
			NW	NE	IRR	9.0
			SE	NE	IRR	7.0
			NE	SE	IRR	10.0
			SE	SE	IRR	3.0
Total Section Acres						66.0
Total Acres						80.0

10. Describe any other water rights used for the same purposes.
35-07000B, 07368B, & 07419 FROM SAME WELL.

11. a. Who owns the property at the point of diversion?
APPLICANT

b. Who owns the land to be irrigated or place of use?
APPLICANT

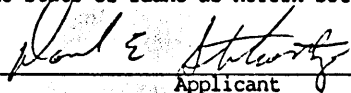
c. If the property is owned by a person other than the applicant,
describe the arrangement enabling the applicant to make this filing.

12. Remarks:

WILL USE EXISTING WELL TO SERVE THIS NEW GROUND.

13. Map of proposed point of diversion and place of use attached? [X]

BE IT KNOWN that the undersigned hereby makes application for permit to
appropriate the public waters of the State of Idaho as herein set forth.


Applicant

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 35-08691

Priority: February 2, 1989

Maximum Diversion Rate: 1.60 CFS
Maximum Diversion Volume: 320.0 AF

This is to certify, that DAVID STOLWORTHY
BRENDA STOLWORTHY

1320 N 375 E
SHELLEY ID 83427

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated February 2, 1989; and has submitted Proof of Beneficial Use on March 4, 1991. An examination indicates that the works have a diversion capacity of 5.540 cfs of water from a GROUNDWATER source, and a water right has been established as follows:

BENEFICIAL USE	PERIOD OF USE	RATE OF DIVERSION	ANNUAL VOLUME
IRRIGATION	04/01 to 10/31	1.60 CFS	320.0 AF

LOCATION OF POINT(S) OF DIVERSION:

SWNWSE, Sec. 21, Township 01N, Range 36E
BINGHAM County

PLACE OF USE	IRRIGATION	ACRES	ACRES	ACRES	TOTAL
TWN RGE SEC					
01N 36E 21		SWSE 2	Lot 4(SESE) 8		10
28	Lot 1(NENE) 38		NWNE 14	Lot 2(SENE) 9	70
	Lot 3(NESE) 9				

Total number of acres irrigated: 80

CONDITIONS/REMARKS:

1. The maximum diversion volume is defined as the maximum allowable volume of water that may be diverted annually from the source under this right. The use of water confirmed by this right is limited to the amount that can actually be beneficially used. The maximum diversion volume may be adjusted to more accurately describe the beneficial use or to implement accepted standards of diversion and use efficiency.
2. This water right is appurtenant to the described place of use.
3. This right is subject to all prior water rights and may be forfeited by five years of non-use.
4. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
5. 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.
6. 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.

PAGE 2

State of Idaho
Department of Water Resources

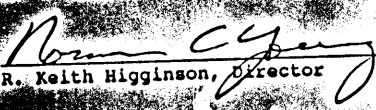
WATER RIGHT LICENSE

WATER RIGHT NO. 35-08691

CONDITIONS/REMARKS:

7. This right when combined with Rights 35-07000F and 35-07419 shall provide no more than .02 cfs per acre nor more than 4.0 afa for the lands above.
8. The following rights are also diverted through the point of diversion described above: 35-07000F and 35-07419.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code.
Witness the seal and signature of the Director, affixed at Boise, this 24th
day of MARCH, 1994.


Acting for R. Keith Higginson, Director



Form 219
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

DEC 02 1993

Department of Water Resources

A. GENERAL INFORMATION

1. Owner: David & Brenda Stolworthy Permit No. 35-08691
Current Address: 1320 N 375 E Shelley Id 83427 Phone No. 357-7085
2. Accompanied by: David Stolworthy EXAM. DATE: 07/10/91
Address: Same Phone No. Same
Relationship to Permit Holder: holder

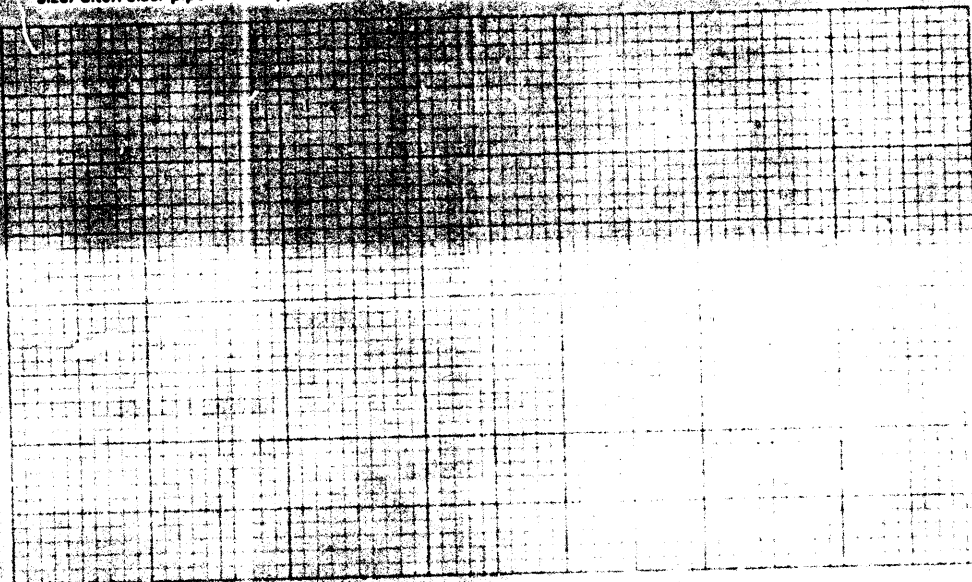
3. Source: groundwater tributary to

B. OVERLAP REVIEW

1. Other water rights with same place of use: NA, license 35-2796 on
about same ☐ Copies Attached
2. Other water rights with same point of diversion: 35-7000 D, 35-7419
☐ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. Diversion System Diagram: Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" = _____

2. ☒ Copy of U.S.G.S. Quadrangle Attached
Showing location(s) of point(s) of diversion and
place(s) of use (required). ☒ Aerial Photo Attached
(required for irrigation of 10 acres or more).
☐ Photo of Diversion and System Attached
(required for all but single household domestic groundwater, and stockwater).

System Description (continued)

3. Narrative: Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

see 35-7000B E for description of point of diversion and place of use for well #4

Well pump + booster pump to 1500 pivot (35-7000D) then mainline to 55 joint handline + 1/4 mile pivot for 1/4 circle on permit 75-08691.

SEE ANALYSIS PAGE "D" & "E" to see how 35-7000B & 35-7368B were split

☐ See Remarks on page 4 for continuation

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
#4	Worthington	200	7309	Laurel-Coulter	10" Discharge
Booster	Heathorn	100	PNA15091N-55	Cornell	68322 13

*Code to correspond with No. on map and aerial photo

5. Point(s) of Diversion:

Ident. No.	Gov't. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
#4		NW	SE		21	1N	36E	Bingham	

6. Place(s) of Use:

Indicate Method of Determination

Twp.	Rge.	Sec.	NE 1/4	NW 1/4	SW 1/4	SE 1/4	Totals
1N	36E	21					
		28	33	15			49
1N	36E	21					
			L-1	L-2		L-3	
1N	36E	28	38	14		9	70
							80

Total 62

Do not use this space

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Cox Hall	Flow			120 385	10"	
Cox Hall	Flow			120 386	10"	

2. Measurements:

see (35-7000 F, well #4) Attached Sheets
Page A; B

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

1. Measured Method: Cox meter + manometer for total of 5.54 cfs
Limit Q = 1.60 cfs from page "C"

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)
Total Head: (1) + (2) = _____ (3); Flow rate: _____ cfs (4)
Water HP: (3) x (4) ÷ 8.8 = _____ (5)
Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)
Meter Input HP: (6) x 1.34 = _____ (7)
Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Amps x .001732 = _____ (6)
Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 80ac \times 4.0af = 320afa$
 $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.60 \times 214 \times 1.9835 = 679.2$
 $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 248afa$

2. Volume Calculations for Other Uses:

H. REMARKS AND OVERLAP REVIEW ANALYSIS

Of the total 5.5 cfs capacity 2.15 cfs is used by 35-7000 D.
The lower 3.35 cfs for new appropriation, this amount 35-69641 only
has 63 new acres will require 2.25 cfs or 1.24 cfs

SEE ATTACHED ANALYSIS PAGES 'D' & 'E' TO SEE HOW 35-7000 B &
35-7368 B WERE SPLIT

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
Irrigation	4/1 10/31	1.24	248
IRRIGATION	4/1 11/1	1.60	320
Totals:		1.24 cfs 1.60 cfs	248 afa 320 afa

2. Recommended Amendments

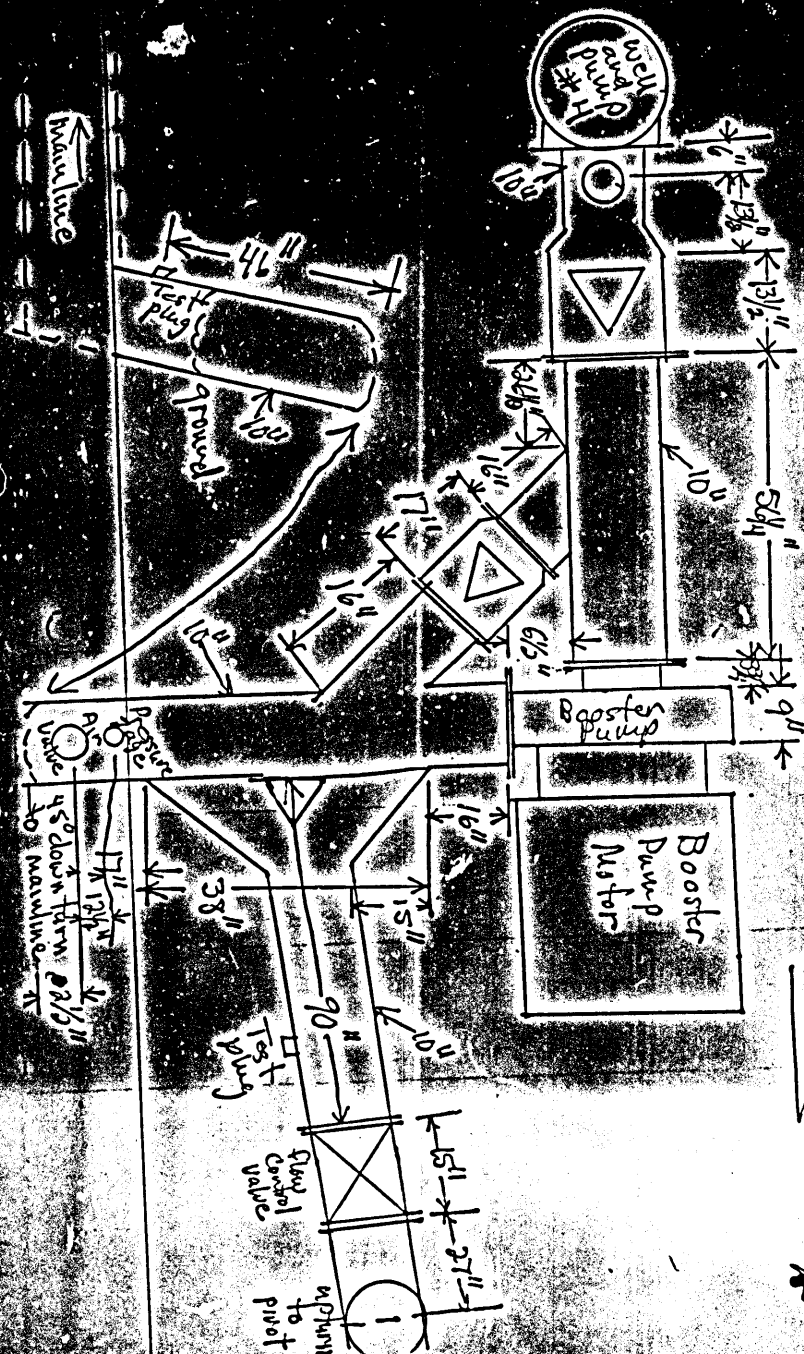
- ☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

J. AUTHENTICATION

Field Examiner's Name Alan W. Davis
Signature _____
Certification Date _____
Field Report Preparation Date _____

CONSULTANT SEAL

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.



SYSTEM
#4

35-08691
~~35-70000~~

State of Idaho
DEPARTMENT OF WATER RESOURCES
Cox/Hall Meter Flow Calculations

DATE: 07/08/91

PERMIT: 35-08691
700-200082

MANOMETER READING INCHES OF WATER TO COX/HALLS METER - IN

COX/HALL METER # 120385

SYSTEM NAME/NUMBER #4
pivot

MEASURED INSIDE PIPE DIAMETER IN INCHES (ID)

Circumference in inches = 31 7/16" CIR 31.56

Thickness in inches = .125 T

ID = $(0.3183 \times \text{CIR}) - (2 T)$ = 9.80 ID

DIFFERENTIAL PRESSURE READING IN INCHES OF H₂O

(33.80) - (26.20) = 7.60 "

(33.55) - (26.15) = 7.40 "

(33.70) - (26.05) = 7.65 "

(33.68) - (26.13) = 7.55 "

High reading - Low Reading

DETERMINE Vh FROM CHART USING (H): 13.1 Vh
(Example H = 12.3, Vh = 16.3)

CALCULATION OF FLOW IN CFS:

$$Q \text{ cfs} = \left[\left(\frac{\pi}{4} \right) \times (ID)^2 \times Vh \right] / 448.8$$

(ID) (Vh)

$$Q \text{ cfs} = [0.78539 (9.80)^2 (13.1)] / 448.8$$

$$Q \text{ cfs} = \underline{2.1975} \text{ cfs}$$

$$Q \text{ cfs} = \underline{2.20} \text{ cfs}$$

op press 63 PSI

ALAN W. PARRIS

MEASURED BY

Page "A"

State of Idaho
DEPARTMENT OF WATER RESOURCES
Cox/Hall Meter Flow Calculations

35-08691

DATE: 07/08/91

PERMIT: 35-08691

MANOMETER READING INCHES OF WATER TO COX/HALLS METER - Vh

COX/HALL METER # 120386

SYSTEM NAME/NUMBER

#4
SE main line

MEASURED INSIDE PIPE DIAMETER IN INCHES (ID)

Circumference in inches = 31 7/8" CIR

Thickness in inches = .125 T

ID = (0.3183 X CIR) - (2 T) = 9.80 ID

DIFFERENTIAL PRESSURE READING IN INCHES OF H2O

(36.00) - (19.75) = 16.25"

(35.85) - (19.20) = 16.65"

(35.70) - (19.40) = 16.30"

(35.91) - (19.25) = 16.66"

High reading - Low Reading

DETERMINE Vh FROM CHART USING (H): 19.9 Vh
(Example H = 12.3, Vh = 16.3)

CALCULATION OF FLOW IN CFS:

$$Q \text{ cfs} = [(\pi^2 / 4) \times (ID)^5 \times Vh] / 448.8$$

$$Q \text{ cfs} = [0.78539 (9.80)^5 (19.9)] / 448.8$$

$$Q \text{ cfs} = 3.3445 \text{ cfs}$$

$$Q \text{ cfs} = 3.34 \text{ cfs}$$

6759

Allen W. Fox

MEASURED BY

PAGE "B"

Form 2/93

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
POINT OF DIVERSION OVERLAP REVIEW

35-8691

Permit Number

1. Analysis of Entire System, Current Application Rate per Acre (Qc):
Limit to 0.02 cfs/ac, Permitted Amount, or System Capacity, Whichever is Less.

A. Total Number of Acres irrigated = 259 acres

B. Total Diversion Rate = 5.54 cfs

Qc = Total Diversion rate [1.B]/Total irrigated acres [1.A]

= 5.54 / 259 = 0.02138 cfs/ac LIMIT TO 0.025/ac

2. Old Application Rate per Acre (Qo) from Licensed Flow Rates:

License # 35-7419 @ 180 cfs / 179 ac

Permit License # 35-7000P @ 0.48 cfs / 179 ac

License # @ cfs / ac

Qo = Total Licensed Rate = 2.28 cfs / 179 ac = 0.012737 cfs/ac
(Old Diversion Rate(Qo) = Licensed Flow Rate/# acres)

3. Comparison of Diversion Rates if:

A. Old Diversion Rate(Qo) > New Diversion Rate(Qc) : EXCLUDE Licensed Lands.

Qo(#2) = > Qc(#1) = GO TO ITEM #4A.

B. New Diversion Rate(Qc) > Old Diversion Rate(Qo) : INCLUDE Licensed Lands.

Qc(#1) = 0.025 > Qo(#2) = 0.012737 CONTINUE TO ITEM #3.B.1

1. Additional Flow Rate for Licensed Lands. NOT COVERED BY PERMIT

Qa = (Qc - Qo) x (# Lic. Ac.) = [(0) - (0)] x (0) = 0 cfs
cfs/ac cfs/ac acres

2. Flow Rate for New Acreage. Total acres(#1.A) - Licensed acres(#3) = New Acres
(259 ac) - (179) = 80 acres

Qn = (Qc) x (# New Ac.) = (0.02 cfs/ac) x (80 ac) = 1.60 cfs

GO TO ITEM #4B.

4. Calculate Total Flow Rate to be licensed:

A. Flow Rate excluding licensed land. Total Acres(#1.A) - Lic. Acres(#3) = New Acres
() - () = ac

Qt = Qc(#1) x (# New Acres) = cfs/ac x ac =

Qt = cfs

CONDITIONS/REMARKS:

- B. Flow Rate including licensed land.

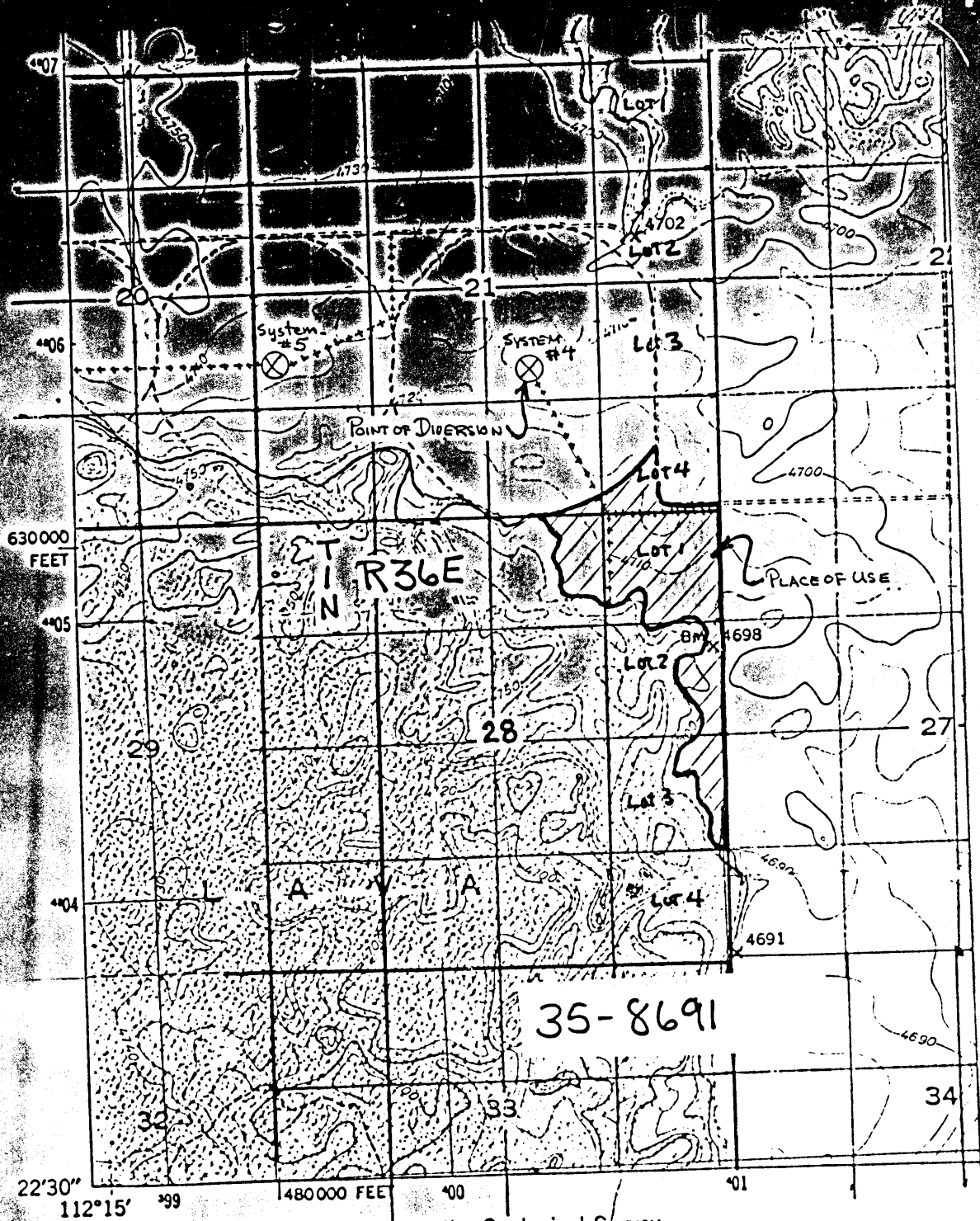
Qt = Qa(#3.B.1) + Qn(#3.B.2) = 0 cfs + 1.60 cfs =

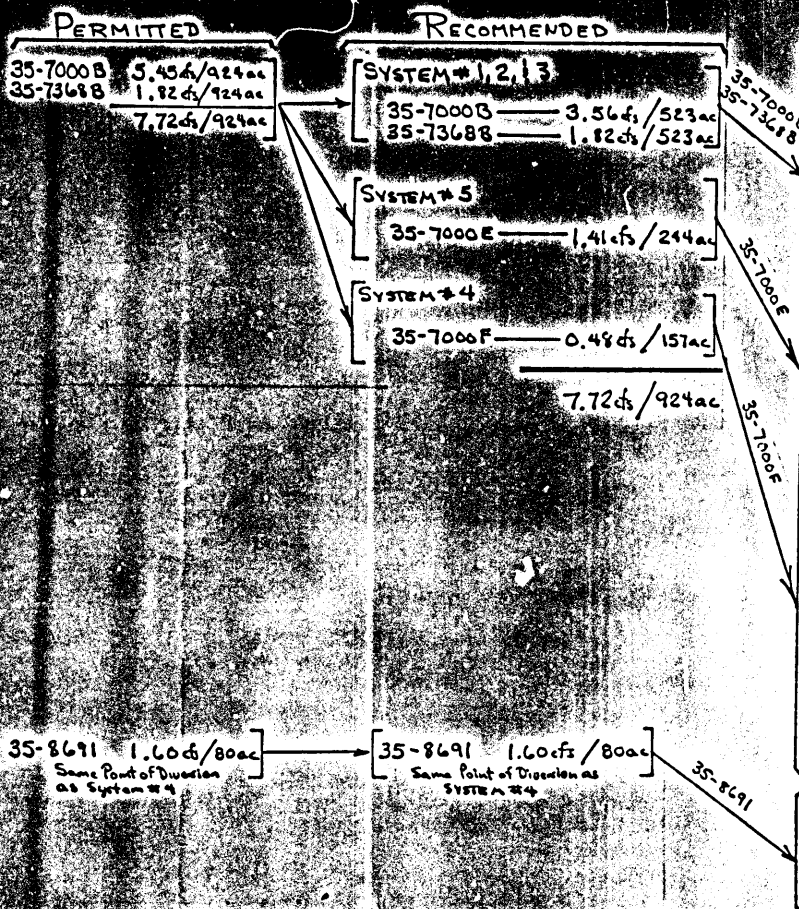
Qt = 1.60 cfs

CONDITIONS/REMARKS:

PAGE "C"

SYSTEM	CAPACITY (CFS)	IRRIGATED ACRES	EXISTING LICENSES	RECOMMEND	11-17-1993
					PERMIT NUMBERS
1	1.53		35-7493 4.24 cfs / 480 ac	Capacity - Licensed = Remaining (9.62 cfs) - (4.24 cfs) = 5.38 cfs / 523 ac	35-7368 B @ 1.82 cfs / 523 ac 35-7000 B @ 3.56 cfs / 523 ac (5.38 cfs - 1.82 = 3.56)
2	1.82	9.62 cfs	523 ac		
3	6.21				
5	3.30 cfs	244 ac	35-7420 1.89 cfs / 143 ac	Capacity - Licensed = Remaining (3.30 cfs) - (1.89 cfs) = 1.41 cfs / 244 ac	35-7000 E @ 1.41 cfs / 244 ac
4	5.54 cfs	179 ac	35-7419 @ 1.80 cfs / 179 ac	PERMITTED AMOUNT 35-7000 B / 7368 B (35-7000 B) (35-7368 B) $Q_p = 5.45 \text{ cfs} + 1.82 \text{ cfs} = 7.27 \text{ cfs}$ PERMITTED AMOUNT - RECOMMENDED = (Q _p) (Q _{1,2,3} + Q ₅) = REMAINING AMOUNT TO BE LICENSED (Q _R) $Q_p - [Q_{1,2,3} + Q_5] = Q_R$ $Q_{1,2,3} = Q_{35-7000B} + Q_{35-7368B}$ $= (3.56 \text{ cfs} + 1.82 \text{ cfs}) = 5.38 \text{ cfs}$ $Q_R = (7.27 \text{ cfs}) - [5.38 \text{ cfs} + 1.41 \text{ cfs}]$ $= 0.48 \text{ cfs}$ REMAINING ACRES (A _R) = PERMITTED AC - RECOMMENDED AC (A _p) (A _{1,2,3} + A ₅) $A_R = (924) - [523 + 244] = 157 \text{ Ac}$ RECOMMEND: 157 ac w/in P.P.U. of 179 ac	35-7000 F @ 0.48 cfs / 157 ac
	18.35 cfs	946 ac	7.93 cfs / 802 ac	$5.38 \text{ cfs} + 1.41 \text{ cfs} + 0.48 \text{ cfs} = 7.27 \text{ cfs}$ $523 \text{ ac} + 244 \text{ ac} + 157 \text{ ac} = 924 \text{ ac}$ $7.27 \text{ cfs} / 924 \text{ ac}$	35-8691 PAGE "E"





CALCULATIONS

SYSTEM #1,2,3: Capacity 9.62 cfs/523 ac
 EXISTING LICENSE 4.24 cfs/460 ac (35-7000B + 35-7368B)
 AMOUNT: Capacity (9.62 cfs) - Licensed (4.24 cfs) = 5.38 cfs
 NOTES: USE ALL OF PERMIT 35-7368B (1.82 cfs)
 REMAINDER (5.38 cfs) - PERMIT 35-7368B (1.82 cfs) = 3.56 cfs
 ACRES = IRRIGATED ACRES UNDER SYSTEMS 1,2,3 = 523

SYSTEM #5: Capacity 3.30 cfs/244 ac
 EXISTING LICENSE 1.89 cfs/143 ac (35-7420)
 AMOUNT: Capacity (3.30 cfs) - Licensed (1.89 cfs) = 1.41 cfs
 ACRES = IRRIGATED ACRES UNDER SYSTEM #5 = 244

SYSTEM #4: Capacity 5.54 cfs/179 ac + 80 ac under P/O
 EXISTING LICENSE 1.80 cfs/179 ac (35-7419)
 AMOUNT: Permitted Amount - Recommended Amounts = Remainder
 (35-7000B + 35-7368B) - (Q_{1,2,3} + Q₅) = 7.27 cfs - [5.38 cfs + 1.41 cfs] = 0.48 cfs
 (3.56 cfs + 1.82 cfs) - (4.24 cfs + 1.89 cfs)
 ACRES: Permitted Acres (924) - Recommended Acres (523 + 244) = 157
 RECOMMEND: 0.48 cfs for 157 ac within a point of diversion of use of 179 ac

SYSTEM #4: Capacity (5.54 cfs) - License (1.80 cfs) - (35-7000F) (0.48 cfs) = 3.26 cfs
 P/O overlap ONLY
 Capacity not exceeded!
 RECOMMEND LICENSING 35-8691 @ 1.60 cfs

RECOMMENDED

SYSTEM #1, 2, 3

35-7000B — 3.56 cfs / 523 ac
35-7368B — 1.82 cfs / 523 ac

SYSTEM #5

35-7000E — 1.41 cfs / 244 ac

SYSTEM #4

35-7000F — 0.48 cfs / 157 ac

7.72 cfs / 924 ac

35-8691 1.60 cfs / 80 ac

Same Point of Diversion as
SYSTEM #4

CALCULATIONS

SYSTEM #1, 2, 3: Capacity 9.62 cfs / 523 ac

EXISTING LICENSE 4.24 cfs / 460 ac (35-7443)

AMOUNT: Capacity (9.62 cfs) - Licensed (4.24 cfs) = 5.38 cfs (Remainder)

NOTE: USE ALL OF PERMIT 35-7368B (1.82 cfs)

REMAINDER (5.38 cfs) - PERMIT 35-7368B (1.82 cfs) = 3.56 cfs Recommended for 35-7000B

ACRES = IMPLICATED ACRES UNDER SYSTEMS 1, 2, 3 = 523 ac

SYSTEM #5: Capacity 3.30 cfs / 244 ac

EXISTING LICENSE 1.89 cfs / 143 ac (35-7420)

AMOUNT: Capacity (3.30 cfs) - Licensed (1.89 cfs) = 1.41 cfs Recommended for 35-7000E

ACRES = IMPLICATED ACRES UNDER SYSTEM #5

SYSTEM #4: Capacity 5.54 cfs / 179 ac + 80 ac under Permit 35-8691

EXISTING LICENSE 1.80 cfs / 179 ac (35-7419)

AMOUNT: Permitted Amount - Recommended Amounts = Remaining Amount to be Licensed
 $(35-7000B + 35-7368B) - (Q_{1,2,3} + Q_5)$
 $(7.27 cfs) - [5.38 cfs + 1.41 cfs] = 0.48 cfs$
 $(3.56 cfs + 1.82 cfs)$
 $(35-7000B + 35-7368B)$

ACRES: Permitted Acres (924) - Recommended Acres (523 + 244) = Remaining Acres to be Licensed

$(924 ac) - [523 ac + 244 ac] = 157 ac$

RECOMMEND: 0.48 cfs for 157 ac with in a permissible place of use of 179 ac

SYSTEM #4: Capacity (5.54 cfs) - License (1.80 cfs) - (35-7000F (0.48 cfs))

$(5.54 cfs) - (1.80 cfs) - (0.48 cfs) = 3.26 cfs$ Remaining System Capacity

P/O overlap ONLY

Capacity not exceeded!

RECOMMEND LICENSING 35-8691 @ 1.60 cfs / 80 ac

ATTACHED ANALYSIS:

17 NOV 1993

NOTE:

35-07000B & 35-07368B COMBINE TO LICENSE LAND UP TO 0.02 CFS/AC

SYSTEMS #1,2,3

SYSTEM CAPACITY = 9.62 CFS/523 AC = 0.01839 CFS/AC = 0.92 "/AC
 LICENSE (35-07493)

4.24 CFS/480 AC = 0.0088333 CFS/AC = 0.44 "/AC
 CAPACITY - LICENSED AMOUNT = REMAINING TO BE LICENSED
 (9.62 CFS) - (4.24 CFS) = 5.38 CFS/523 AC REMAINING

USE ALL OF PERMIT 35-07368B (1.82 CFS) ON SYSTEM'S #1,2,3, TO
 ELIMINATE SPLITTING PERMIT INTO NUMEROUS SMALL PORTIONS
 PORTION OF 35-07000B NECESSARY TO LICENSE SYSTEMS AT CAPACITY
 REMAINING CAPACITY - PERMIT 35-07368B = RECOMMENDED
 (5.38 CFS) - [35-07368B (1.82 CFS)] = 3.56 CFS FOR 35-07000B

SYSTEM #5

SYSTEM CAPACITY = 3.30 CFS/244 AC = 0.0135 CFS/AC = 0.676 "/AC
 LICENSE (35-07420) 1.89 CFS/143 AC = 0.0132 CFS/AC = 0.66 "/AC
 CAPACITY - LICENSED = REMAINING TO BE LICENSED
 3.30 CFS - 1.89 CFS = 1.41 CFS/244 AC FOR 35-07000E

SYSTEM #4

SYSTEM CAPACITY = 5.54 CFS/179 AC = 0.0309 CFS/AC
 LIMIT TO 0.02 CFS/AC
 PERMITTED AMOUNT - RECOMMENDED AMOUNTS = REMAINING AMOUNT
 (35-7000B/7368B) - (SYSTEM #1,2,3 + SYSTEM #5)
 (5.45 CFS + 1.82 CFS) - (5.38 CFS + 1.41 CFS) = 0.48 CFS
 PERMITTED AC - RECOMMENDED AC = REMAINING AC TO LICENSE
 (924 AC) - (AC OF 1,2,3 + AC OF #5) =
 (924 AC) - (523 AC + 244 AC) = 157 AC

RECOMMEND:
 0.48 CFS FOR 157 AC WITH/IN PERMISSIBLE PLACE OF USE
 OF 179 AC.

ANALYSIS:

QUANTITY	ACRES
35-07368B (1.82 CFS)	523 AC
35-07000B (3.56 CFS)	"
35-07000E (1.41 CFS)	244 AC
35-07000F (0.48 CFS)	157 AC W/IN 179 AC
7.27 CFS	924 AC

35-8691

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