

FORM 202
2007
RECEIVED

NOV 02 2007

WATER RESOURCES
DIVISION

Ident. No.

63-32619

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

AMENDED

To appropriate the public waters of the State of Idaho

1. Name of Applicant Velma V. Morrison Phone 345-5225
Mailing address 827 E. Park Blvd., Ste. 200 BOISE, IDAHO 83712
2. Source of water supply Groundwater which is a tributary of BOISE RIVER
3. Location of point of diversion is Township 3N Range 2E Sec. 14, in the NW 1/4,
NW 1/4, Govt. Lot 5, B.M., Ada County;
additional points of diversion if any: _____
4. Water will be used for the following purposes:
Amount 0.3342 cfs for Heating & Cooling purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated is (a) 33 and/or (b) _____
cubic feet per second acre feet per annum
6. Proposed diverting works:
 - a. Describe type and size of devices used to divert water from the source Groundwater Well
 - b. Height of storage dam N/A feet; active reservoir capacity _____ acre-feet; total
reservoir capacity _____ acre-feet
 - c. Proposed well diameter is 6 inches; proposed depth of well is 40 feet
 - d. Is ground water with a temperature of greater than 85°F being sought? NO
 - e. If well is already drilled, when? _____; Drilling firm _____;
Well was drilled for (well owner) _____; Drilling Permit No. _____
7. Time required for completion of works and application of water to proposed beneficial use is 3 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
 - a. Hydropower; show total feet of head and proposed capacity in kW. N/A
 - b. Stockwatering; list number and kind of livestock. N/A
 - c. Municipal; show name of municipality. N/A
 - d. Domestic; show number of households. N/A
 - e. Other; describe fully. Hydronic Heat Exchanger closed loop
System for a 38,000 S.F. Commercial Building

3. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	2E	14					65												

Total number of acres to be irrigated 0

10. Describe any other water rights used for the same purposes as described above. NONE

11. a. Who owns the property at the point of diversion? Velma Morrison
- b. Who owns the land to be irrigated or place of use? Velma Morrison
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: N/A

12. Remarks: NON-CONSUMPTIVE USE FOR A HYDRONIC HEAT EXCHANGER
CLOSED LOOP SYSTEM FOR A 38,000 S.F. COMMERCIAL OFFICE
BUILDING. Mitigated via injection well permit 63-W-229-001 (40ft)
water bearing zone to be appropriated is from 1-40ft property AKA
315 Park Blvd. the Falcon Building

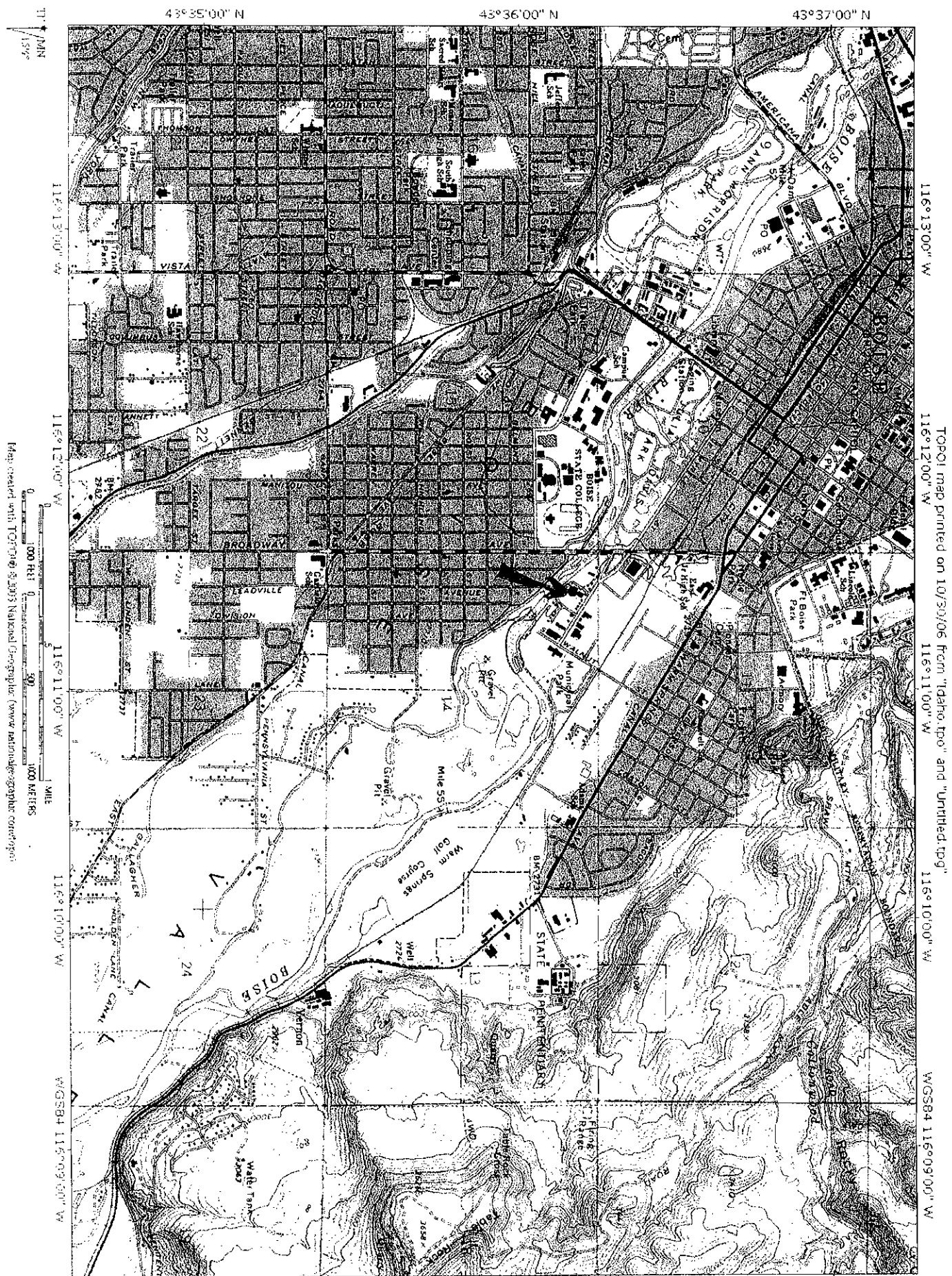
13. MAP OF PROPOSED PROJECT REQUIRED - Attach an 8 1/2"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

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

Velma Morrison
 Signature of Applicant (and title, if applicable)

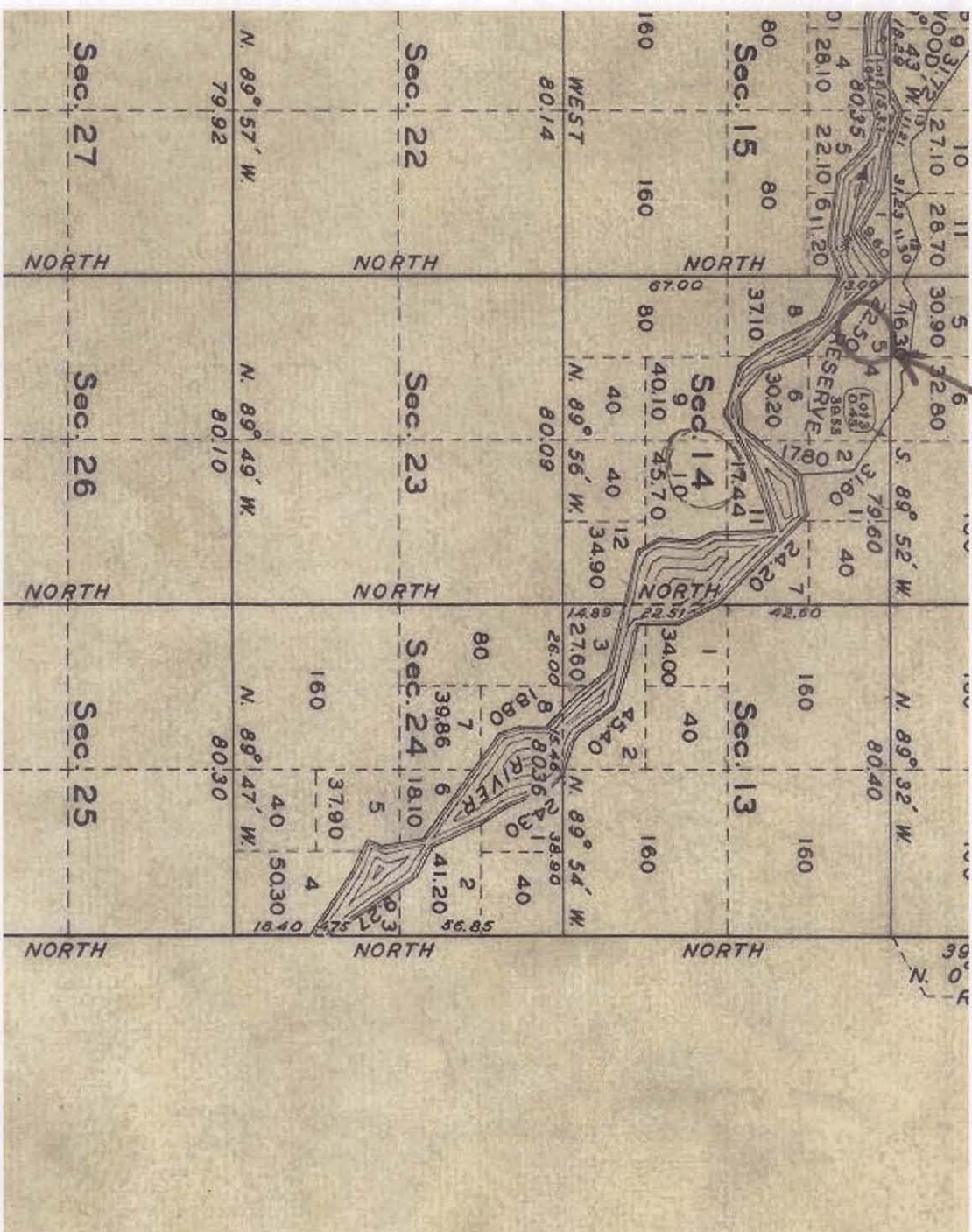
Received by SL Date 11/2/07 Time 1:00 Preliminary check by SL
 Fee \$ * Received by DB # Date 11/06/07
 Publication prepared by DB Date 11/06/07 Published in IDAHO STATESMAN; NOV. 15 & 22, 2007
 Publication approved Date

* See original 3/7/07



35°00' N 43°36'00" N
T3N R2E S.14, NWNW, 504 lot 5

63.32619



T3N
R2E
S.14
NW/4
part Lot 5

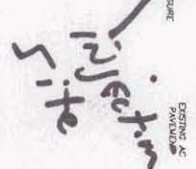
63-32619

1. EXISTING CONSIDERING SITE IMPROVEMENTS ARE FROM AN
AUTOCAD DRAWING PROVIDED BY COLE+POE ARCHITECTS.

1. LOCATION OF EXISTING SITE FEATURES AND UTILITIES SHALL BE IDENTIFIED BY THE DESIGNER AND SHOWN ON THE EXISTING SITE PLAN. THE LOCATION OF ALL UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO EXCAVATION. CALL DEPT. 3-1-1.
2. ALL EXISTING UTILITIES SHALL BE PROTECTED AND MAINTAINED WITHIN THE EXISTING RIGHT-OF-WAY. ALL UTILITIES SHALL BE PROTECTED AND MAINTAINED WITHIN THE EXISTING RIGHT-OF-WAY. ALL UTILITIES SHALL BE PROTECTED AND MAINTAINED WITHIN THE EXISTING RIGHT-OF-WAY.
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EXISTING CONDITION SAVED
WORK IN CONTRACT (U.N.O.)

- | | |
|---------------------------|--------|
| PROPERTY LINE | — E — |
| ELECTRICAL | — G — |
| GAS | — SO — |
| STORM DRAIN | — S — |
| SEWERY SEWER | — T — |
| FIBER OPTIC LINE | — W — |
| WATER 0'S IF FIRE SERVICE | — — — |
| POHCE | — — — |
| FLOW DIRECTION | — — — |
| BOUNDARY | — — — |
| 500' TEST HOLE | • |
| CLEAN OUT TO CHASE | ▲ |
| DOWN HOLE (20) | ○ |
| MANHOLE | ⊙ |
| WELL | ⊙ |



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cole	
coe	

cole + poe architects, inc.

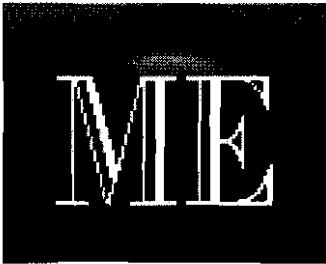
The Falcon Building Remodel & Addition

PROJECT ADDRESS
815 Park Boulevard
Boise, Idaho 83712

[illegible]

C1.0

Site Development Plan



**MUSGROVE
ENGINEERING, P.A.**

David O. Musgrove, P.E. ~Principal
Charles E. Paulin, P.E. ~ Principal
Bill A. Carter, P.E. ~ Principal



410 S. Orchard St., Suite 184
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November 1, 2007

Russell Corporation
El Dorado Business Campus
1940 S. Bonito Way, Ste. 150
Meridian, ID 83642

Attention: Marv Meyer

Re: THE FALCON BUILDING – Well Flow

Marv,

Please find attached the backup calculations required by the Department of Water Resources for flow requirements out of the well on the Falcon Building project.

These calculations include the required building heating and cooling calculations based on ASHRAE standards. The calculated flow came out to 142 GPM, but was rounded up to 150 GPM due to possible inconsistencies in the ground water temperature (55 deg. F was assumed). It should be noted that the 150 GPM being pumped out of the aquifer is pumped directly back into the aquifer at a different well, hence these are “non-consumptive” wells. Furthermore, the building will only use the 150 GPM intermittently; the pump will cycle on and off as demand requires.

Please let me know if you need anything else regarding this matter.

Sincerely,

Shelley Weatherby

63-32619

Well Calculations

COOLING

$$727,292 \times 1.5 = 1,090,938 \text{ BTH}$$

heat pump compressor inefficiencies

$$61 \text{ TONS} \times 3 \text{ GPM} = 183 \text{ GPM}$$

185 GPM

condenser loop

HEATING

$$1,059,837 \times .8 = 847,870 \text{ BTH}$$

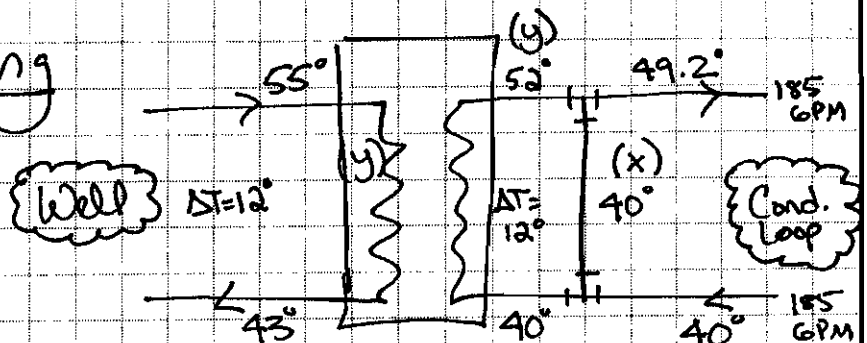
added from HP compressor

$$847,870 = (500)(185)(\Delta T)$$

$$\Delta T = 9.2^\circ$$

GROUND Water Temp = 55°F
 Cooling = 86°F
 Heating = 40°F

Ht Exchanger - Heating



$$40(x) + 52(y) = 49.2(185)$$

$$40(185 - y) + 52(y) = 9102$$

$$7400 - 40y + 52y = 9102$$

$$y = 141.8$$

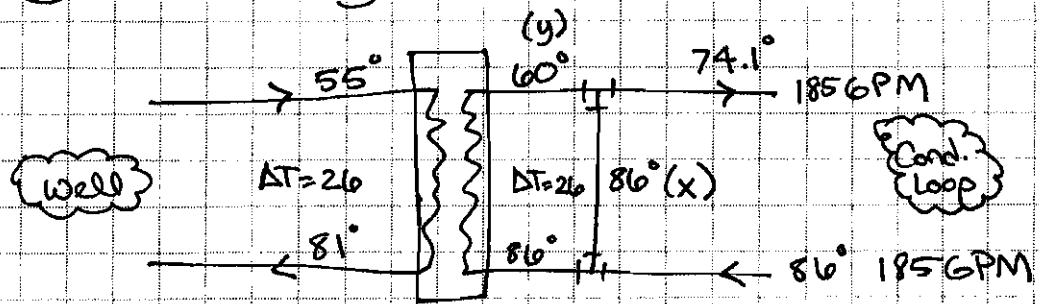
$$x = 43.2$$

$$x = 185 - y$$

MUSGROVE ENGINEERING, P.A.
 Over 30 Years Of Engineering Excellence
 410 S. Orchard, Suite 184
 Boise, Idaho 83705
 208.384.0585, Fax 208.384.0765

JOB The Falcon BUILDING
 SHEET NO. 2 OF 2
 CALCULATED BY _____ DATE 2/2007
 CHECKED BY _____ DATE _____
 SCALE _____

Ht. Exchanger - Cooling



$$\begin{aligned}
 86(x) + 60(y) &= 74.1(185) & x &= 185 - y \\
 86(185 - y) + 60(y) &= 13708.5 \\
 15910 - 86y + 60y &= 13708.5 \\
 y &= 84.7 \leftarrow * \\
 x &= 100.3
 \end{aligned}$$

* HEATING IS WORST CASE @ 141.8 GPM

(1) well @ 150 GPM Required