

RECEIVED
JAN 5 1993

Form 219
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

Department of Water Resources

A. GENERAL INFORMATION

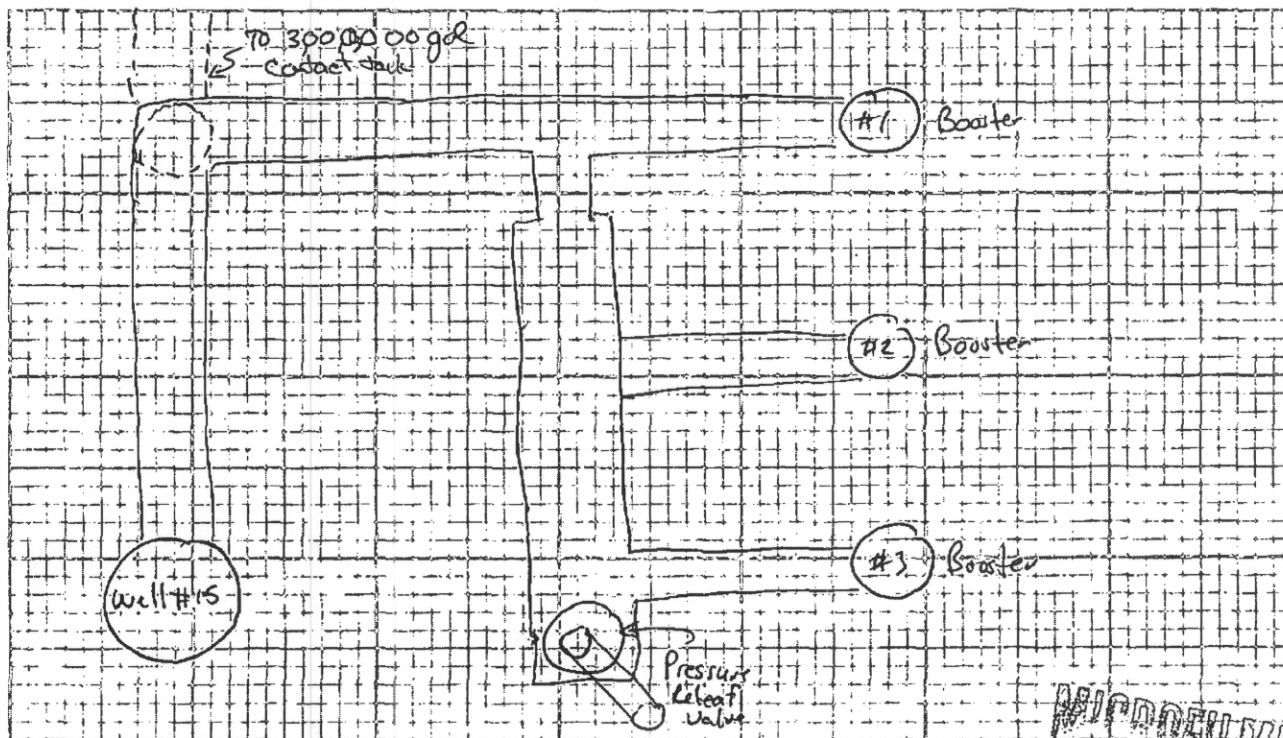
- Permit No. 25-7298/7398
Phone No. 529-1250
1. Owner: City of Idaho Falls
Current Address: P.O. Box 50220 Idaho Falls 83405
2. Accompanied by: Carol Arnold / Bob Drollinger EXAM. DATE: 7-28-1992
Address: P.O. Box 50220 Idaho Falls Id 83405 Phone No. 529-1471/1472
Relationship to Permit Holder: Water Dept. Supt. / operator
3. Source: GROUNDWATER tributary to _____

B. OVERLAP REVIEW

1. Other water rights with same place of use: SEE ATTACHED PAGE ☐ Copies Attached
2. Other water rights with same point of diversion: 25-7298 / 25-7398 ☐ 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).

FEB 17 1993

System Description (continued)

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

Well #15 to 3 million gal contact tank machine to three booster to machine to municipal water supply

2200 gpm from computer print out

☐ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
#15 Well	US Motors	150	9402222-920 R2117968 K0480495	Quora	V82-71877
Booster #3	US Motors	160	9402217-920 K0460549 R2117963	Quora	V84-75061
Booster #2	US Motors	100	9402220-920 R2117969 K0460550	Quora	V84-75060
Booster #1	US Motors	50	9402219-920 R2117959 K0460547	Quora	V84-75059

*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
#15			NW	SE	28	ZN	(38E)	Bonneville	U.S.G.S. Map / on site inspection

6. Place(s) of Use: Within City Limits of Idaho Falls Indicate Method of Determination

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	

USE WITHIN CITY LIMITS OF Idaho Falls

Do not use this space

RECEIVED

FEB 17 1993

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

2200 gpm = 4.90 cfs

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

1. Measured Method:

$Q = 4.90 \text{ cfs}$

25-7298 @ 3.35 cfs

25-7398 @ 1.55 cfs

$Q_{\text{TOTAL}} = 4.90 \text{ cfs}$

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:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$ _____

2. Volume Calculations for Other Uses:

MICROFILMED
FEB 17 1993

H. REMARKS AND OVERLAP REVIEW ANALYSIS

10

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Municipal	1/1	12/31	3.35 cfs	
Totals:			3.35 cfs	

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 KEITH C. WILSON
Signature Keith C. Wilson
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.

FEB 17 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
LICENSING REPORT

25-7298 / ~~7348~~
Permit No.

Measurement Calculations

hp = 150 hp assume 70% eff
Lift = 85' psi = 60 psi

$$Q = \frac{hp (8.814) \text{ eff}}{\text{Lift} + (\text{psi} \times 2.308)} = \frac{150 (8.814) (.7)}{85 + (60 \times 2.308)} = 4.14 \text{ cfs} = 1858$$

② 83% eff

$$Q = \frac{150 (8.814) (.83)}{85 + (60 \times 2.308)} = 4.91 \text{ cfs} = 2204 \text{ gpm}$$

at Time of Exam pressure @ 54 psi assume 80% eff

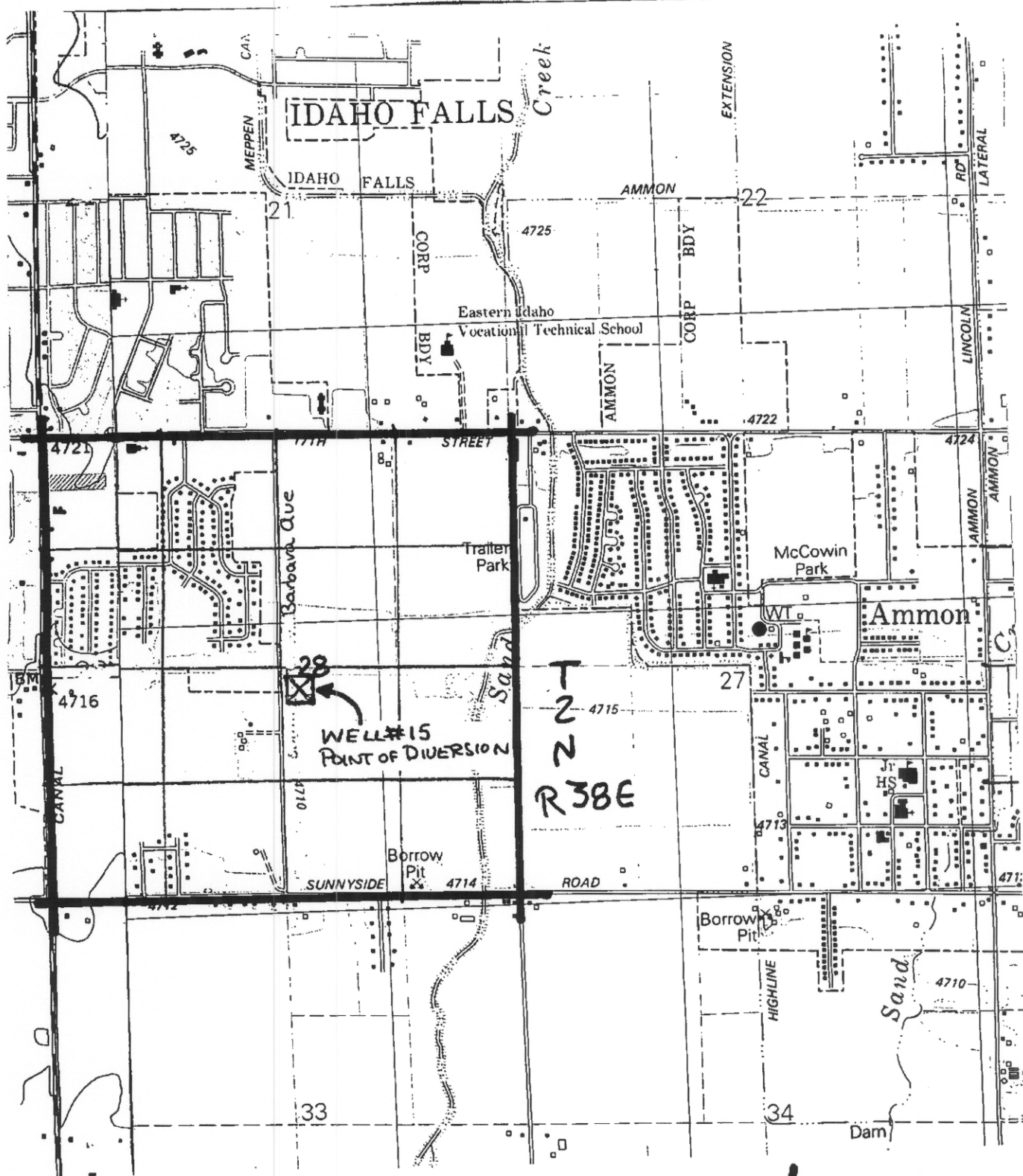
$$Q = \frac{150 (8.814) (.8)}{85 + (54 \times 2.308)} = 5.04 \text{ cfs} = 2264 \text{ gpm}$$

③ 77.7% eff and 54 psi

$$Q = \frac{150 (8.814) (.777)}{85 + (54 \times 2.308)} = 4.90 \text{ cfs} = 2199 \text{ gpm}$$

∴ Recommend 4.90 cfs total flow Rate

MICROFILMED
FEB 17 1993



25-7298/25-7398
MICROFILMED

FEB 17 1993