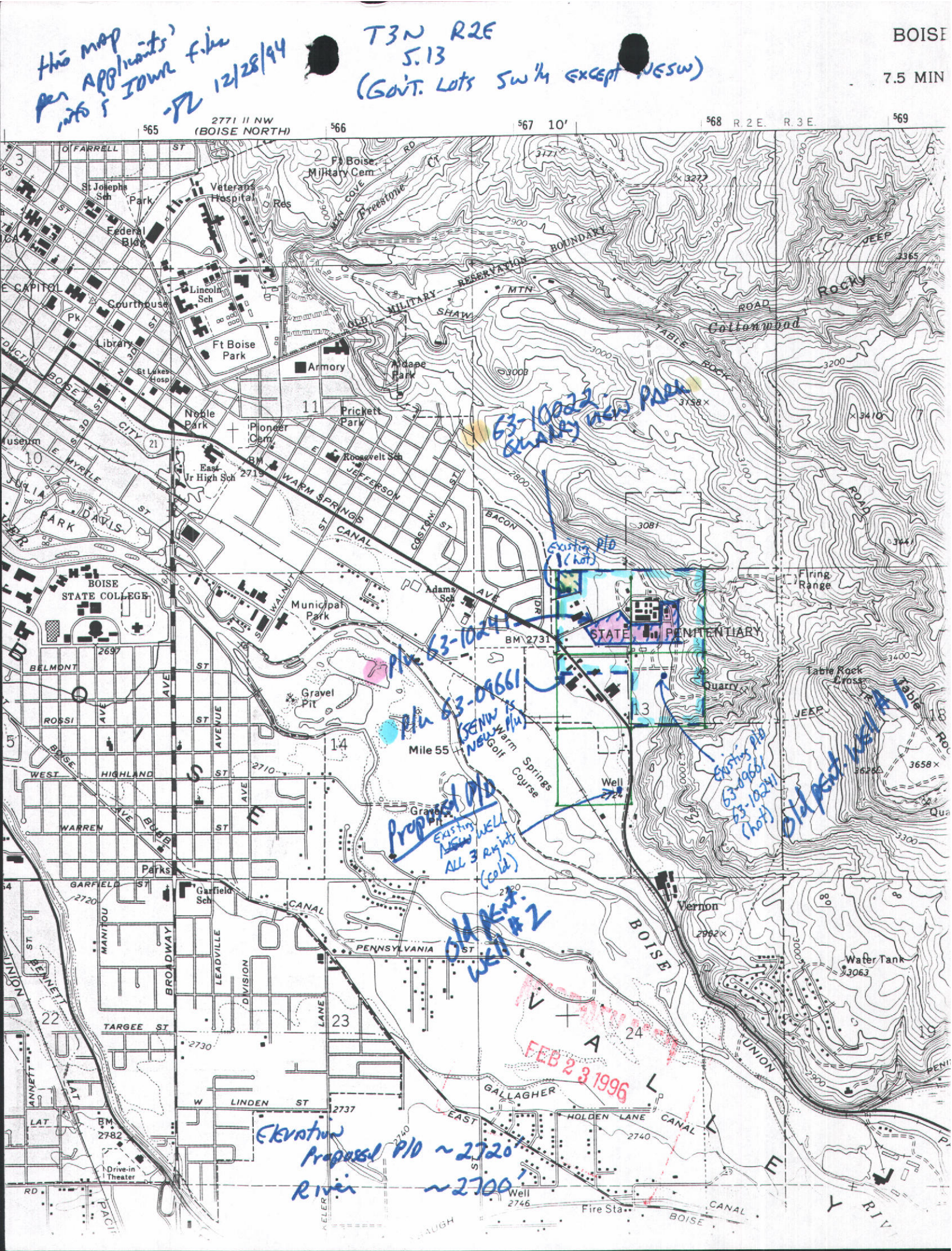

this map per Applicants' info & Town file -PZ 12/28/94
T3N R2E 5.13 (Gov't. Lots 5 SW¼ except NESW)
BOISE
7.5 MIN
2771 II NW (BOISE NORTH)
R. 2 E.
R. 3 E.
565
566
567
568
569
10'
O FARRELL ST
St Joseph Sch
Park
Veterans Hospital
Res
Ft Boise Military Cem
Freestone Cr
Cove Rd
Federal Bldg
E CAPITOL
Courthouse
Pk
Lincoln Sch
Library
Ft Boise Park
Armory
St Lukes Hosp
Idaho Park
Military Reservation Boundary
Shaw Mtn
Old Table Rock Road
Cottonwood
Rocky
Jeep
Noble Park
Pioneer Cem
Prickett Park
BM 2719
East Jr High Sch
Roosevelt Sch
Jefferson St
Warm Springs Canal
Bacon
Adams Sch
Ave
Dr
Museum
Julia Davis Park
E Myrtle St
City
Boise State College
Municipal Park
Walnut St
Gravel Pit
Belmont St
Rossi St
West Highland St
Warren St
Boise Ave
Broadway Ave
Capitol Blvd
Parks
Garfield St
Garfield Sch
Manitou
Leadville
Division
Lane
Pennsylvania St
Union
Bennett
Targee St
W Linden St
Lat
BM 2782
Drive-in Theater
Rd
Pacific
Keller
Gallagher
East St
Holden Lane
Canal
Well 2746
Fire Sta
Boise River
Valley
Union
Vernon
Water Tank
3063
Table Rock Cross
Quarry
Jeep
Firing Range
State Penitentiary
BM 2731
Mile 55
Golf Course
Well
Existing P/D (Hot)
63-10022 (Quarry) New Park
P/U 63-10241
P/U 63-09661 (SENW ¼ New P/U)
Proposed P/D
Existing NESW well All 3 Right (Cold)
Old Penit. well #2
Existing P/D 63-09661 63-10241 (hot)
Old Penit. well #1
FEB 23 1996
Elevation
Proposed P/D ~2720'
River ~2700'

# CITY OF BOISE

## PAYMENT VOUCHER

Page 1 of 1

| TRANSACTION CODE | | VOUCHER NUMBER | | VOUCHER DATE (m m d d y y) | ACCOUNTING PERIOD (m m y y) | BUDGET FY (y y) |
|---|---|---|---|---|---|---|
| | PV | | | 3 31 83 | | |

**ACTION**
- ☐ Original Entry (E)
- ☐ Adjustment (M)

**TYPE OF VOUCHER**
- ☐ Outside Vendor (1)
- ☐ Between Funds (2)
- ☐ Within Fund (3)

FUND: 002

COMMENTS (12): Cap. Fac. East End Park

SCHEDULED PAYMENT DATE (m m d d y y)

OFFSET LIABILITY ACCOUNT

**INTRA-GOVERNMENTAL VOUCHER**

OFFSET RECEIVABLES ACCOUNT

**VENDOR** code

name: Department of Water Resources

address: 450 West State Street

Boise, Idaho 83720

SELLER'S ACCOUNT DISTRIBUTION

| Fund | Agency | Organ-ization | Sub Org | Activity | Revenue Source | Sub Rev Src | Job Number | Reporting Category |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| REFERENCE PURCHASE ORDER CODE | REFERENCE PURCHASE ORDER NUMBER | REFERENCE PURCHASE ORDER LINE | AGENCY | ORGANIZATION | SUB ORG | ACTIVITY | OBJECT | SUB OBJ | REPT CATEG | BAL SHEET ACCT | INVOICE NO. / DESCRIPTION (30) | AMOUNT | INC/DEC IND | P/F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10 | 501 | | | 6869 | | | | Water Resources Permit-Quarry View Park | 45.00 | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

TOTAL 45.00

SPECIAL INSTRUCTIONS: Please process as soon as possible.

☐ MAIL ☐ RETURN TO DEPARTMENT ☐ OTHER

PURCHASING DEPT.

DEPARTMENT HEAD SIGNATURE

ACCTG INT.

MICROFILMED

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

Susan K. Mayer, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in the regular edition of The Idaho Statesman

for one insertion, in the issue of

May 12, 19 83.

Susan K. Mayer, Principal Clerk

Subscribed and sworn to before me this 12th

day of May, 19 83.

Notary Public for Idaho, Residing at Boise, Idaho

**NOTICE OF APPLICATION FOR WATER RIGHT**

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

63-10022 V/P

BOISE PARK SYSTEM
QUARRY VIEW PARK
1104 ROYAL BLVD., BOISE, ID 83706
Source: GROUNDWATER
Date Filed: 04/20/1983
Diversion Point: NENW Sec 13 T 03N R 02E
Use: IRRIGATION (0.60 CFS)
In: NENW Sec 13 T 03N R 02E FOR 8 ACRES

The permit(s) will be subject to all prior water rights. Protests must be filed with the Director, Dept. of Water Resources, Western Region, Statehouse, Boise, Idaho 83720 on or before MAY 23, 1983.

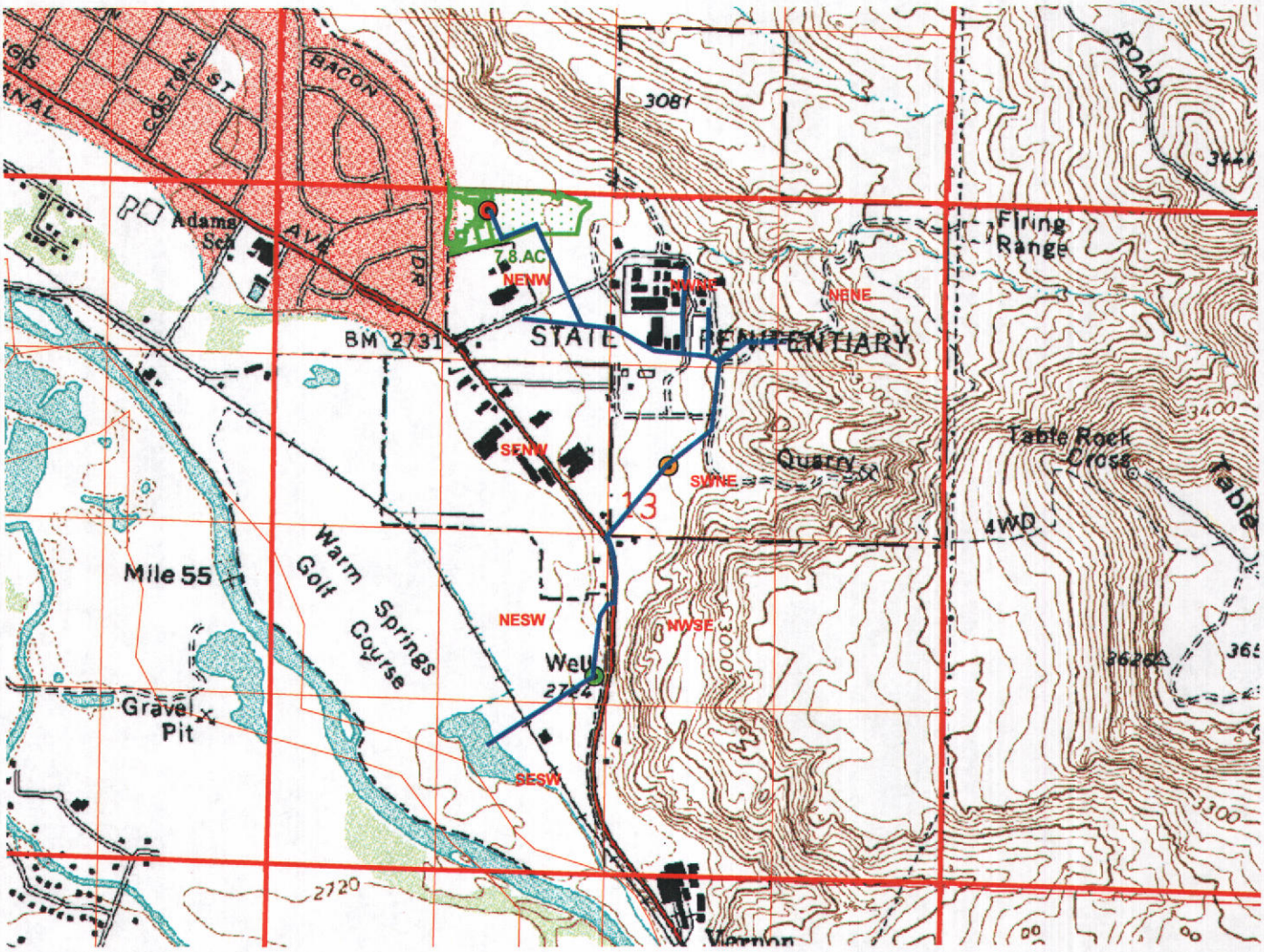
A. KENNETH DUNN
Director

Pub. May 5, 12, 1983 349

MICROFILMED

RECEIVED
MAY 18 1983
Department of Water Resources
Western Regional Office

# Field Exam 63-1022
# Quadrangle Map
# by Dan Nelson

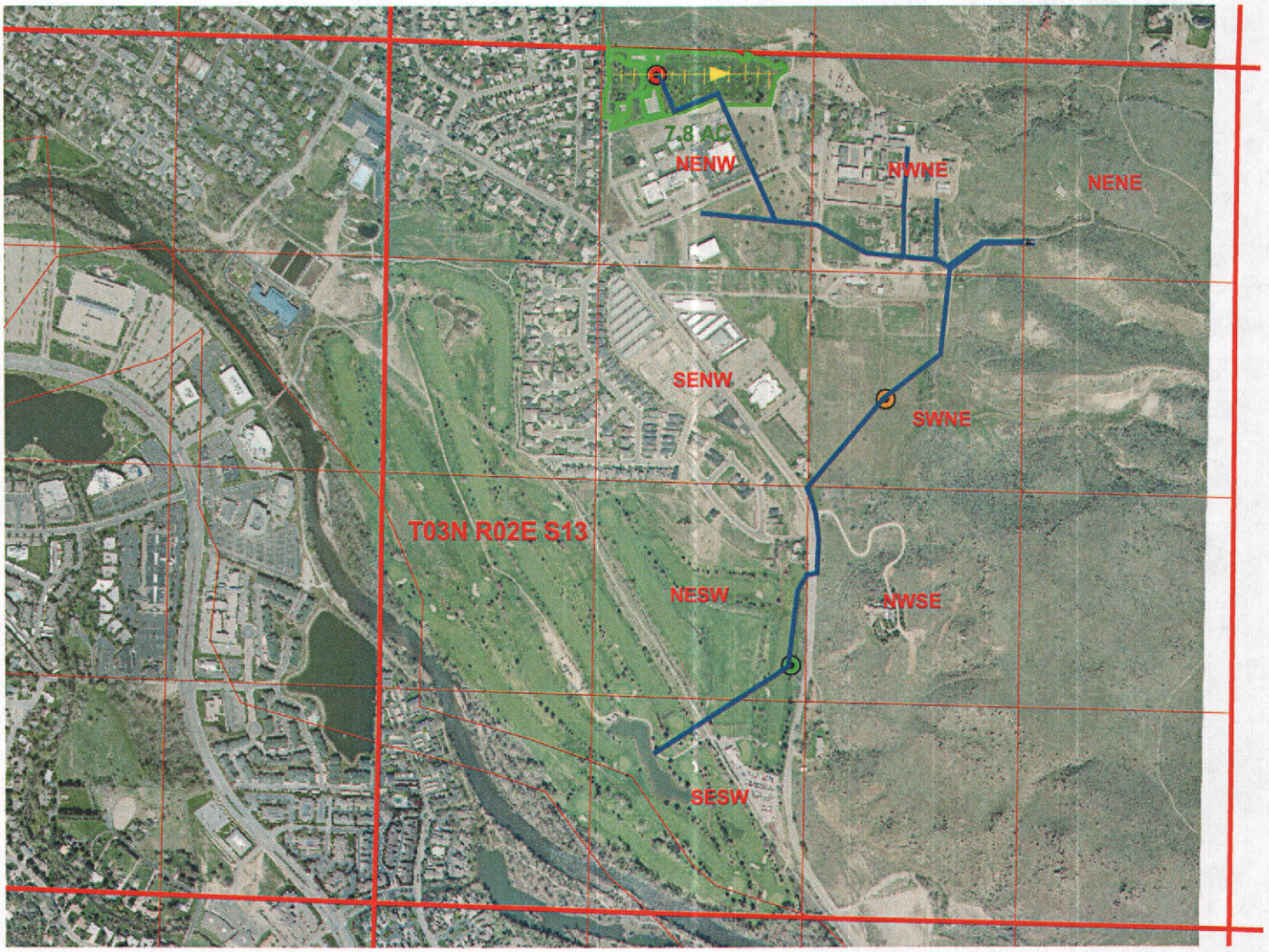



0.5 0 0.5 1 Miles

Reservoir
Mainline
Quarry Park Hot Well
Penitentiary Hot Well
Cold Well
Place of Use
Section Lines
1/4 1/4 Lines

N
W E
S

# Field Exam 63-10002
# System Diagram
# By Dan Nelson

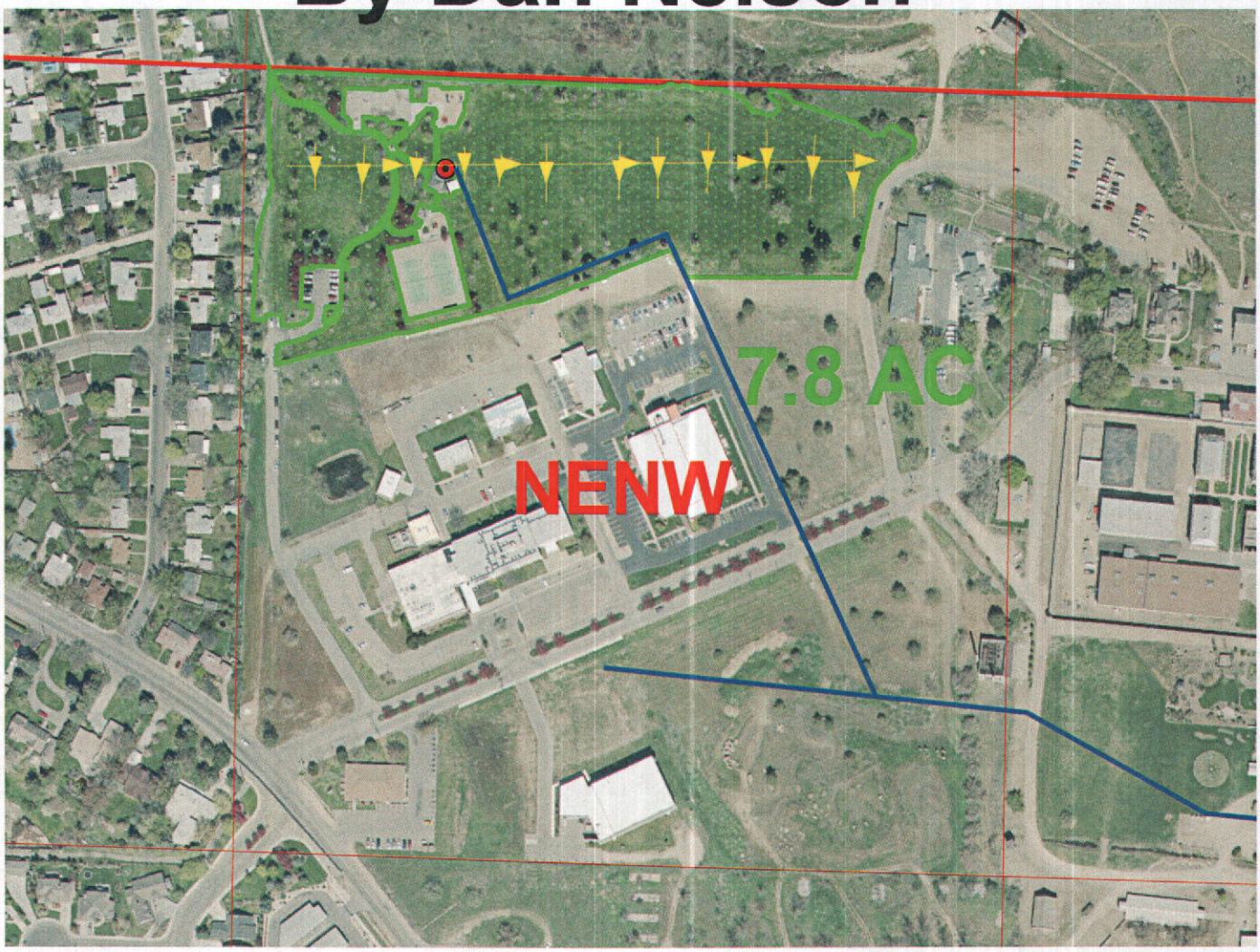



0.4 0 0.4 0.8 Miles

- Reservoir
- Sprinkler System
- Mainline
- Quarry Park Hot Well
- Penitentiary Hot Well
- Cold Well
- Place of Use
- Section Lines
- 1/4 1/4 Lines

N
W E
S

# Field Exam 63-10022
# System Diagram 2
# By Dan Nelson

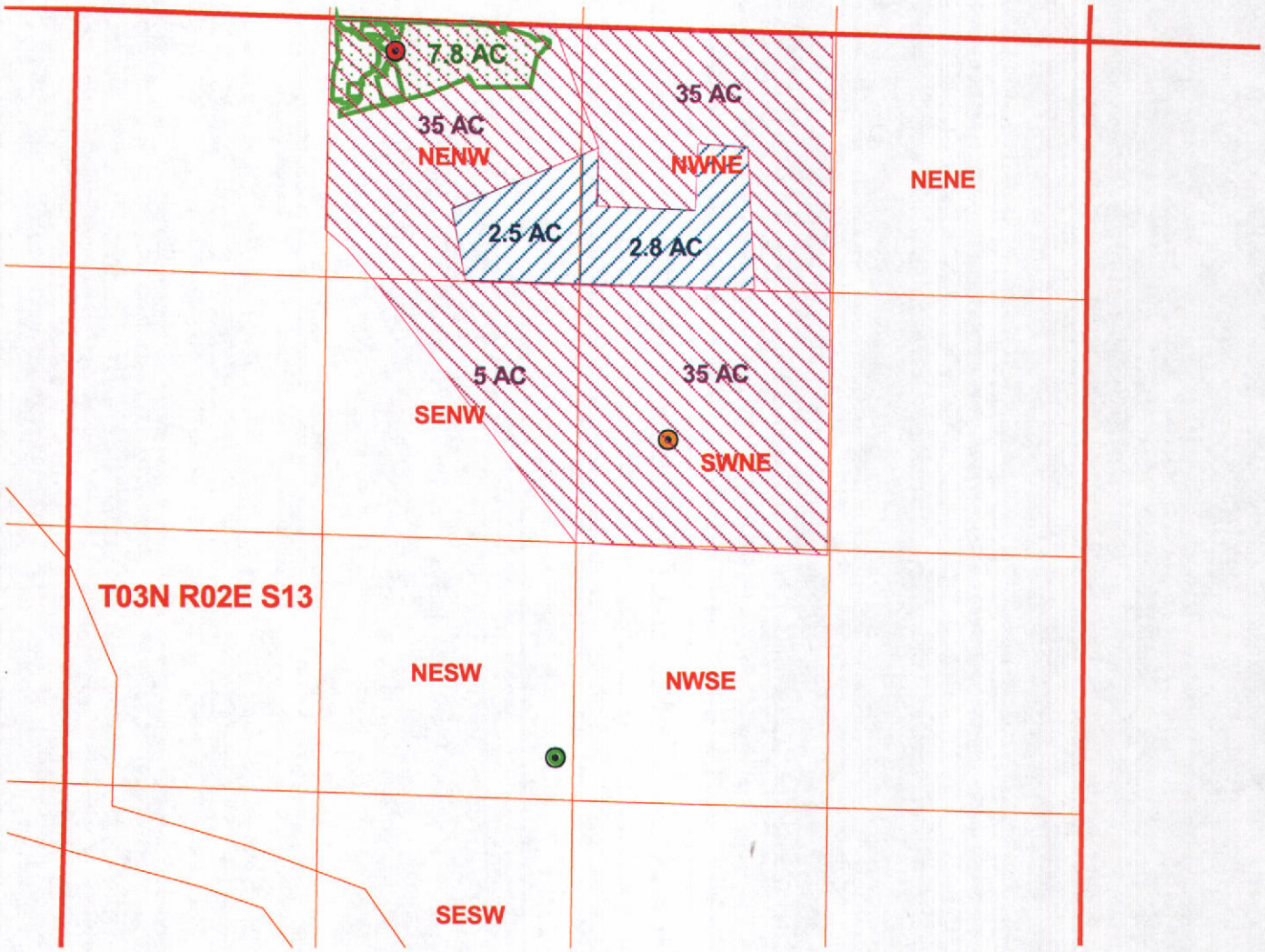



0.1 0 0.1 0.2 Miles

Sprinkler System
Mainline
Quarry Park Hot Well
Place of Use
Section Lines
1/4 1/4 Lines

N
W E
S

# FIELD EXAM 63-10022
# OVERLAP REVIEW
# BY DAN NELSON

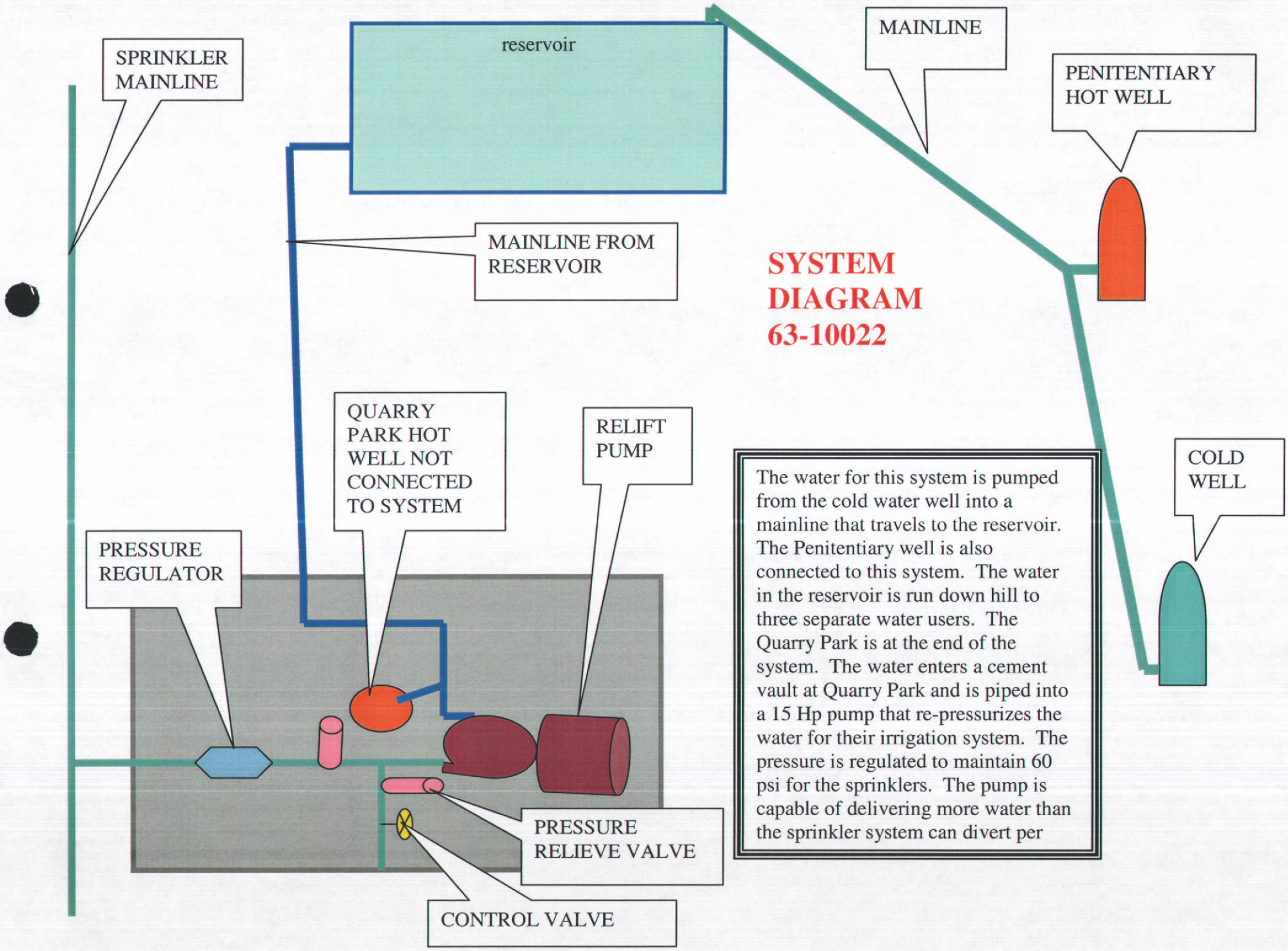



0.3 0 0.3 0.6 Miles

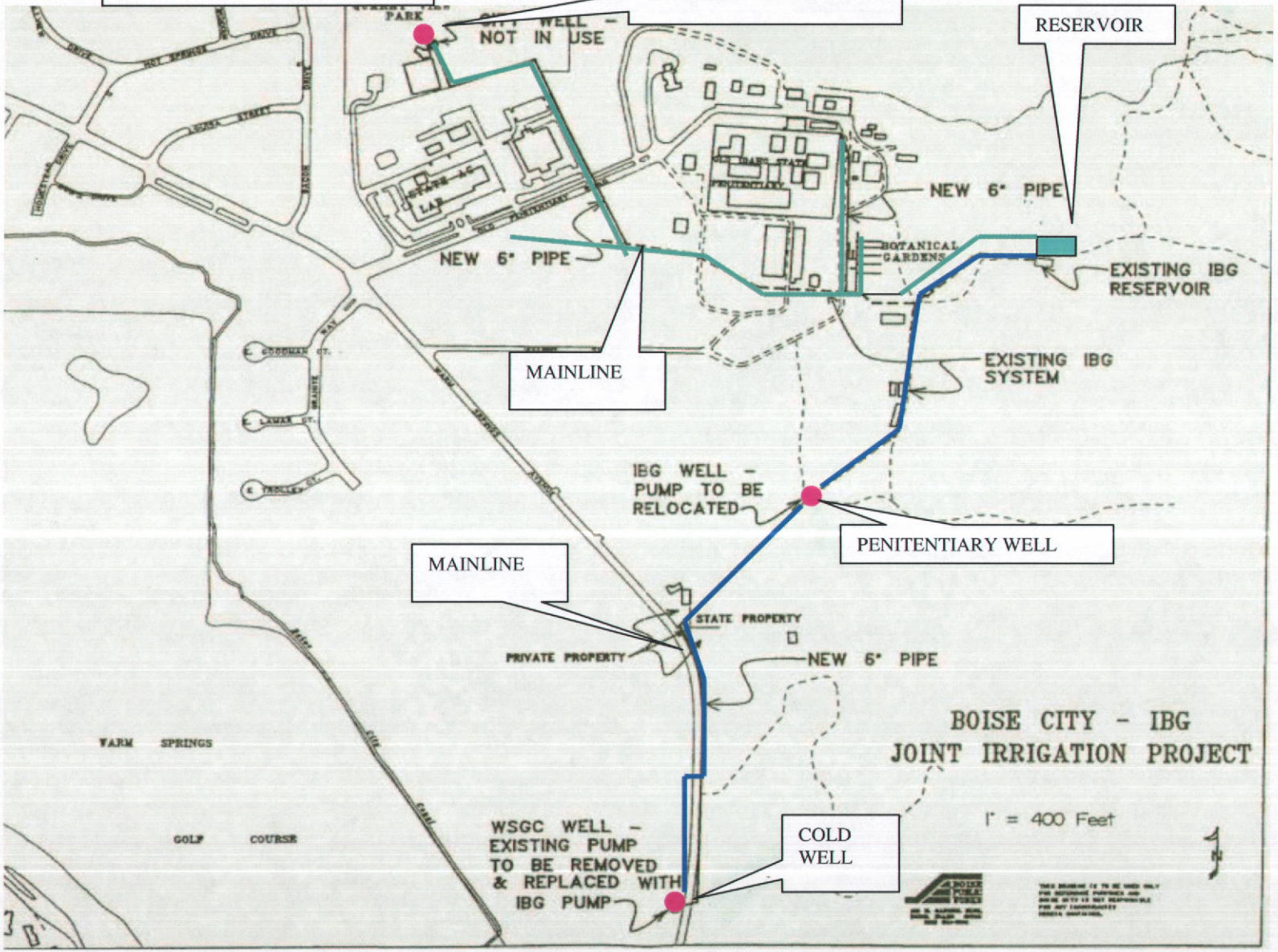
N
W E
S

63-9661 Place of Use
63-10241 Place of Use
63-10022 Place of Use
Cold Well (listed on all three rights)
Quarry Park Hot Well (list only on right 63-10022)
Penitentiary Hot Well (listed on rights 63-9661 & 63-10241)
Section Lines
1/4 1/4 Lines

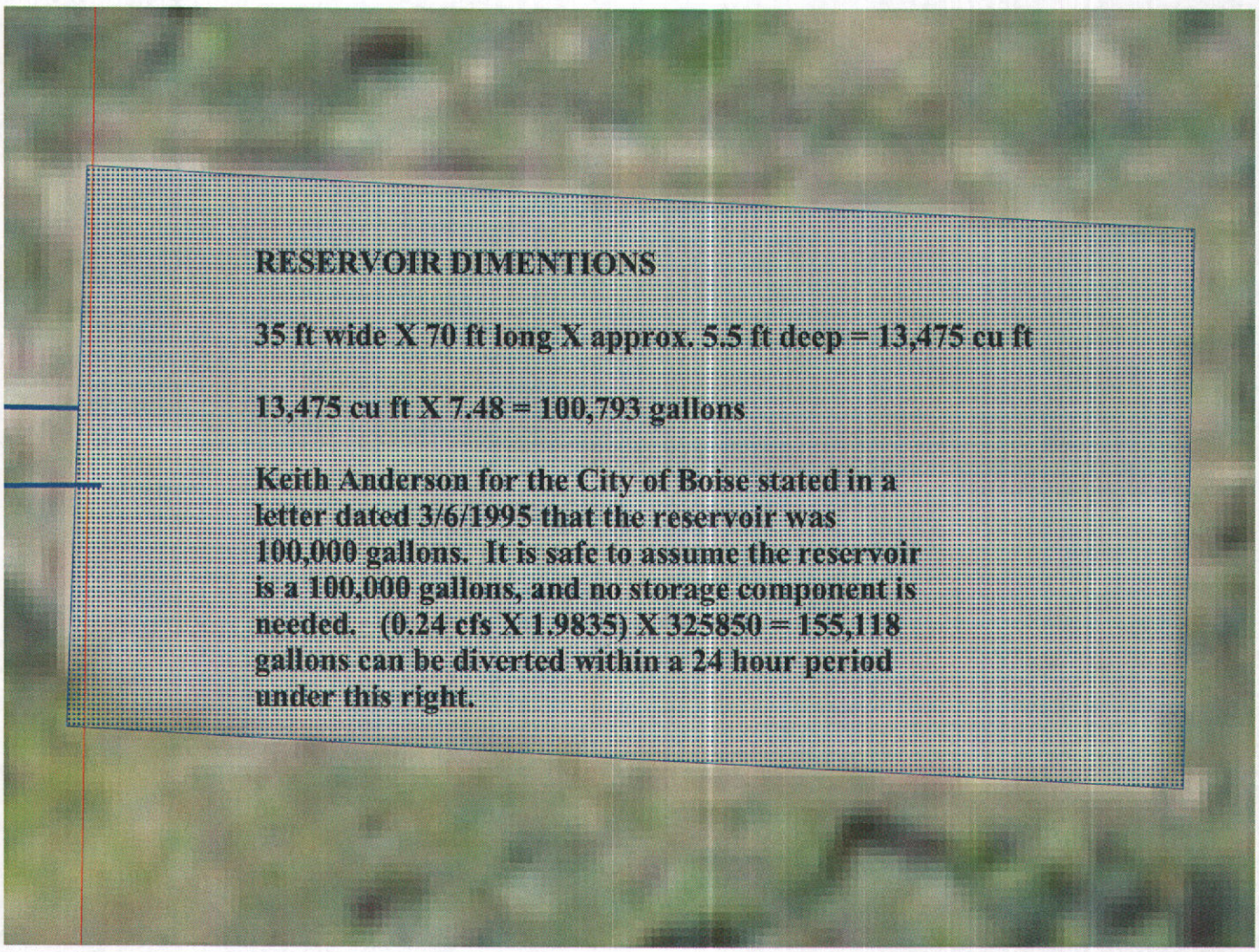
**PLEASE NOTE: Transfer 69327 has been filed to allow the Warm Springs Golf Course to irrigate out of the cold well also. This transfer hasn't been approved, but I wanted to mention it since it will come out of the cold well also. The place of use for the transfer will not affect the place of use for this permit.**


SPRINKLER MAINLINE
reservoir
MAINLINE
PENITENTIARY HOT WELL
MAINLINE FROM RESERVOIR
SYSTEM DIAGRAM 63-10022
QUARRY PARK HOT WELL NOT CONNECTED TO SYSTEM
RELIFT PUMP
COLD WELL
PRESSURE REGULATOR
PRESSURE RELIEVE VALVE
CONTROL VALVE
The water for this system is pumped from the cold water well into a mainline that travels to the reservoir. The Penitentiary well is also connected to this system. The water in the reservoir is run down hill to three separate water users. The Quarry Park is at the end of the system. The water enters a cement vault at Quarry Park and is piped into a 15 Hp pump that re-pressurizes the water for their irrigation system. The pressure is regulated to maintain 60 psi for the sprinklers. The pump is capable of delivering more water than the sprinkler system can divert per

# SYSTEM DIAGRAM



# Field Exam 63-10022
# Reservoir Dimensions
# By Dan Nelson




0.003 0 0.003 0.006 Miles

Idaho Department of Water Resources
Estimated Pumping Rate Computer

ed 1/6/2000

Flow Analysis Performed by: Dan Nelson  Date: 3/21/2005  Page 1 of 1

| | | | | | | |
|---|---|---|---|---|---|---|
| Record ID | | | | Measured Flow: | 0.37 cfs | |
| Water Right No. | 63-10022 | | | Designed Flow: | | Max Flow fr |
| Name | City of Boise | | | HP/Eff Flow: | 2.21 cfs | <<--Max |
| pod | Quarry Park Re-lift Pump | | | Sprinkler Flow: | 0.24 cfs | |
| year: | | | | Pivot/System Flow: | | |
| Flow Measurement: | 166 | gpm | = 0.37 cfs | (measured on the hot well in first exam) | | |
| Curve/Pump Design: | | gpm | = | | | |

Horsepower / Efficiency Method

| | | | | |
|---|---|---|---|---|
| Horsepower | 15 | hp | | (extremely oversized pump. See notes below) |
| PWL | -92.4 | ft | | |
| Disch Psi | 60 | psi | | |
| PUMP Eff Estimate | 0.77 | % | | |
| TDH | 46 | ft | | |
| OHP | 11.55 | hp | | |
| Flow | 990 | gpm | = 2.21 cfs | |

System Method:

| | | | | |
|---|---|---|---|---|
| No Lines | 1 | | | Nozzle Equation: Q=C*A*sqrt(2*g*h) / sqrt(1-r^4) |
| Birds per line | 19 | | | C= 1.00 Nozzle coefficient; typical 0.97 to 1.00 |
| Ttl no nozzles | 19 | | | r= 0.0065 ft Nozzle radius |
| Nozzle size | 5/32 | in | | A= 0.00013 ft^2 Nozzle area |
| Nozzle pressure | 60 | psi | | h= 139 ft Head |
| Flow per nozzle | 5.63 | gpm | | g= 32.2 ft/sec^2 Gravitational constant |
| Sprinkler Flow | 107 | gpm | | Q= 0.013 cfs Flow per nozzle |
| Percent Leaks | | % | | = 5.628 gpm Flow per nozzle |
| Total Flow | 107 | gpm | = 0.24 cfs | (per applicant's information) |
| Pivot / System rating | | gpm | = | |

Comments / Data Supplied:

The relift pump is way oversized for this type of use, and could supply well over 2.21 cfs at 60 psi. Therefore they have installed a pressure regulation system to reduce and maintain the pressure on the sprinklers at a constant rate. The pressure regulation system would put approximately 225 psi against the pump. This psi rate seemed extremely high to me, since this type of setup would be serverly inefficient. To ensure this system was reasonable, I spoke to Scott King about this oversized pump, and he told me that this is not an uncommon practice amongst municipalities. Mr. King has inspected many municipalities while working in he ESPA Measurement Districts, and I trust his opinion. The City's head of park maintenance, Mike Woodward, sent me the largest and smallest sprinkler stations on the parks irrigation system. The largest station supplied a maximum of 0.24 cfs for the system. The original field exam measured the diversion into this system as 0.37 cfs from the Hot well that is now abandoned, which seems reasonable even with the maximum drawdown. The earlier exam didn't state what or how many stations were in operation during the measurement. In a letter dated 3/6/1995, the City states that it uses 0.37 cfs of water for irrigation as determined by the measurement during the original field exam. In another letter dated 2/12/1996, another measurement was done on station # 9 which had a diversion rate of 0.27 cfs. The 1996 measurement is very close to the 0.24 cfs supplied by the City of their current system. The diversion rates requested by the applicant seem to vary greatly with very little supporting documentation. I believe that 0.24 cfs has been used on the system, and the right should be licensed for that amount. This is very close to the standard inch and half of water granted by the department for special irrigation needs for smaller systems like the parks.

Idaho Department of Water Resources
Estimated Pumping Rate Computer

ed 1/6/2000

Flow Analysis Performed by: Dan Nelson  Date: 3/21/2005  

| | | | |
|---|---|---|---|
| Record ID | | Measured Flow: | |
| Water Right No. | 63-10022 | Designed Flow: | |
| Name | City of Boise | HP/Eff Flow: | 1.97 cfs <<--Max |
| pod | Cold Water Well | Sprinkler Flow: | |
| year: | | Pivot/System Flow: | |

Flow Measurement: _____ gpm =

Curve/Pump Design: _____ gpm =

Horsepower / Efficiency Method

| | | | |
|---|---|---|---|
| Horsepower | 60 | hp | |
| PWL | 33 | ft | (See comments below for pressure and water level data) |
| Disch Psi | 77.5 | psi | |
| PUMP Eff Estimate | 0.79 | % | |
| TDH | 212 | ft | |
| OHP | 47.4 | hp | |
| Flow | 885 | gpm = | 1.97 cfs |

System Method:

| | | | |
|---|---|---|---|
| No Lines | | | |
| Birds per line | | | |
| Ttl no nozzles | 0 | | |
| Nozzle size | | in | |
| Nozzle pressure | | psi | |
| Flow per nozzle | 0.00 | gpm | |
| Sprinkler Flow | 0 | gpm | |
| Percent Leaks | | % | |
| Total Flow | 0 | gpm = | |

Pivot / System rating _____ gpm =

Nozzle Equation: Q=C*A*sqrt(2*g*h) / sqrt(1-r^4)

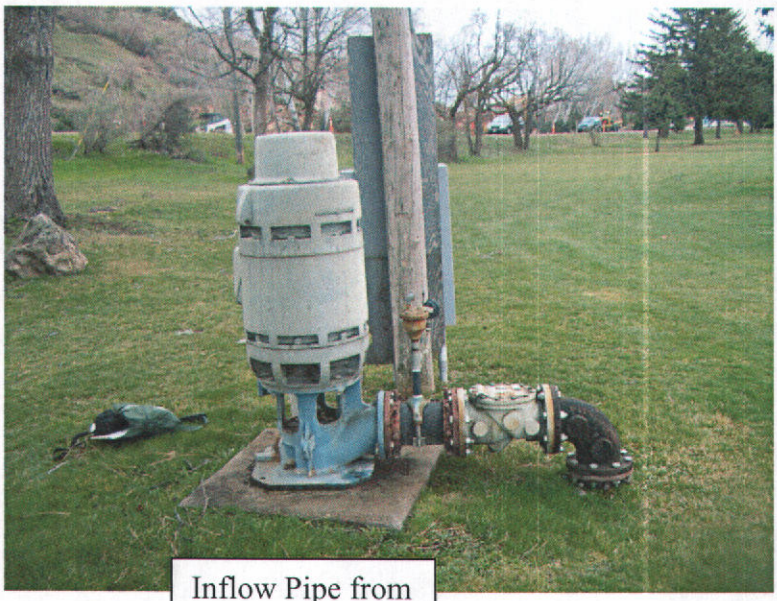
| | | | |
|---|---|---|---|
| C= | 1.00 | | Nozzle coefficient; typical 0.97 to 1.00 |
| r= | 0.0000 | ft | Nozzle radius |
| A= | 0.00000 | ft^2 | Nozzle area |
| h= | 0 | ft | Head |
| g= | 32.2 | ft/sec^2 | Gravitational constant |
| Q= | 0.000 | cfs | Flow per nozzle |
| = | 0.000 | gpm | Flow per nozzle |

Comments / Data Supplied:

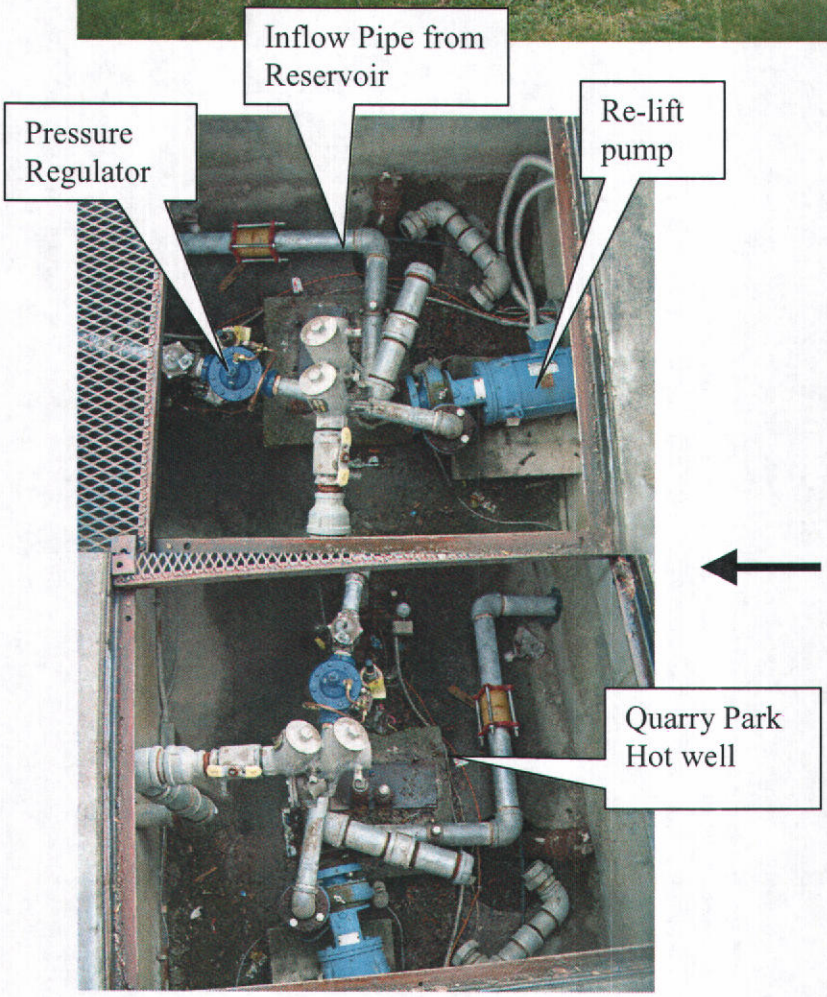
A pump test was performed on the Cold Water well at the Warm Springs Golf Course in July of 1995. This test revealed a pumping level of 21.77 feet at a pumping rate of 587 gpm for a 24 hour period. In a letter Ed Squires to the City during this test, Mr. Squires states that Layne Pump of Idaho did a pump test at the time that the well was drilled with a pumping level of 33 ft at 700 gpm. Therefore, I used the pumping level of 33 feet. It seems reasonable that the higher rate diverted from the pump would cause an increase in the drawdown of the well. During the pump test, the pumping level never did stabilize, so it is safe to assume that an average of 33 feet drawdown would be a reasonable long term pumping water level. The water from the well is pumped up hill approximately 156 feet. I used the Quadrangle map to determine the difference in feet of elevation from the pump to the reservoir or 156 feet difference. A 156 feet of lift from the pump to the reservoir would equal approximately 67.5 psi. I added an additional 10 psi on to this number to account for friction loss and pressure of the open discharge. Therefore, at estimated the pressure on the well at 77.5 psi. The pump test was done at a diversion rate of 587 gpm or 1.31 cfs. In the narrative, it implies that the had the pump valved back to this flow rate. I believe that the above calculation is a reasonable estimation of the pump capacity.

*PHOTOGRAPHER AND DATE OF PHOTOS* DANIEL A NELSON 3/21/2005

*FILE NUMBER* 63-10022



This is a photo of the cold water well located at Warm Springs Golf Course. The well diverts into a mainline the feeds the reservoir. The water from the reservoir then feeds the re-lift pump shown below



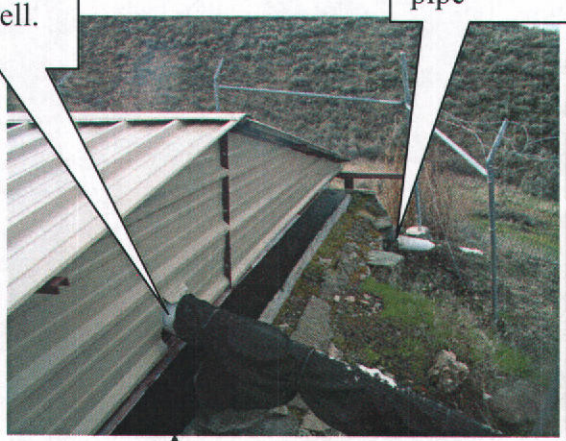

These are pictures of the vault at Quarry Park. The water comes in through the pipeline with the yellow and red connector to a re-lift pump. The relift pump then sends the water through a pressure regulator, and then sends it out to the sprinkler system. The hole in the bottom of the vault is the Quarry Park Hot Well. There is no pump in the well. According to the city representative that accompanied me, the well has been partially filled in, and hasn't been used for some time.

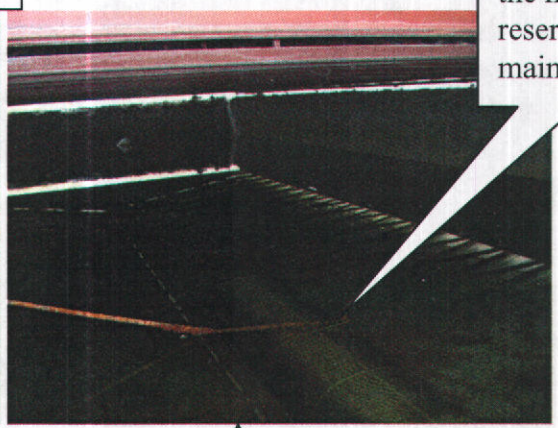
***PHOTOGRAPHER AND DATE OF PHOTOS*** DANIEL A NELSON 3/21/2005
***FILE NUMBER*** 63-10022





The above pictures are of the reservoir for the irrigation system. 3 different water users share the reservoir.




The black pipe above is where the water from the well comes into the reservoir. The white pipe on corner of the building is the overflow in case the automatic floats doesn't work. The cold water well is connected to a float regulation system for the reservoir. Once the reservoir is lowered to a certain point the well kicks on and fills the reservoir.

The above photo is of the inside of the reservoir. A half pipe type screen runs along the bottom of the reservoir. The mainline is filled from the water flowing through the screen.

***PHOTOGRAPHER AND DATE OF PHOTOS*** DANIEL A NELSON 3/21/2005

***FILE NUMBER*** 63-10022



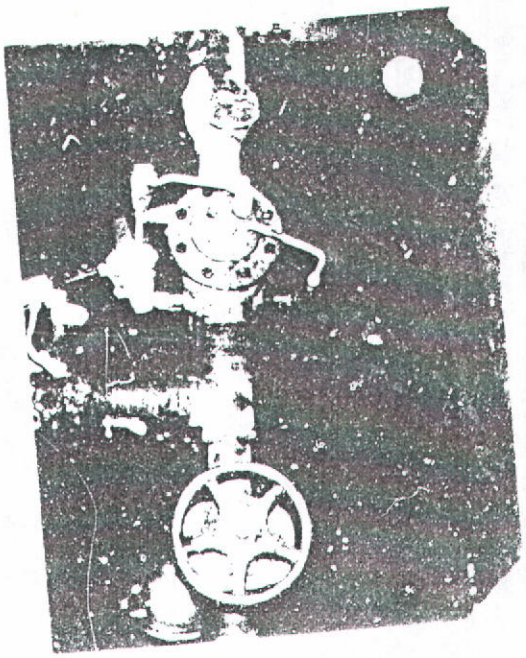


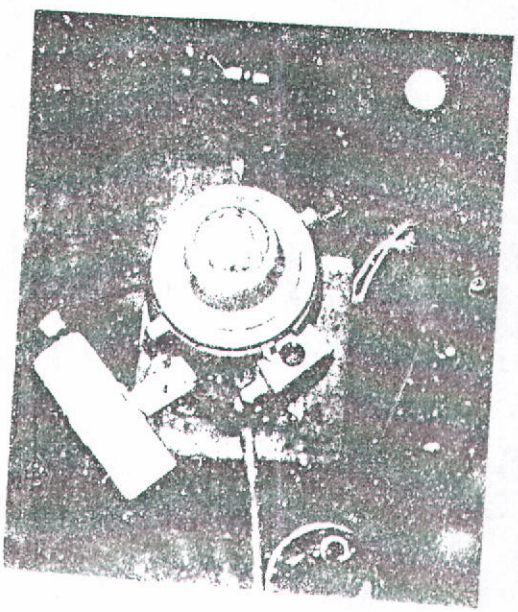
These are photos of the park. The irrigation vault is located on the other side of the building behind the burgundy vehicle.

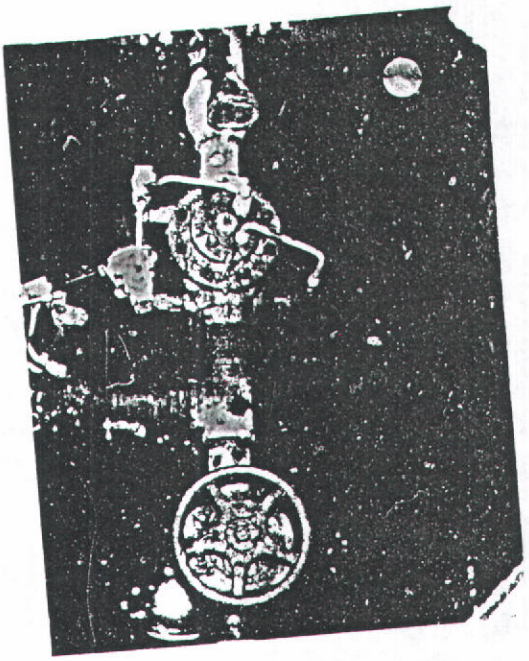


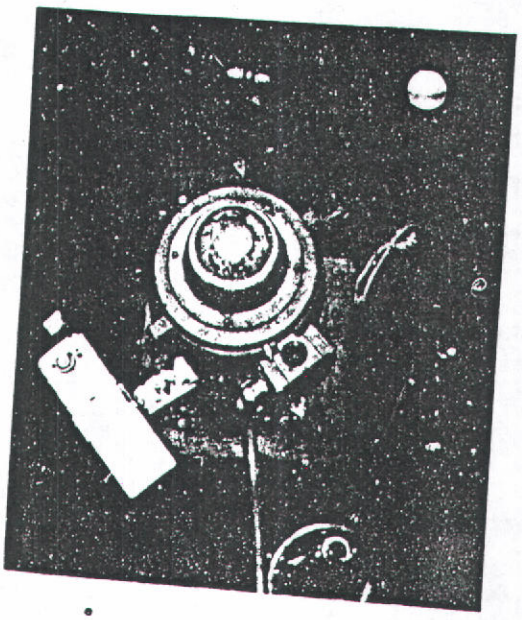











Hot Well
Relift
From Res.

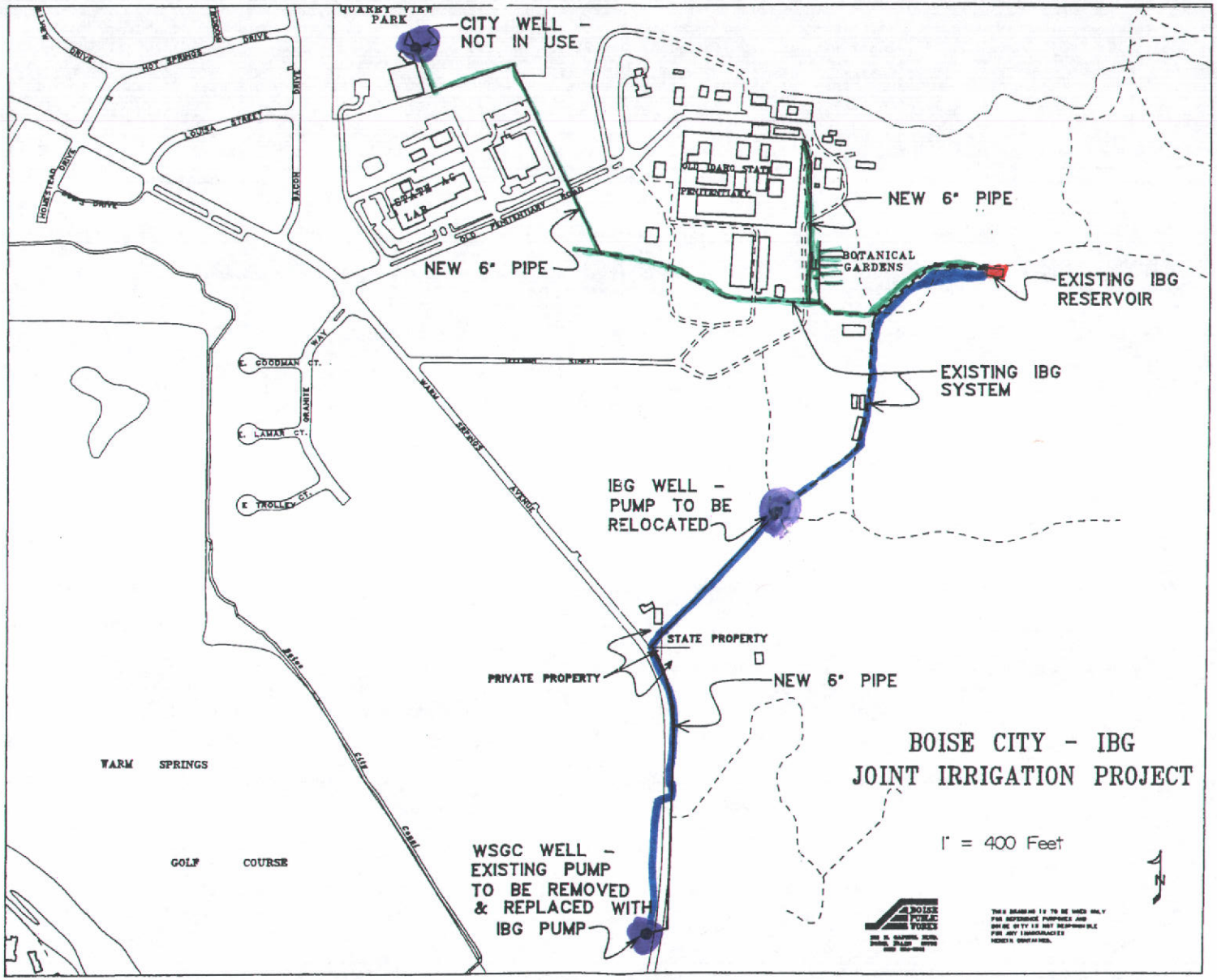


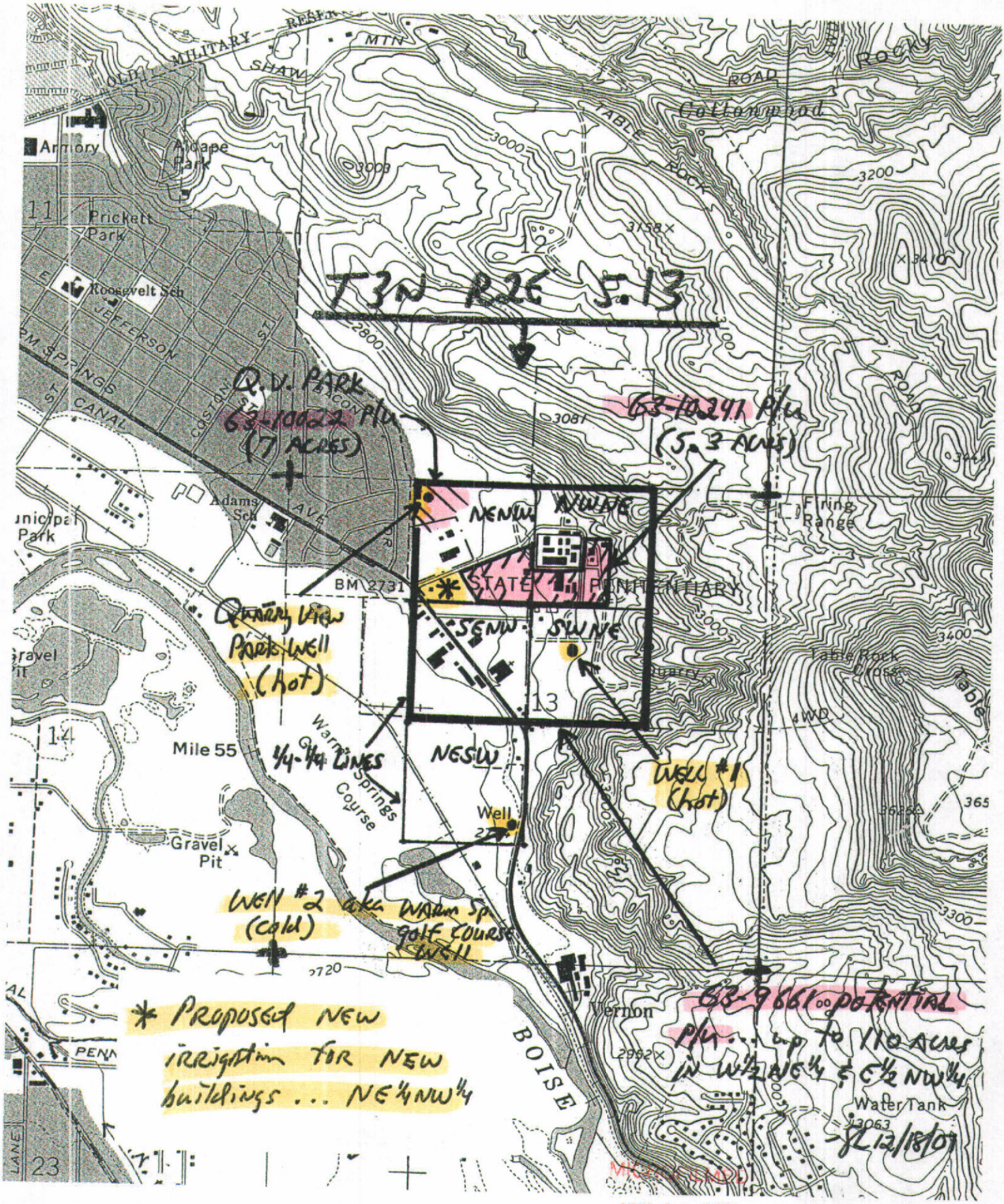
10241
x Fed
4526
Road
Cold
Well

* For
69327
Proposes
moving
water
to cold
well
(no hot wells
included.)

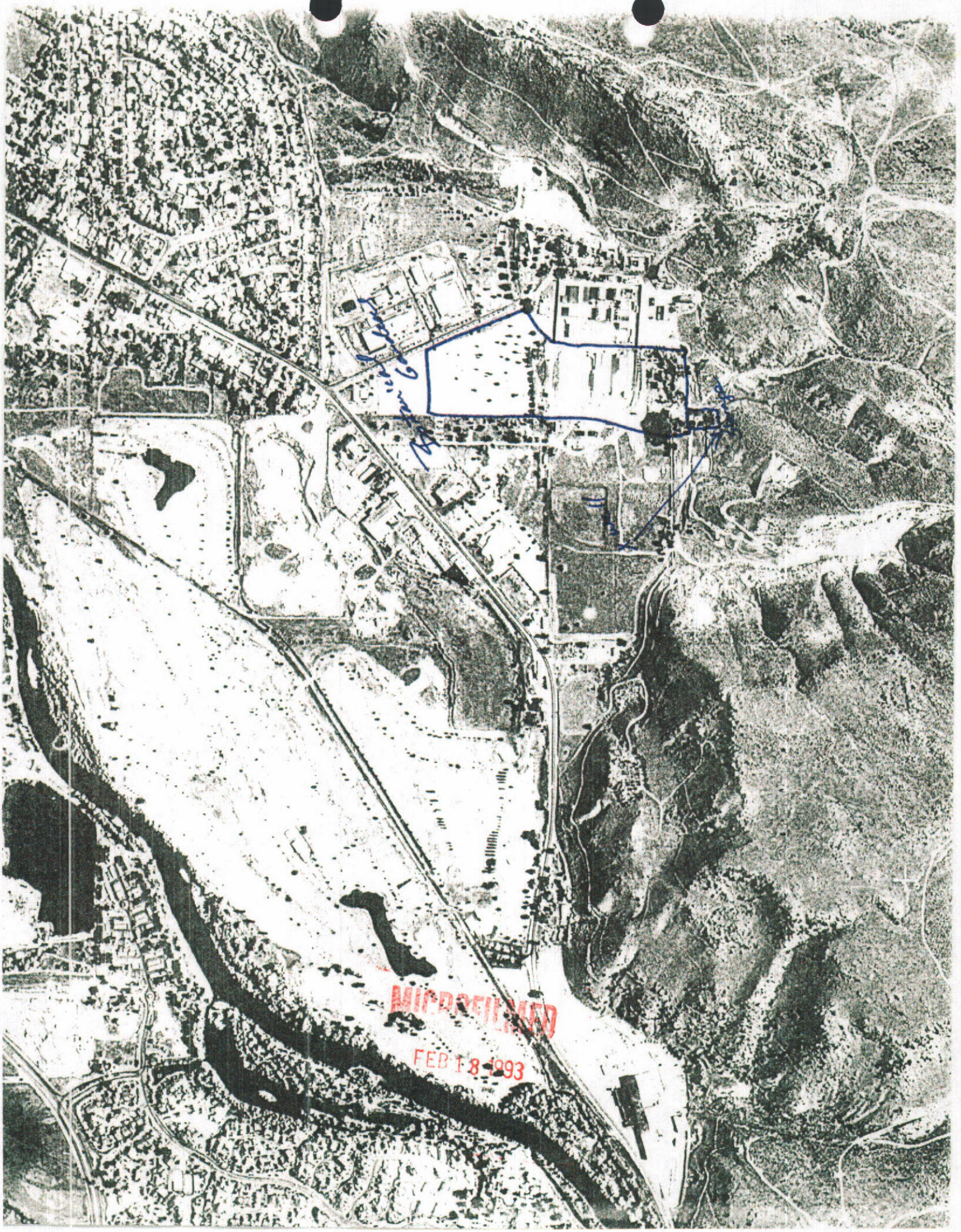



SYSTEM
NOT generally used
COLD well


QUARRY VIEW PARK
CITY WELL - NOT IN USE
NEW 6" PIPE
NEW 6" PIPE
OLD IDAHO STATE PENITENTIARY
BOTANICAL GARDENS
EXISTING IBG RESERVOIR
EXISTING IBG SYSTEM
IBG WELL - PUMP TO BE RELOCATED
STATE PROPERTY
PRIVATE PROPERTY
NEW 6" PIPE
WARM SPRINGS GOLF COURSE
WSGC WELL - EXISTING PUMP TO BE REMOVED & REPLACED WITH IBG PUMP
BOISE CITY - IBG JOINT IRRIGATION PROJECT
1" = 400 Feet
N
BOISE PUBLIC WORKS


T3N R2E S.13
Q.V. PARK
63-10022 Plu
(7 ACRES)
63-10241 Plu
(5.3 ACRES)
NENW
NWNE
SENW
SWNE
NESW
STATE PENITENTIARY
Quarry View Park Well (Hot)
1/4-1/4 LINES
WELL #1 (Hot)
WELL #2 aka Warm Sp Golf Course Well
(Cold)
* PROPOSED NEW IRRIGATION FOR NEW buildings ... NE¼NW¼
63-9661 POTENTIAL Plu ... up to 110 ACRES IN W½NE¼ & E½NW¼
Armory
Prickett Park
Roosevelt Sch
Adams Sch
Mile 55
Gravel Pit
Warm Springs Golf Course
Well
Vernon
Water Tank
Firing Range
Table Rock
Cottonwood
Military Reserve
Shaw Mtn
Rocky Road
Table Rock Road
Jefferson St
Warm Springs Ave
Canal
Penn
Lane
Boise
4WD
BM 2731
3158
3008
3081
3063
2992
2720
3000
3200
3400
3300
2800
11
12
13
14
23

JAN 09 2002



MICROFILMED
FEB 18 1993

Well Log Form 1

RECEIVED
JUL 6 1965
Department of Reclamation

# WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL: SEE IDAHO STATUTES 42-238

Permit No. ____ Well No. ____ County Ada

Owner D. & K. Parkinson

Address Boise

Driller L. Chapman

Address 1517 Broadway Ave.

Well location NE ¼ NE ¼ Sec. 13, T. 3 N/S, R. 3 E/W

Size of drilled hole 6"

Total depth of well 527'

Give depth to standing water from the ground 16' Water temp. ____ Fahr.

Test delivery was ____ g.p.m. or ____ c.f.s. Drawdown was ____ feet. Pump? ____ Bailer? ____

Size of pump and motor used to make test ____

Length of time of test ____ hours ____ minutes.

If flowing well, give flow ____ c.f.s. or ____ g.p.m. and of shut off pressure ____

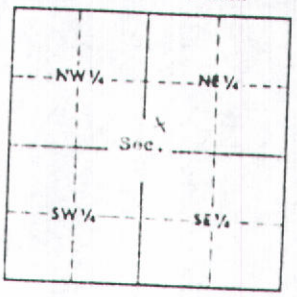
If flowing well, described control works ____ (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for Domestic Weight of casing per lineal foot 17#

Thickness of casing .219 Casing material Steel (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing ____
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

Locate well in section




## CASING RECORD

| Diam. Casing | From Feet | To Feet | Length | Remarks—seals, grouting, etc. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Number and size of perforations ____ located ____ feet to ____ feet from ground

Date of commencement of well ____ Date of completion of well 6/21/65

NE NE 13 3N 3E

WELL LOG

| From Feet | To Feet | Type of Material | Water-bearing Formation Ans. Yes or No | Casing Perforated Ans. Yes or No |
|---|---|---|---|---|
| 0 | 10 | Top soil Silty sand | | |
| 10 | 15 | Coarse sand | | |
| 15 | 45 | Med gravel | Yes | |
| 45 | 50 | Sandy clay | No | |
| 50 | 56 | white | No | |
| 56 | 58 | Thin Layer clay & Layer sand | Yes | |
| 58 | 62 | Coarse sand | Yes | |
| | | | | |
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| | | | | |
| | | If more space is required use Sheet No. 2 | | |

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

Signed H J Blagwell

By

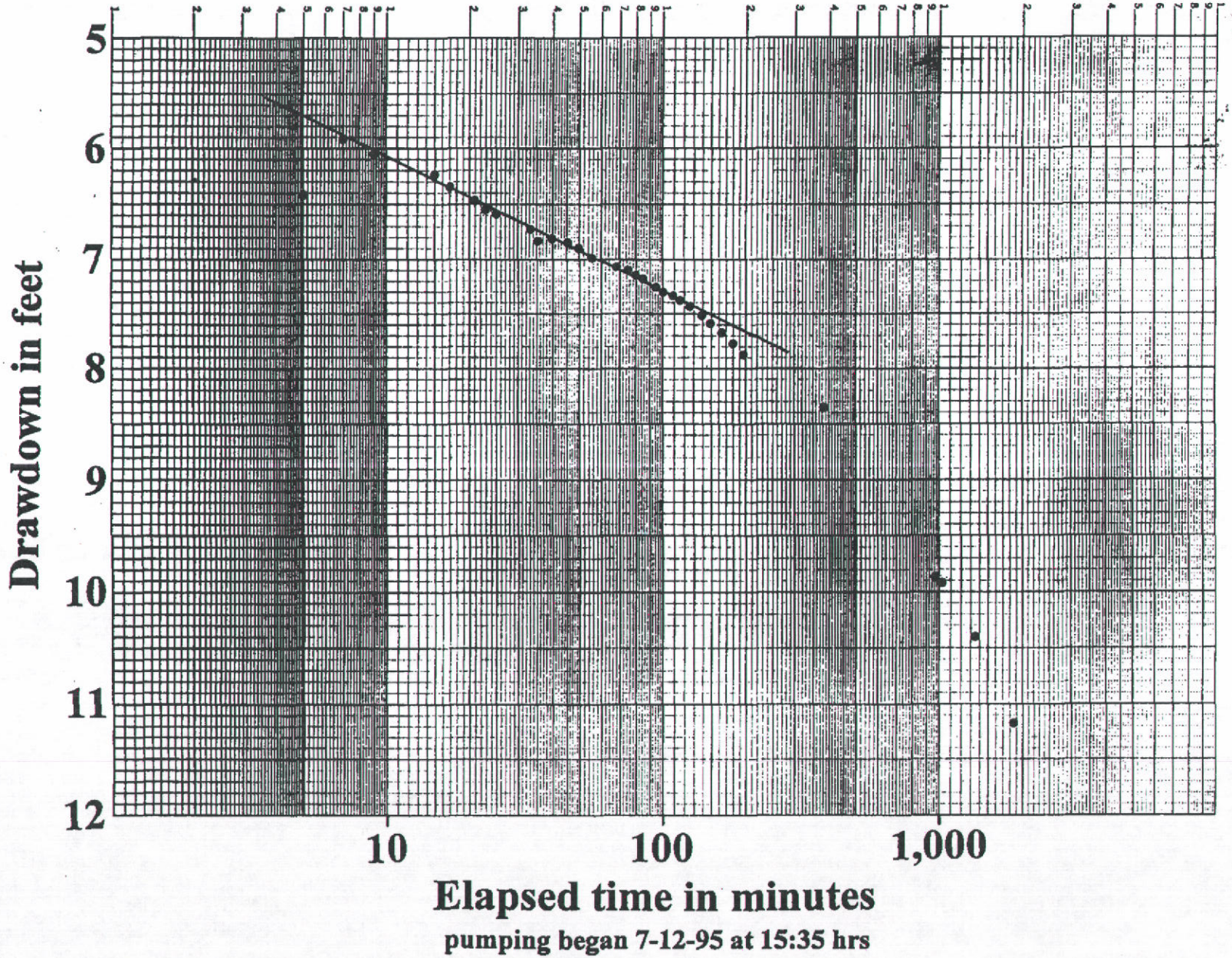
License No. 45

Dated 6-2, 1965.

Well Driller's helper Gil Nelson

# WARM SPRINGS GOLF COURSE

## Constant Discharge Test (587 gpm)




pumping began 7-12-95 at 15:35 hrs

JAN 31 1996

Well Log Form 1

# WELL LOG AND REPORT TO THE [illegible] of Reclamation
# STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL. SEE IDAHO STATUTES 42-238

Permit No. B 32252 Well No. 2 County [illegible]

Owner State of Idaho - Risco

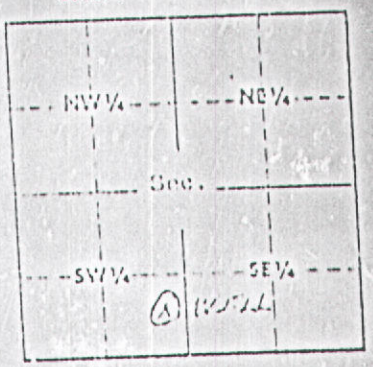
Address [illegible]

Driller Layne

Address 4062 Federal Way, Boise

Well location SE¼ SW¼ Sec. 13, T. 2 N/S, R. 2 E/W

Locate well in section




Size of drilled hole 16"

Total depth of well 110

Give depth to standing water from the ground 10' Water temp. 63 Fahr.

Test delivery was 1600 g.p.m. or [illegible] c.f.s. Drawdown was 45 feet. Pump? Y Bail? [illegible]

Size of pump and motor used to make test 10" Layne - Bowler [illegible]

Length of time of test 8 hours [illegible] minutes.

If flowing well, give flow No c.f.s. or No g.p.m. and of shut off pressure No

If flowing well, described control works No (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for [illegible] Weight of casing per lineal foot [illegible]

Thickness of casing 375 Casing material Steel (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 16" - 105' 12" 4'0"
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

## CASING RECORD

| Diam. Casing | From Feet | To Feet | Length | Remarks—seals, grouting, etc. |
|---|---|---|---|---|
| | | | | Pumping Test 1600 GPM 45' Drawdown |
| 16" | 0 | 105' | 105' | 1350 GPM 40' " |
| 12" | 0 | 410 | 410 | 1100 GPM 35' " |
| | | | | [illegible] |
| | | | | [illegible] |

Number and size of perforations 4 - 1 4" located [illegible] feet to [illegible] feet from ground

Date of commencement of well Aug 1 - 65 Date of completion of well Sept 4 - 65

ESA [illegible]

WELL LOG

| From Feet | To Feet | Type of Material | Encountered Formation And Yes or No | Cable Perforated And Yes or No |
|---|---|---|---|---|
| 0 | | | | |
| 0 | 10 | Soil | No | No |
| 10 | 30 | Mud & sand | Yes | Yes |
| 30 | 68 | Sand | No | No |
| 68 | 130 | Blue shale | No | No |
| 130 | 243 | 3 Strings of Bleached Sand | Yes | Yes |
| 243 | 305 | Hard Blue Shale with strings of sand | Yes | Yes |
| 305 | 315 | Blue Clay | No | No |
| 315 | 415 | Hard blue shale with stringers of sand | Yes | Yes |
| 415 | 432 | Sandy shale | Yes | Yes |
| 432 | 436 | Blue shale - gassed | Yes | Yes |
| 436 | 439 | Lava rock | No | Yes |
| 439 | 470 | Blue shale | No | No |

If more space is required use Sheet No. 2

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

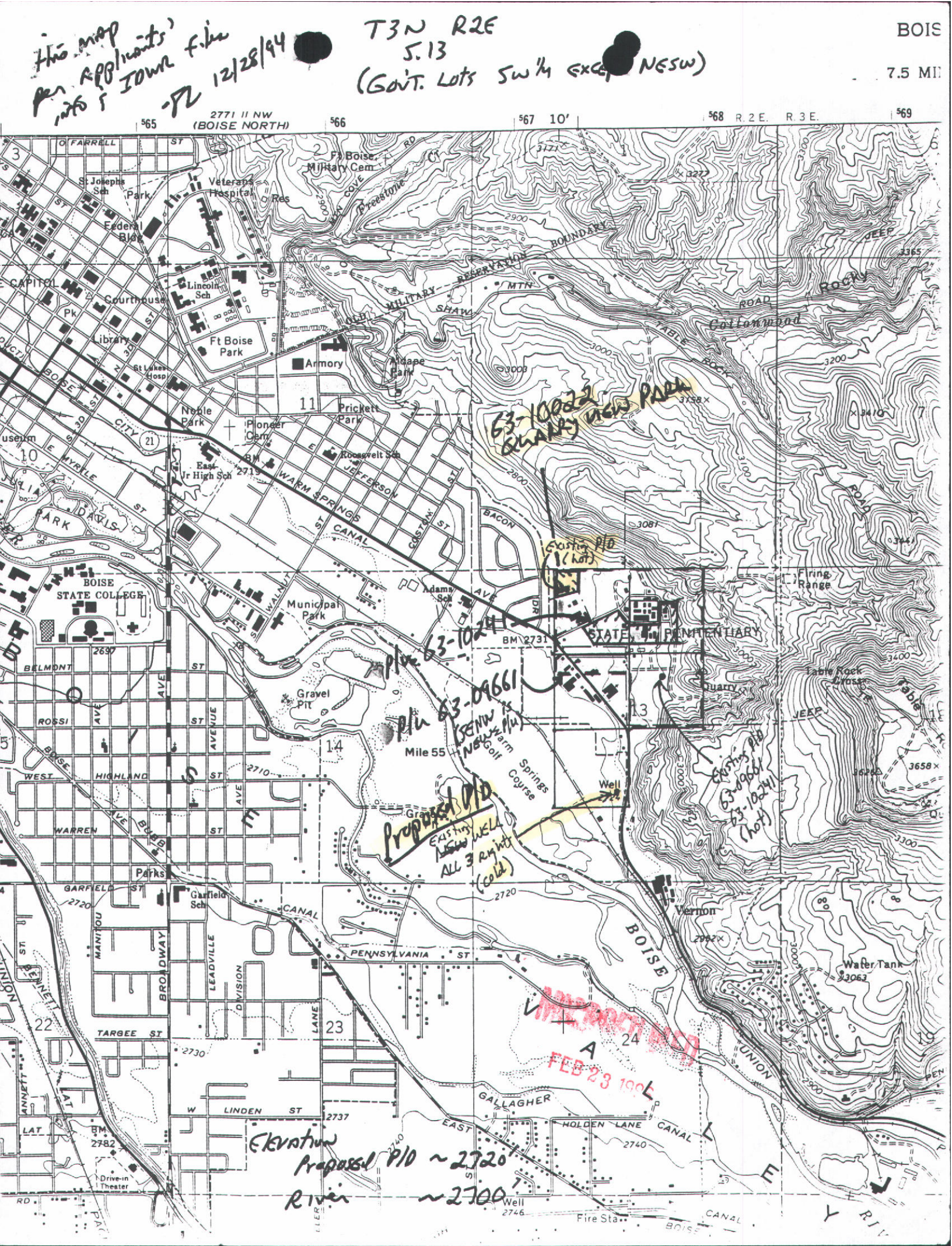
Signed Edwin J. Lubotsky

By

License No. 122

Dated Oct 65, 19

Well driller's helper


this map per applicants' info & town file -PL 12/28/94
T3N R2E
S.13
(Gov't. Lots SW¼ exc NESW)
BOIS
7.5 MI
2771 II NW
(BOISE NORTH)
R.2E.
R.3E.
63-10822 (Shafer) view Park
Existing P/D (hot)
Plus 63-10241
Plus 63-09661 (SENW NESW Plu)
Existing P/D 63-09661 63-10241 (hot)
Proposed P/D
Existing NESW well all 3 right (cold)
Elevation
Proposal P/D ~2720'
River ~2700'
FEB 23 1995

## WELL LOG

| From Feet | To Feet | Type of Material | Water-bearing Formation Ans. Yes or No | Casing Perforated Ans. Yes or No |
|---|---|---|---|---|
| 0' | | | | |
| 0' | 10' | Soil | No | No |
| 10' | 30 | Gravel + sand | Yes | No |
| 30 | 68 | Sand | No | No |
| 68 | 180 | Blue shale | No | No |
| 180 | 243 | Stringers of Blue shale + Sand | Yes | Yes |
| 243 | 305 | Hard Blue shale with sand & water | Yes | Yes |
| 305' | 315 | Blue shale | No | Yes |
| 315' | 415 | Hard Blue shale with Stringers of sand | Yes | Yes |
| 415 | 432 | Sandy shale | Yes | Yes |
| 432 | 436 | Blue shale - Coal | Yes | Yes |
| 436 | 431 | Coal | No | Yes |
| 431 | 490 | Blue shale | No | No |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | If more space is required use Sheet No. 2 | | |

### WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

Signed Felix M Goodwin

By _____

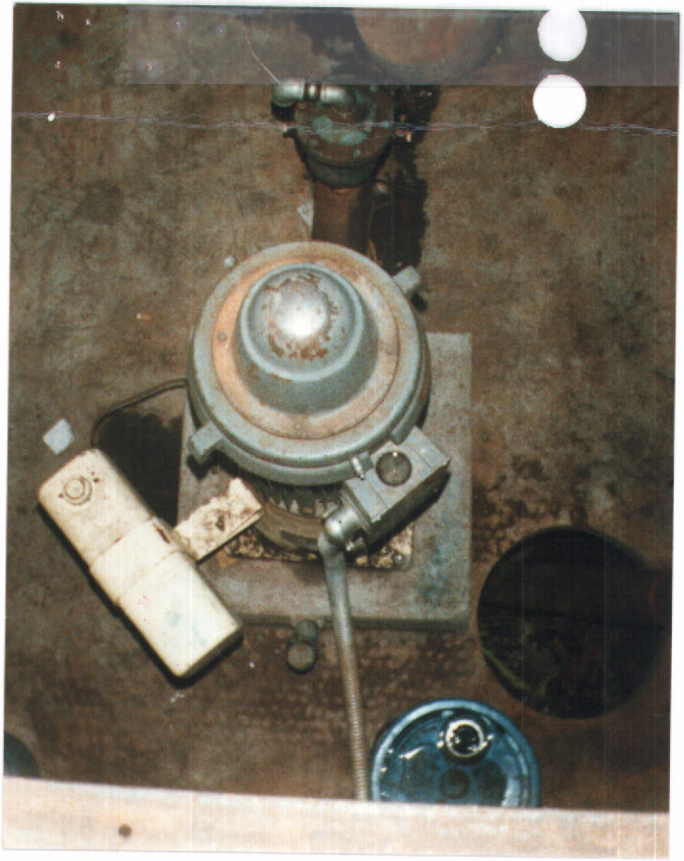
License No. _____

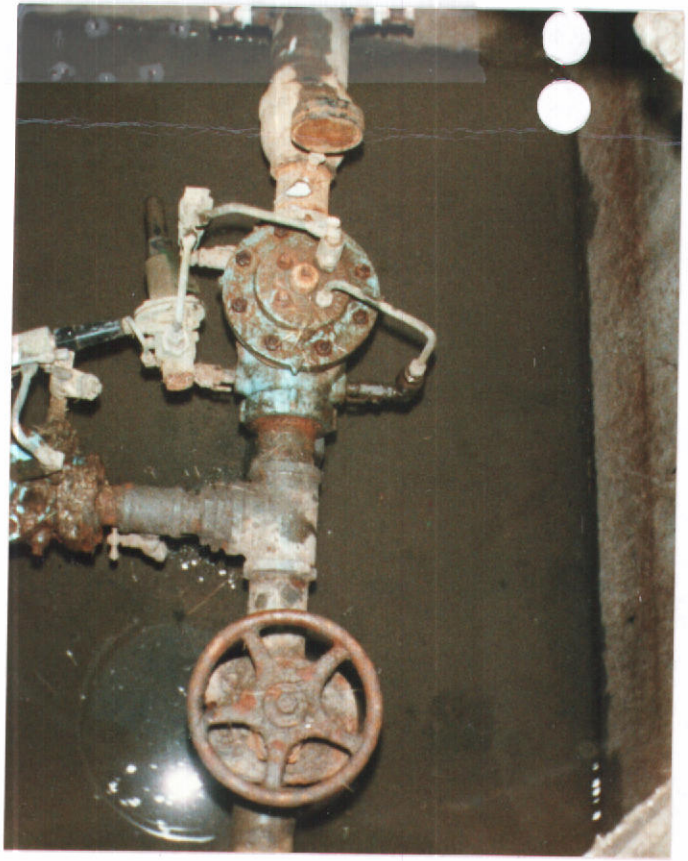
Dated Aug, 19 65

Well Driller's Helper _____

RECEIVED

FEB 28 1996





Form 211
10/93

Receipt No. W018454
Receipted By JL
Date 12/21/94

RECEIVED
JAN 09 1995
WATER RESOURCES
WESTERN REGION

APPROVED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# APPLICATION FOR AMENDMENT OF A PERMIT

See Note

RECEIVED
JAN 03 1996
Department of Water Resources

Applicant City of Boise, Dept. of Parks Phone 384-4240

Address 1104 Royal Blvd Boise ID 83706

I am the owner and holder of Permit to Appropriate the Public Waters of the State of Idaho No. 63-10022, and request that the permit and permit map be amended and/or changed as follows:

**Purpose of Amendment:** ____ Change point of diversion X Add point of diversion ____ Change place of use ____ Change nature of use ____ Change period of use ____ Other

1. Point of diversion: ¼ NE ¼ NW ¼, Section 13, Township 3N, Range 2E, B.M., County of Ada. Other points of diversion NESW S. 13 T3N R2E (cold water well, existing but unused NW) ← this is P/D to be added

2. Period and nature of use: (irrigation, domestic, stockwatering, industrial, etc.)

Amount .37 (cfs or acre feet per annum) for Irrigation (water use) purposes from 4/1 (Begin month) to 10/31 (End month) (both dates inclusive)

Amount ____ (cfs or acre feet per annum) for ____ (water use) purposes from ____ (Begin month) to ____ (End month) (both dates inclusive)

Amount ____ (cfs or acre feet per annum) for ____ (water use) purposes from ____ (Begin month) to ____ (End month) (both dates inclusive)

3. Place of use or land to be irrigated:

| Twp | Rge | Sec | NE¼ | | | | NW¼ | | | | SW¼ | | | | SE¼ | | | | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | |
| 3N | 2E | 13 | | | | | 7 | | | | | | | | | | | | 7 |
| | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | |

Total number of acres to be irrigated = 7

4. a. Who owns the property at the point of diversion? Applicant

b. Who owns the land to be irrigated at the place of use? Applicant

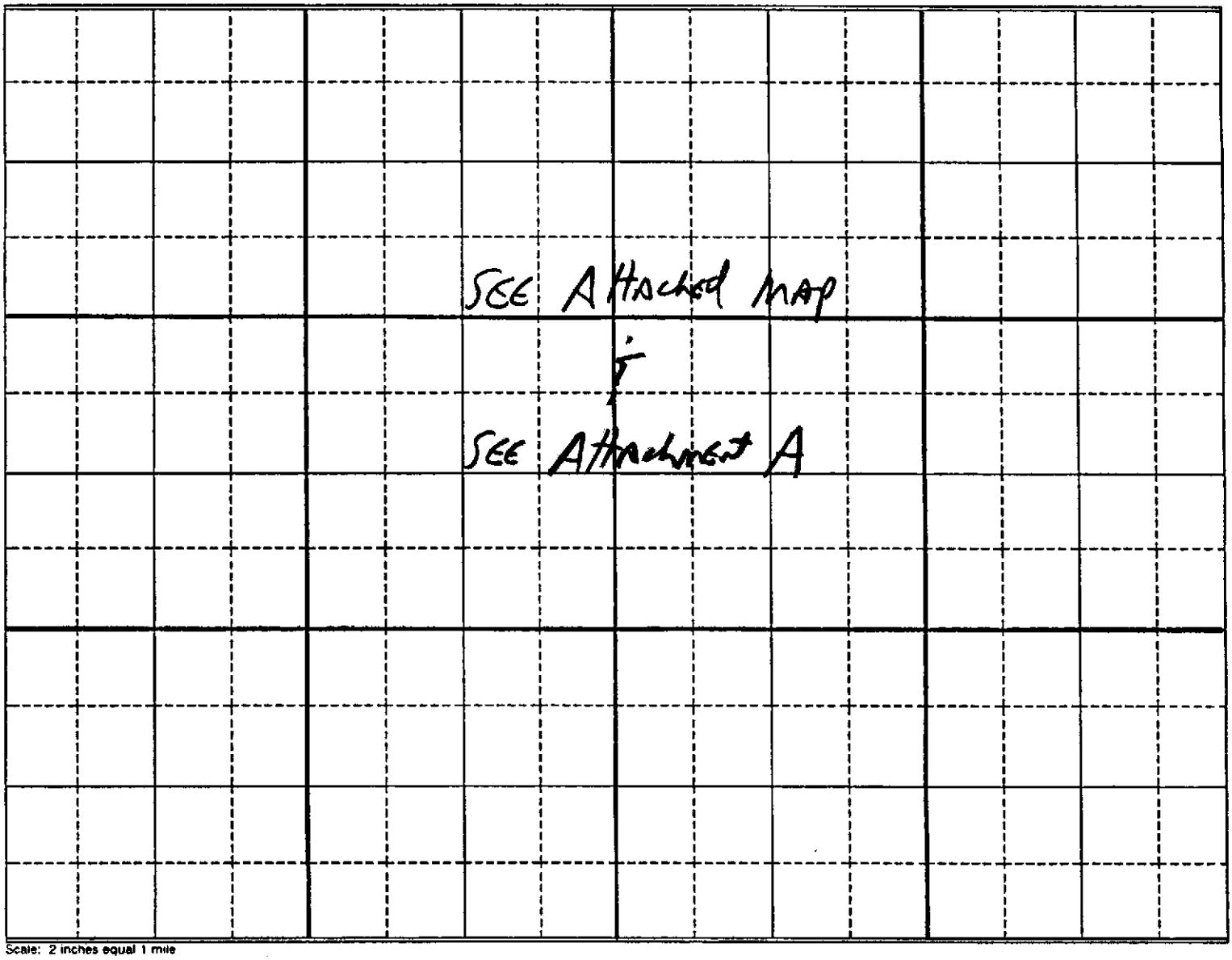
FEB 23 1996

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

NOTE: AMENDMENT IS BASED ON DRAFT LICENSE INSTEAD OF PERMIT DETAILS & THUS REFLECTS LESS WATER & ACRES. AMENDMENT REPLACES WITHDRAWN APPLICATION FOR TRANSFER ORIGINALLY FILED 12/21/94. Apply $50 from $100 paid 12/21/94, Receipt # W018454 – Remaining $50 to be refunded to Applicant.

Complete the following map by showing land and point of diversion as proposed by this amendment.

Show 1/4 1/4, section, township, range and ditches. (the smallest subdivision represents 40 acres)




Scale: 2 inches equal 1 mile

I hereby request approval of this change subject to the fact that no one will be injured by the change, and that the change will be made at my own risk.

Signed this 9 day of JAN, 19 95. James R. Hall (NAME) Permit Holder 1/9/95 (TITLE)

ACTION OF THE DEPARTMENT OF WATER RESOURCES

Preliminary check by _____ Publication prepared by _____ Date _____

Published in Idaho Statesman Publication dates 1-19 & 26, 1995

I, L. Glen Saxton, of the Department of Water Resources hereby approve the above referenced application for amendment. See the attached sheet for the conditions of approval.

Witness my hand this 16th day of February, 19 96.

L. Glen Saxton

Chief, Water Allocation Bureau

FEB 2 3 1996

CONDITIONS OF APPROVAL

Amendment of Permit No. 63-10022

1. The previous conditions as set forth in Permit No. 63-10022 must be met.

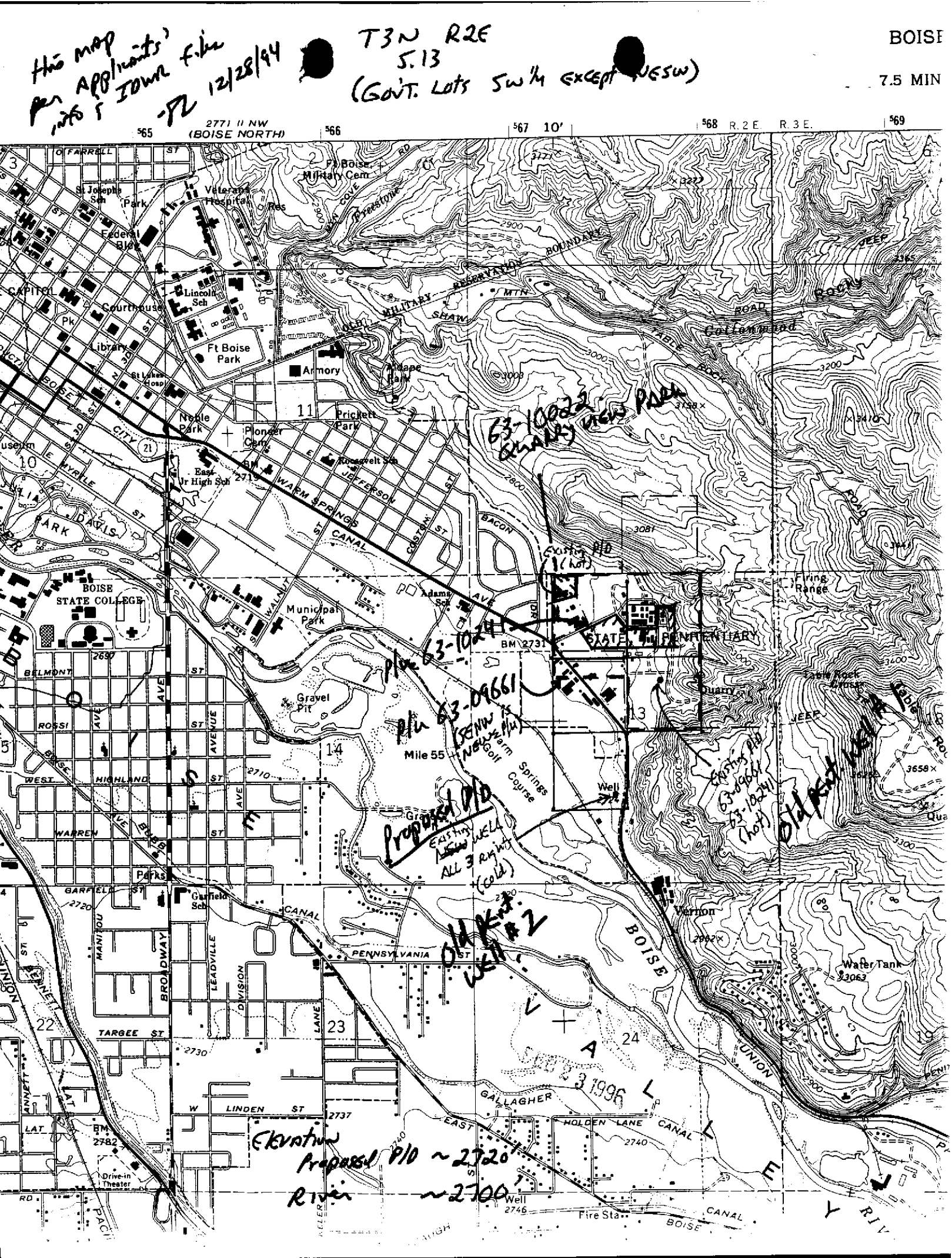
2. After specific notification by the department, the right holder shall install a suitable measuring device or shall enter into an agreement with the department to determine the amount of water diverted from power records and shall annually report the information to the department.

Dated this 16th day of February, 1996.

L. Glen Saxton

L. GLEN SAXTON
Chief, Water Allocation Bureau

FEB 23 1996


This map per Applicants' info from Idaho f.b. -PZ 12/28/94
T3N R2E
S.13
(Gov't. Lots SW¼ except NESW)
BOISE
7.5 MIN
2771 II NW
(BOISE NORTH)
R.2E.
R.3E.
10'
63-10022 (Quarry) View Park
Existing P/D (Hot)
Proposed P/D
Existing P/D 63-09661 63-10241 (Hot)
Old Hot Well #2
Elevation Proposed P/D ~2720
River ~2700'
Aug 23 1996
BOISE RIVER VALLEY
BOISE STATE COLLEGE
STATE PENITENTIARY
Municipal Park
Ft Boise Park
Pioneer Cem
Gravel Pit
Mile 55
Warm Springs Golf Course
Quarry
Firing Range
Water Tank
Well
Fire Sta
Drive-in Theater
Veterans Hospital
Ft Boise Military Cem
Armory
Adobe Park
Prichett Park
Noble Park
Roosevelt Sch
East Jr High Sch
Lincoln Sch
St Joseph Sch
Federal Bldg
Courthouse
Library
St Lukes Hospl
Adams Sch
Garfield Sch
Parks
BM 2731
BM 2782
Table Rock
Table Rock Quarry
Cottonwood
Rocky Canyon
Military Reserve
Shaw Mtn
Boise City Canal
Warm Springs Ave
Capitol Blvd
Broadway
Vista
Union
Gallagher
Holden Lane Canal
Pennsylvania
Targee St
Linden St
Warren St
Belmont St
Rossi St
Myrtle St
Davis St
Jefferson St
Bacon St
Walnut St
Fairview Ave
Boise Ave
Owyhee
Manitou
Leadville
Division
Lane
Bennett
Latah
Pacific
Fort Boise
Hill Cove
Prestonia Rd
Old Penitentiary Rd
Table Rock Rd
Jeep
Res
Well
2746
2740
2737
2730
2720
2710
2697
3081
3000
2900
3200
3400
3658
3063
2962
2782
2746

Form 217
12/84

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

PROOF OF BENEFICIAL USE

RECEIVED
MAY 30 1986
Department of Water Resources

The Idaho Department of Water Resources will consider this form as a statement that the permit holder(s) has completed development under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below:

Permit No. 63-10022 Quarry View Park

Name(s) of Permit Holder: Boise Park System

1104 Royal Blvd.

Post Office Address: Boise, Idaho 83706

Telephone No. 384-4240

Source of Water: Ground Water

Extent of Use:

Domestic _____ (number of households)

Stockwater _____ (number and type of stock)

Irrigation 8 (acres)

Other/Remarks _____

Indicate the date water was first diverted and beneficially used under this permit: October 1984

Measuring Device: Required? ☐ Yes ☑ No
Installed? ☐ Yes ☐ No

Flow Measurement Port: Required? ☐ Yes ☑ No
Installed? ☐ Yes ☐ No

Person to contact to accompany the Department representative during the field examination:

Paul Philbrook, Boise Park System
(Name)

1104 Royal Blvd., Boise, Idaho 83706 — 384-4240
(Address) (Telephone No.)

MICROFILMED

The above information is a true statement of the extent to which the above numbered permit has been developed.

May 27, 1986
Date

Paul Philbrook Park Designer
Signature of Permit Holder (and Title, if appropriate)

6-19-86 FD

Boise Park System

1104 Royal Blvd.

Boise, Idaho 83706

Place Stamp Here

**Idaho Department of Water Resources**
**Statehouse Mail**
**Boise, ID 83720**

RECEIVED
APR 2 1986
BOISE CITY PARKS DEPT.

Form 202
3/78

Ident. No. 63-10022

RECEIVED
APPROVED
APR 20 1983
Department of Water Resources

# STATE OF IDAHO
# DEPARTMENT OF WATER RESOURCES
# APPLICATION FOR PERMIT

**To appropriate the public waters of the State of Idaho**

1. Name of applicant Boise Prk System - Quarry View Park Phone 384-4240

   Post office address 1104 Royal Boulevard, Boise, Idaho 83706

2. Source of water supply groundwater which is a tributary of Snake River

3. Location of point of diversion is N.E. ¼ of N.W. ¼ of Section 13 Township 3N

   Range 2E B.M. Ada County, additional points of diversion if any: none

4. Water will be used for the following purposes:

   Amount 0.6 cfs (cfs or acre-feet per annum) for irrigation purposes from April 1 to October 31 (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

5. Total quantity to be appropriated:

   a. 0.6 cubic feet per second and/or b. _____ acre-feet per annum.

6. Proposed diverting works:

   a. Description of ditches, flumes, pumps, headgates, etc. Well with submersible pump piped to buried sprinkler system in park.

   b. Height of storage dam _____ feet, active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet, materials used in storage dam: _____

   Period of year when water will be diverted to storage _____ (Month/Day) to _____ (Month/Day) inclusive.

   c. Proposed well diameter is 10 inches; proposed depth of well is 150 feet.

7. Time required for the completion of the works and application of the water to the proposed beneficial use is 3 years *(minimum 1 year – maximum 5 years).*

8. Description of proposed uses:
   a. If water is not for irrigation:
      (1) Give the place of use of water: _____ ¼ of _____ ¼ of Section _____ Township _____

      Range _____ B.M.

      (2) Amount of power to be generated: _____ horsepower under _____ feet of head.

      (3) List number of each kind of livestock to be watered _____

      (4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____.

      (5) If water is to be used for other purposes describe: _____

MICROFILMED

b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below:

| TWP | RANGE | SEC. | NE¼ | | | | NW¼ | | | | SW¼ | | | | SE¼ | | | | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | |
| 3N | 2E | 13 | | | | | 8 | | | | | | | | | | | | 8 |
| | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | |

Total number of acres to be irrigated 8

c. Describe any other water rights used for the same purposes as described above.

None known

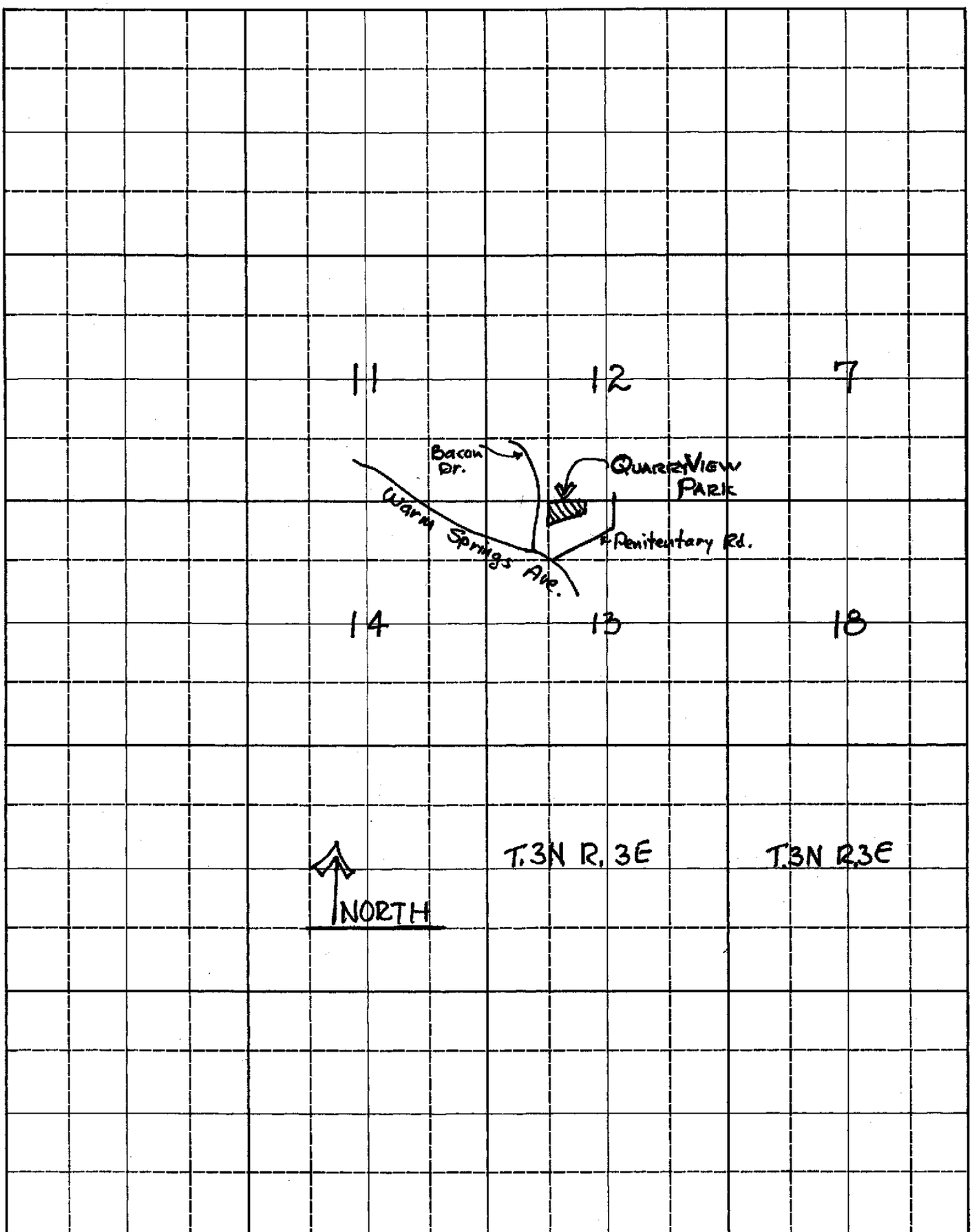
9. a. Who owns the property at the point of diversion State of Idaho, Department of Lands

b. Who owns the land to be irrigated or place of use State of Idaho, Department of Lands

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing We have a 50 year renewable option lease from the State of Idaho.

10. Remarks Water will be used for night irrigation of Quarry View Park lawn and planting areas. The amount applied for exceeds that normally used for irrigation but this is necessary to insure minimum public incovenience during daylight hours and is consistent with previous applications approved for city parks. The high application rate is necessary to provide peak irrigation requirements during the maximum growing season within the limited time available for night irrigation during long daylight-hour days in the summer.

11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.




Scale: 2 inches equal 1 mile.

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)

John Cooper, Director
Boise Park System

MICROFILMED

Proposed Priority 4-20-83

Received by SRC Date 4-20-83 4/20/83 Time 3:00 9:15

Preliminary check by JP Fee $ 45.00 27945

Receipted by JP Date 4/21/83

Publication prepared by jp Date 4/28/83

Published in The Idaho Statesman

Publication dates 5/5 & 5/12/83

Publication approved SR Date 5/13/83

Protests filed by: None

Copies of protests forwarded by

Hearing held by Date

Recommended for (approval) denial by DBS

MICROFILMED

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**ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES**

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. 63-10022, and said application is hereby Approved.

1. Approval of said application is subject to the following limitations and conditions:

   a. SUBJECT TO ALL PRIOR WATER RIGHTS.

   b. Proof of construction of works and application of water to beneficial use shall be submitted on or before June 1, 19 86.

   c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land.

   d. Other: Permit holder shall commence the excavation or construction of diverting works within one year of the date this permit is issued and shall proceed diligently until the project is complete.
   The issuance of this permit in no way grants any right-of -way or easement across the land of another.

Witness my hand this 13th day of June, 1983

L. Glen Saxton

Chief, Operations Bureau

# CITY OF BOISE

## PAYMENT VOUCHER



| TRANSACTION CODE | VOUCHER NUMBER | VOUCHER DATE (m m d d y y) |
|---|---|---|
| PV | | 3 31 83 |

**ACTION**
- [x] Original Entry (E)
- [ ] Adjustment (M)

**TYPE OF VOUCHER**
- [x] Outside Vendor (1)
- [ ] Between Funds (2)
- [ ] Within Fund (3)

FUND: 002

COMMENTS (12): Cap. Fac. East End Park

**VENDOR**

code

name: Department of Water Resources

address: 450 West State Street

Boise, Idaho 83720

| REFERENCE PURCHASE ORDER CODE | REFERENCE PURCHASE ORDER NUMBER | REFERENCE PURCHASE ORDER LINE | AGENCY | ORGANIZATION | OBJECT | BAL SHEET ACCT | INVOICE NO. / DESCRIPTION (30) | AMOUNT | P/F |
|---|---|---|---|---|---|---|---|---|---|
| | | | 10 | 501 | 6869 | | Water Resources Permit-Quarry View Park | 45.00 | |
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| | | | | | | | | | |

TOTAL: 45.00

SPECIAL INSTRUCTIONS: Please process as soon as possible.

- [ ] MAIL
- [x] RETURN TO DEPARTMENT
- [ ] OTHER

PURCHASING DEPT. _____ DEPARTMENT HEAD SIGNATURE _____

CHECK NO. _____

MICROFILMED

**NOTICE OF APPLICATION FOR WATER RIGHT**

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

63-10022 V/P
BOISE PARK SYSTEM
QUARRY VIEW PARK
1104 ROYAL BLVD., BOISE, ID 83706
Source: GROUNDWATER
Date Filed: 04/20/1983
Diversion Point: NENW Sec 13 T 03N R 02E
Use: IRRIGATION (0.60 CFS)
In: NENW Sec 13 T 03N R 02E FOR 8 ACRES

The permit(s) will be subject to all prior water rights. Protests must be filed with the Director, Dept. of Water Resources, Western Region, Statehouse, Boise, Idaho 83720 on or before MAY 23, 1983.

A. KENNETH DUNN
Director

Pub. May 5, 12, 1983 349

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

Susan K. Mayer, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in the regular edition of The Idaho Statesman

for one insertion, in the issue of

May 12, 19 83.

Susan K. Mayer, Principal Clerk

Subscribed and sworn to before me this 12th

day of May, 19 83.

Notary Public for Idaho, Residing at Boise, Idaho

RECEIVED
MAY 16 1983
DEPARTMENT OF WATER RESOURCES
WESTERN REGION

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 63-10022
Exam Date: 3/21/2005

1. Current Owner: CITY OF BOISE
PARKS & RECREATION DEPT
1104 ROYAL BLVD
BOISE ID 83706-2898
(208)384-4240

RECEIVED
APR - 4 2005
DEPARTMENT OF WATER RESOURCES

2. Accompanied by: Mike Woodward
Phone No: (208) 384-4329
Address: SAME AS ABOVE
Relationship to Permit Holder: PARK MAINTENANCE MANAGER

3. **SOURCE** **TRIBUTARY**
GROUND WATER N/A

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: 63-9661
2. Other water rights with the same point of diversion: 63-9661 AND 63-10241

**C. DIVERSION AND DELIVERY SYSTEM**

1. **LOCATION OF POINT(S) OF DIVERSION:**

| | | | | | |
|---|---|---|---|---|---|
| GROUND WATER | NE1/4SW1/4 | Sec. 13, | Twp 03N, | Rge 02E, B.M. |
| ADA County | | | | |
| GROUND WATER | NE1/4NW1/4 | Sec. 13, | Twp 03N, | Rge 02E, B.M. |
| ADA County | | | | |

Method of Determination:

2.
**PLACE OF USE:** IRRIGATION

| Twp Rge Sec | NE | | | | NW | | | | SW | | | | SE | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | |
| 03N 02E 13 | | | | | 7.8 | | | | | | | | | | | | 7.0 |

Total Acres: 7.8

Method of Determination:

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

   YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

   YES Aerial Photo Attached (required for irrigation of 10+ acres).

   YES Photo of Diversion and System Attached

4.

| Well or Diversion Identification No.* | Motor Make | Hp | Motor Serial No. | Pump Make | Pump Serial No. or Discharge Size |
|---|---|---|---|---|---|
| COLD WELL | GENERAL ELECTRIC | 60 Hp | 422113 | UNKNOWN | L88OO9 – 8 INCH DISCHARGE |
| QUARRY PARK RELIFT PUMP | MEULLER | 15 Hp | E8771 812 2302 R036F | UNKOWN | 110889 2G150P12 MODEL 20 |
| QUARRY PARK HOT WELL | NO PUMP MOTOR | N/A | N/A | NO PUMP | NOT CONNECTED TO SYSTEM |
| | | | | | |

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

**D. FLOW MEASUREMENTS**

1.

| Measurement Equipment | Type | Make | Model No. | Serial No. | Size | Calib. Date |
|---|---|---|---|---|---|---|
| N/A | | | | | | |
| | | | | | | |

2. Measurements: The system wasn't operational at the time of the field exam. It wasn't possible to attain actual measurements of the system. Theoretical calculations and sprinkler capacities were used to determine the flow rate.

**E. FLOW CALCULATIONS** YES Additional Computation Sheets Attached

Measured Method:

The theoretical calculation for he cold well showed a well capacity of 885 gpm or 1.97 cfs. There are currently three water rights on the system. The three rights combined have a greater diversion rate then the pump is capable of producing.

The relift pump is way oversized for this type of use, and could supply well over 2.21 cfs at 60 psi. Therefore they have installed a pressure regulation system to reduce and maintain the pressure on the sprinklers at a constant rate. I have spoken to Scott King about this oversized pump, and he told me that this is not an uncommon practice amongst municipalities. Mike Woodward sent me the largest and smallest sprinkler stations on the parks irrigation system. The largest station supplied a maximum of 0.24 cfs for the system. The original field exam measured the diversion into this system as 0.37 cfs from the Hot well that is now abandoned. In a letter dated 3/6/1995, the City states that it uses 0.37 cfs of water for irrigation as determined by the measurement during the original field exam. In another letter dated 2/12/1996, another measurement was done on station # 9 which had a diversion rate of 0.27 cfs. The 1996 measurement is very close to the 0.24 cfs supplied by the City of their current system. The diversion rates requested by the applicant seem to vary greatly with very little supporting documentation. I believe that 0.24 cfs has been used on the system, and the right should be licensed for that amount. This is very close the standard inch and half of water granted by the department for special irrigation needs for smaller systems like the parks.

## F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 7.8 X 4.5 = 35.1 afa

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 = 0.24 X 260 X 1.9835 = 123.8 afa

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = 35.1 afa

2. Volume Calculations for Other Uses:

## G. NARRATIVE/REMARKS/COMMENTS

This permit is to irrigate Quarry Park for the City of Boise. This permit has a long history, which may have an impact on the licensing of this permit. This permit was filed in June of 1983, and was subsequently approved in May of the same year. The permit was approved to allow irrigation from a hot water well (Quarry Park Hot Well) to irrigate 8 acres of ground at a diversion rate of 0.6 cfs. The high rate of diversion was allowed because the park was irrigated only at night, and a higher rate of diversion was needed for the shorter irrigation time.

Independent field examiner, Sherl Chapman, submitted a field exam in January of 1987. The field exam limited the lands irrigated to 7 acres, and the flow rate from the Quarry Park Hot Well was measured at 0.37 cfs. Due to controversy of the declining hot water levels in the Boise Front area licensing of the permit was delayed. Idaho Code § 42-233a that deals with low geothermal water states that any low geothermal use permits, licenses, decreed rights and valid claims to a right issued or proclaimed prior to July 1, 1987 remain valid. Therefore, it seems as though this statute may not have a direct bearing on the issuance of this license.

However, the Boise Front Ground Water Management Area (BFGWMA) was designated in June 1987. The BFGWMA management plan was also instituted in June of 1987. Section IV, A, 3, of the BFGWMA plan states "Idaho Dept. of Water Resources (IDWR) will require substitution of cold water resources for existing uses that do not need the heat value of the low temperature geothermal resource, where practical." This plan also required a monitoring plan and measurement and reporting of the geothermal wells within the BFGWMA to be submitted to Ken Neely with IDWR.

In December of 1988, Gary Spackman wrote a letter to the City of Boise stating that it was understood that the City of Boise was using another source of water to irrigate the park other than the Quarry Park Hot Well. Several agreements and a memorandum of understanding were sent the department showing the park was being irrigated with other sources of non-geothermal water. In January of 1996 an amendment to this permit was filed, and was subsequently approved in February of that same year. The amendment added a new cold water well located at the Warm Springs Golf Course. The amendment reduced the acres and rate of diversion to the amounts found by Sherl Chapman in 1987, or 0.37 cfs and 7 acres. The amendment did not propose to take the existing hot well off of the permit, even though the documentation in the files suggests that the Quarry Park Hot Well hasn't had a pump in the well, since the 1980's. The amendment was protested, and a stipulated agreement was signed by the applicant to monitor these wells. According to Ken Neely, the City of Boise has complied with the stipulated agreement and the BFGWMA Management Plan.

The current water system is shared with 3 entities and a transfer has been filed to add a forth entity. The other two water rights are 63-9661 under the name of the Idaho Dept. of Lands (used by Idaho Historical Society), and 63-10241 also owned by the Idaho Dept. of Lands (used by the Idaho Botanical Gardens). The water comes from a well located at the golf course in the NESW of S13 T3N R2E and diverted northeast to the Penitentiary Hot Well covered under water rights 63-9661 and 63-10241. The water from the Penitentiary Hot Well also hasn't been used since the late 1980's. The water then continues northeast to a reservoir in the NENE S13 up hill from the place of use for all three water rights. A mainline then travels downhill or northwest to supply water to each water user under the three water rights. Quarry Park is at the end of the mainline. The mainline enters a cement vault at the park and is re-lifted by a 15 Hp pump that pressurizes the irrigation system. This pump has the potential for supplying a great deal more water than is needed for the sprinkler system, so a pressure regulation system has been added to the irrigation system to maintain a constant pressure.

Tom Woodward accompanied me on the exam, and informed me that the most water consumptive station on the irrigation system requires 0.24 cfs. Therefore, that is what is being recommended. I discovered that 7.8 acres have been irrigated by this system in both the current and 1987 aerial photography. The original permit requested 8-acres, therefore, with the more advanced mapping technology available, it seems acceptable to allow the full 7.8 acre of irrigation under this irrigation system, instead of the 7 acres found by Serl Chapman in his earlier exam.

There are several problems with this permit. The main problem being the two hot wells associated with this irrigation system. Neither well is currently being used, and the Quarry Hot Well doesn't even have a pump. However, both of these wells are subject to the BFGWMA management plan that clearly wishes to discourage any geothermal water use without using the heat value of the geothermal water first. In speaking with Ken Neely who oversees the BFGWMA, there would be great concern if the hot water wells were ever put back into production. Mr. Neely would require water level, flow, and annual volume measurements of these wells if they were put back into production. Therefore, a monitoring requirement should be placed on this license.

An additional problem with this permit is the fact that the hot well has not been used for several years, but is still included on the application. I would like to see the City of Boise voluntarily remove the well from the license, but in speaking with their representatives, it doesn't seem as though that will happen. The hot well on this permit cannot be used with out using the heat value first, per a stipulated agreement in the BFGWMA. Therefore, the well is virtually useless when associated with this irrigation right. The well was originally the only source of water for this system, and was being used during the first field exam preventing the department from requiring the well be removed from the water right. Strict monitoring of the irrigation system would be the only way to ensure that this well is not used without using the heat value first.

The lack of use of these wells also brings up the problem of safety. If the wells aren't being used, I am concerned that periodic checks and maintenance may not be kept up as much as it should. The biggest problem in this area has to do with the Quarry Hot Well. This well is located in a vault, without the standard casing above ground. As you can see in the photos with this exam, the well doesn't seem to have a watertight cap. The casing isn't 12 inches above ground. The vault may provide some protection, but I am concerned about the safety of this well.

The three other water users on this system each have their own water rights. Water rights 63-9661 and 63-10241 were originally permitted for a separate well (the Penitentiary Hot Well). However, all three rights were amended or transferred to include the cold water well. Water right 63-9661 describes the lands associated with the Quarry Park in their legal description, which creates a possible problem. Even if the Quarry Park Hot well is abandoned there is a color of a water right that might allow irrigation of the park from the Penitentiary Hot Well. Proof of beneficial use hasn't been filed on 63-9661, so we need to include conditions that refer to the system as a whole and not just the Quarry Park water right. If this permit is licensed, I would also suggest that the indefinite hold on providing proof of beneficial use under water right 63-9661 be rescinded, and a request for proof of beneficial use be submitted within 90 days. The indefinite hold on providing proof of beneficial use for 63-9661 was extended until the Boise Front Moratorium was lifted. If this right can be licensed, then there is no reason 63-9661 can't proceed as well.

Another problem with this permit is the terminology of the use. The permit was issued as an irrigation right, and the adjudication claim was claimed as a municipal right. Dave Tuthill has suggested that this right can be referred to as a municipal right. However, Shelly Keen has informed me that if this system isn't connected to the City's main municipal system then it should be licensed as an irrigation use. I do have concerns that a municipal designation might give the City the impression that they could use this right for heating purposes, even though, heating is not allowed under a municipal right. In order to avoid confusion, I have retained the use as irrigation. If the use is changed to municipal use, a condition should be placed on the water right limiting the use to 7.8 acres of irrigation and 35.1 afa to avoid any confusion.

The final problem with this right is that this permit shares this system with three other water users. The capacity of the system needs to be limited to the capacity of the Cold Water Well. This will avoid any temptation to use either of the two geothermal wells for this irrigation use. The capacity of the Cold Water Well is 1.97 cfs. Therefore, when all three of the rights on this system are combined, the total diversion rate should be limited to 1.97 cfs.

I strongly recommend that conditions similar to the following be included on this license:

1.) Prior to any diversion from either of the hot wells associated with this irrigation system, a measurement device suitable to the department must be installed on each of the three wells associated with the system, and all diversion rates and annual volumes must be recorded and reported to the department along with monthly water level checks.
2.) Written approval from the department must be acquired prior to any diversion from either of the hot wells on this system. Failure to acquire this approval will result in immediate revocation of this license.
3.) Any diversion from either of the two hot wells associated with this irrigation system without using the heat value first will result in immediate revocation of this license.
4.) Any diversion from either of the two hot wells without an accompanying water right for heating purposes will result in revocation of this license.
5.) The use of this right is limited to the irrigation of 7.8 acres and a maximum annual volume of 35.1 af.
6.) When water rights 63-09661 and 63-10241 are combined with this water right the total rate of diversion is limited to 1.97 cfs.
7.) Periodic maintenance on both of the two hot wells must be performed to ensure these wells comply with current well drilling standards as a prevention of possible contamination and intermixing of the cold and hot water aquifers.
8.) Application of water from any other water rights on the 7.8 acres described on this water right without prior written approval from the department will result in the revocation of this water right.

Have conditions of permit approval been met? __X__Yes _____No

**H. RECOMMENDATIONS**

**1. Recommended Amounts**

| BENEFICIAL USE | PERIOD OF USE | DIVERSION RATE | ANNUAL VOLUME |
|---|---|---|---|
| IRRIGATION | 04/01 to 10/31 | 0.240 CFS | 35.1 AF |
| | Totals: | 0.240 CFS | 35.1 AF |

**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

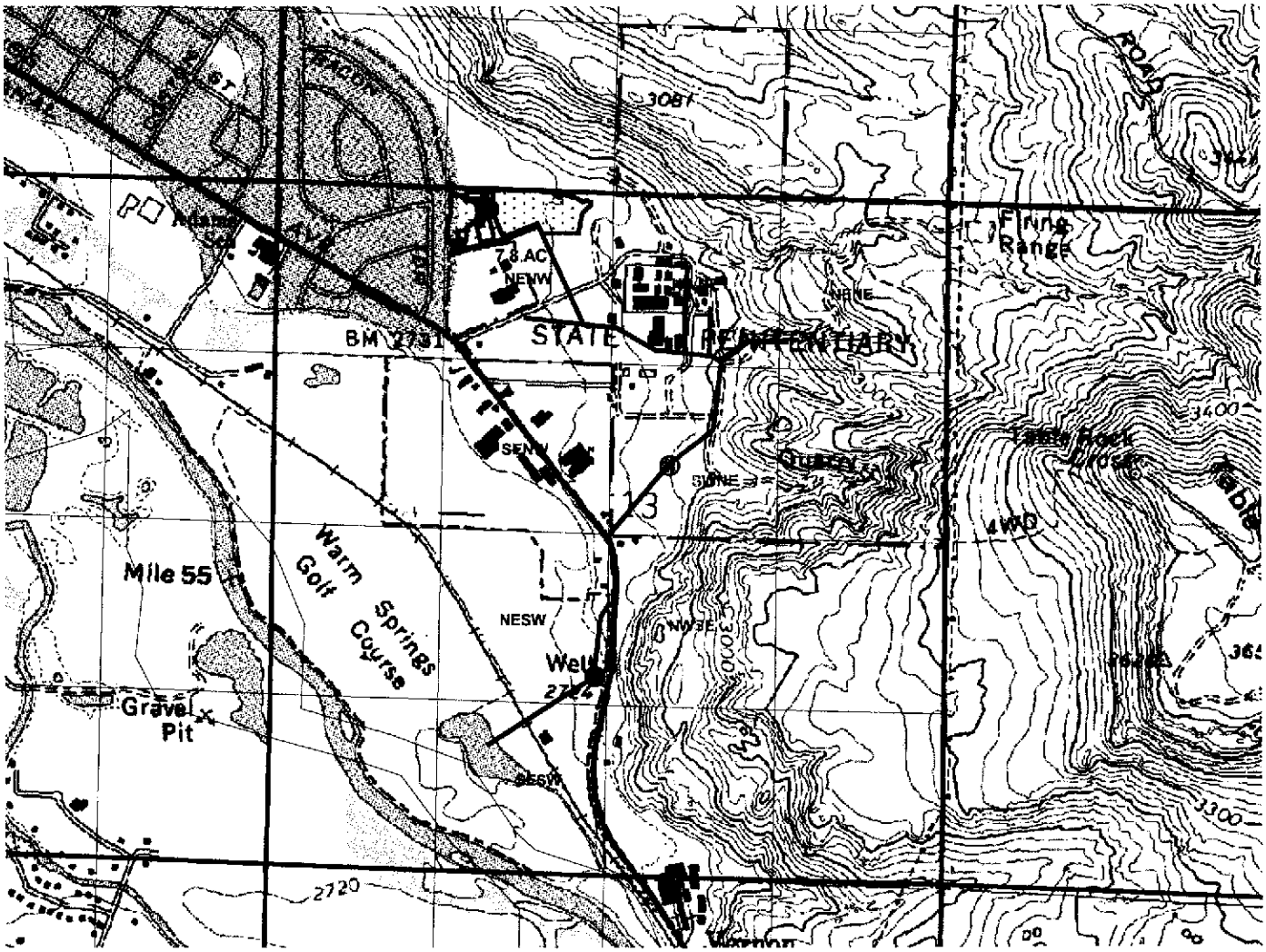
**I. AUTHENTICATION** DANIEL A. NELSON – SENIOR AGENT

Field Examiner's Name Daniel A. Nelson Date 4-1-05

Reviewer _____ Date _____

SEAL

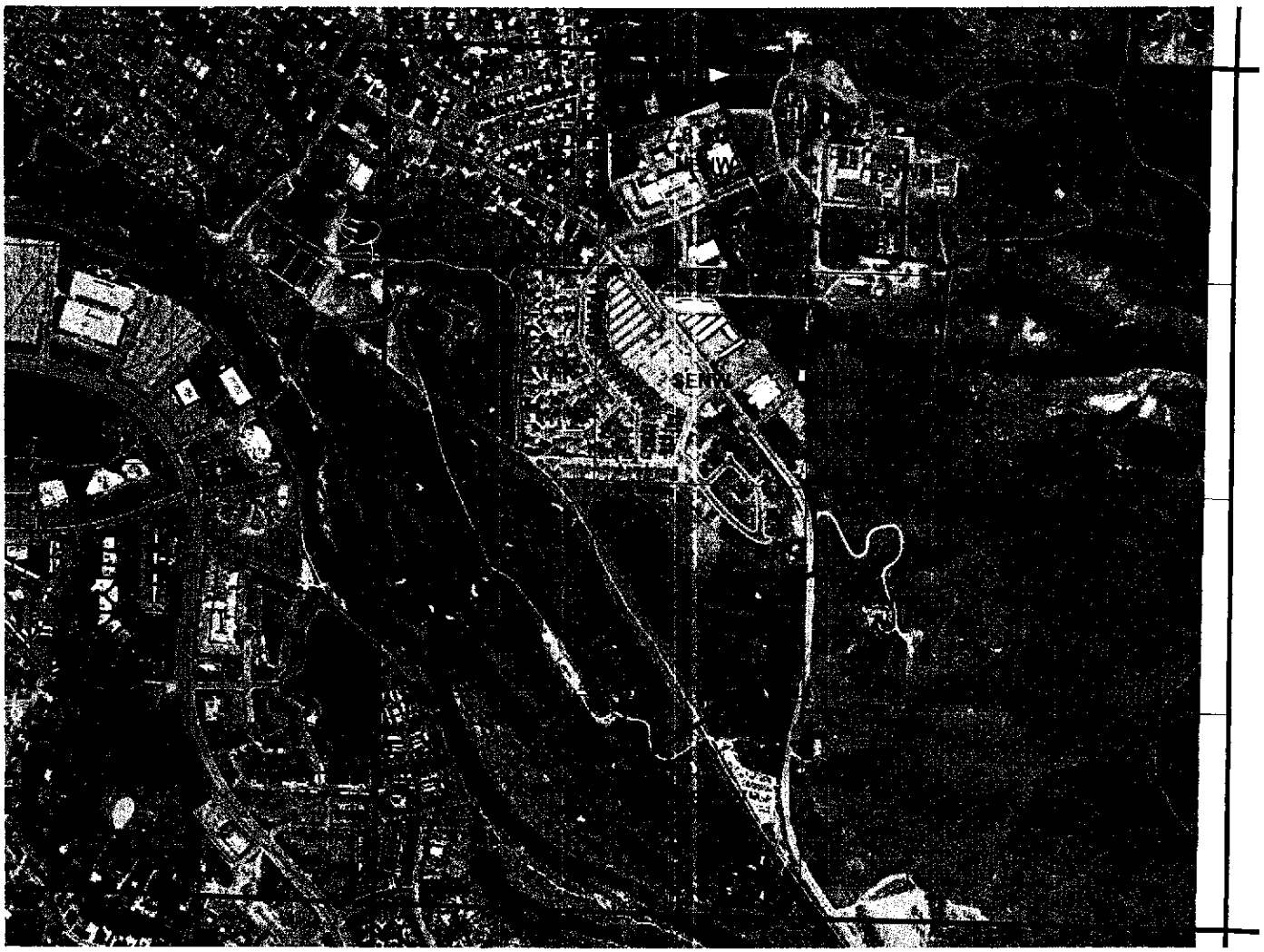
# Field Exam 63-1022
# Quadrangle Map
# by Dan Nelson




- Reservoir
- Mainline
- Quarry Park Hot Well
- Penitentiary Hot Well
- Cold Well
- Place of Use
- Section Lines
- 1/4 1/4 Lines

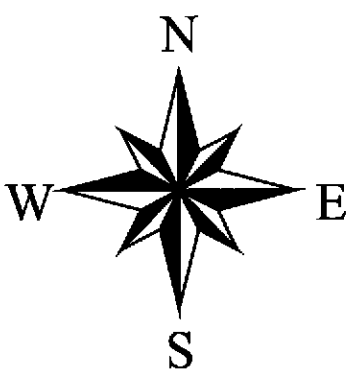
N
W
E
S

# Field Exam 63-10002
# System Diagram
# By Dan Nelson

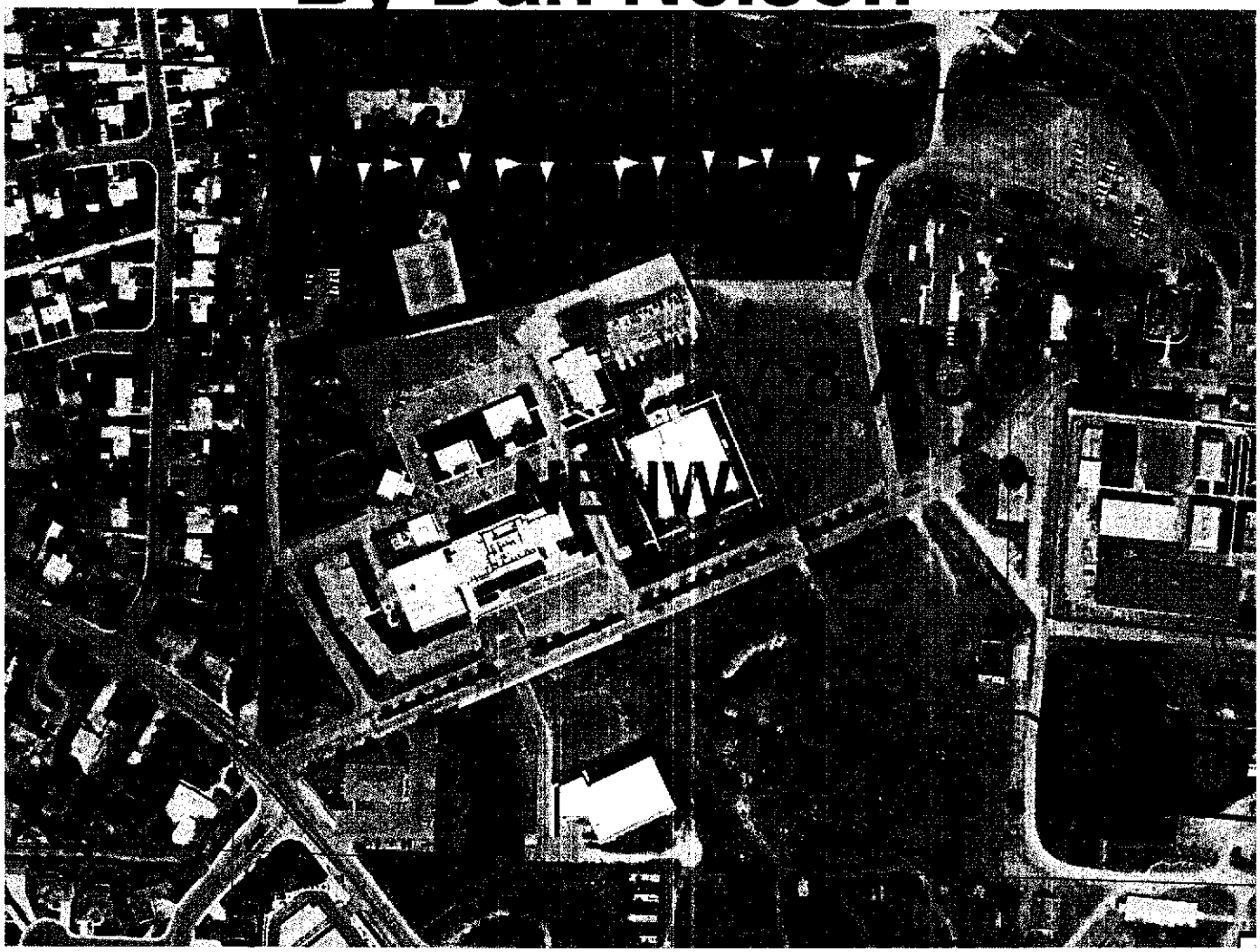


0.4 0 0.4 0.8 Miles

- Reservoir
- Sprinkler System
- Mainline
- Quarry Park Hot Well
- Penitentiary Hot Well
- Cold Well
- Place of Use
- Section Lines
- 1/4 1/4 Lines

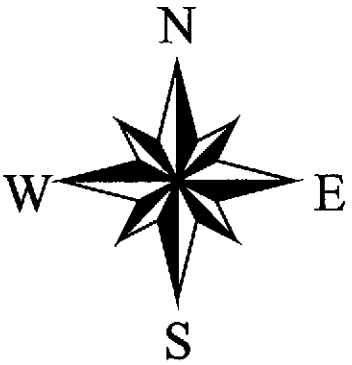


# Field Exam 63-10022
# System Diagram 2
# By Dan Nelson

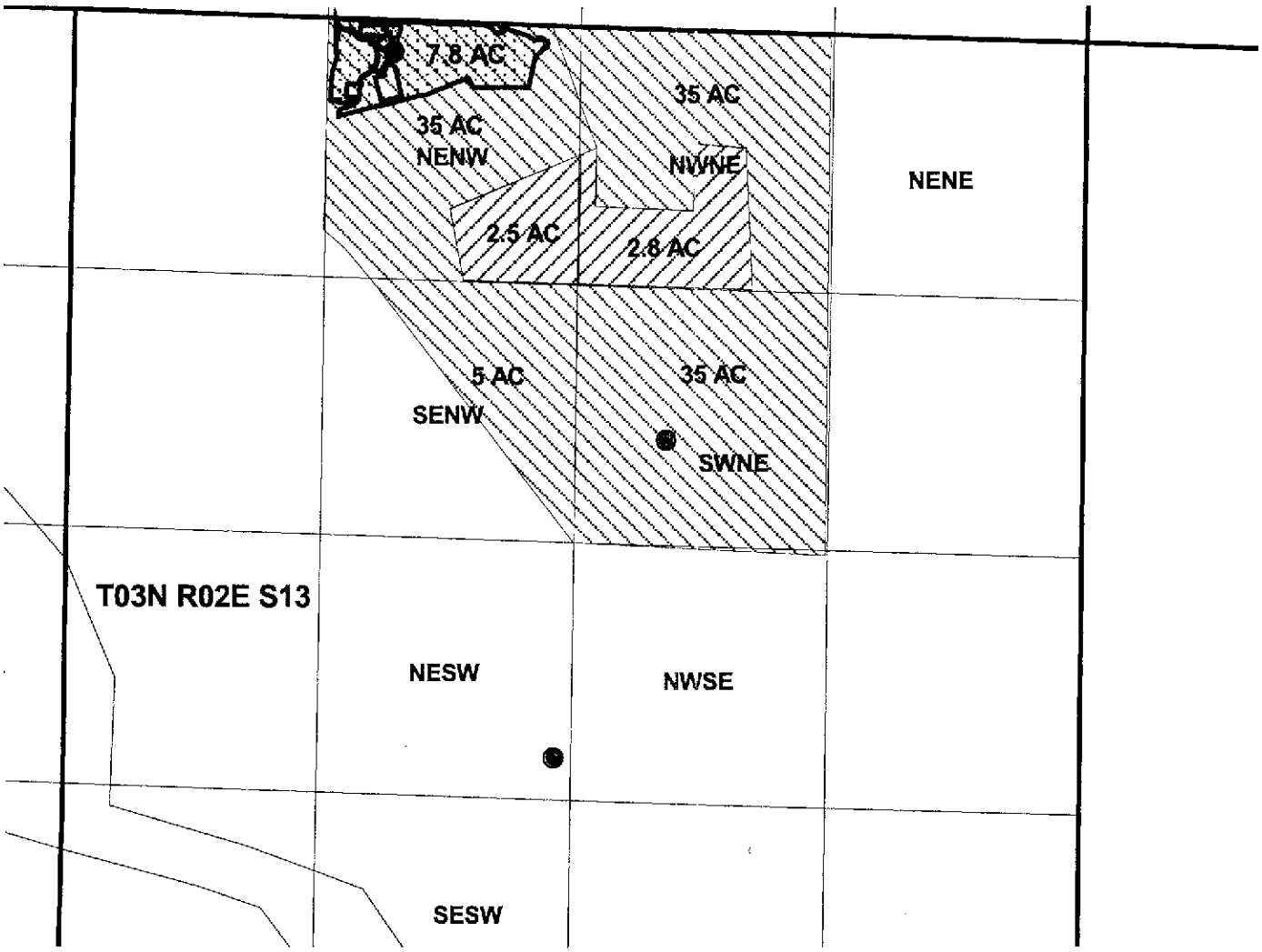


0.1 0 0.1 0.2 Miles

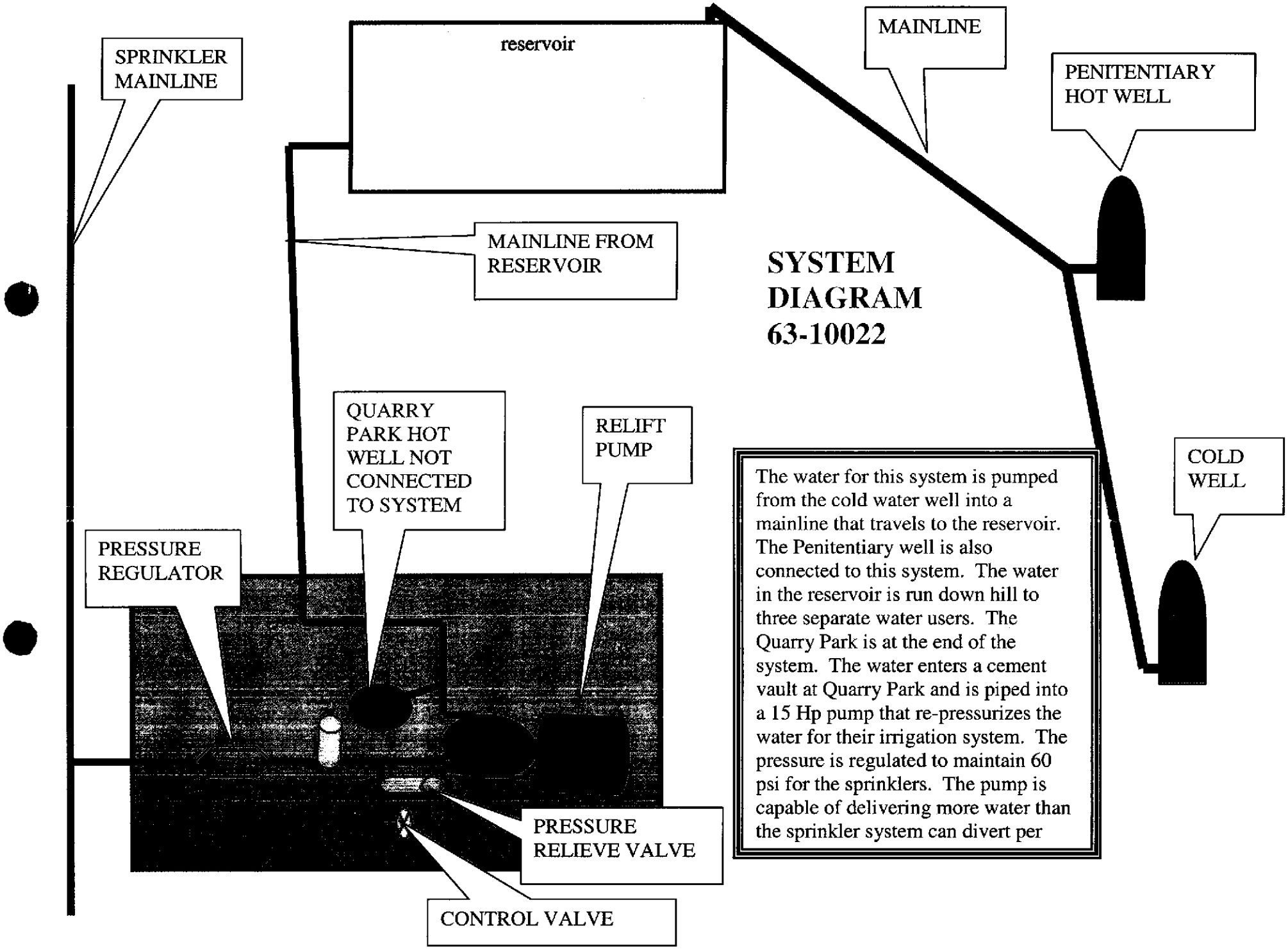
Sprinkler System
Mainline
Quarry Park Hot Well
Place of Use
Section Lines
1/4 1/4 Lines

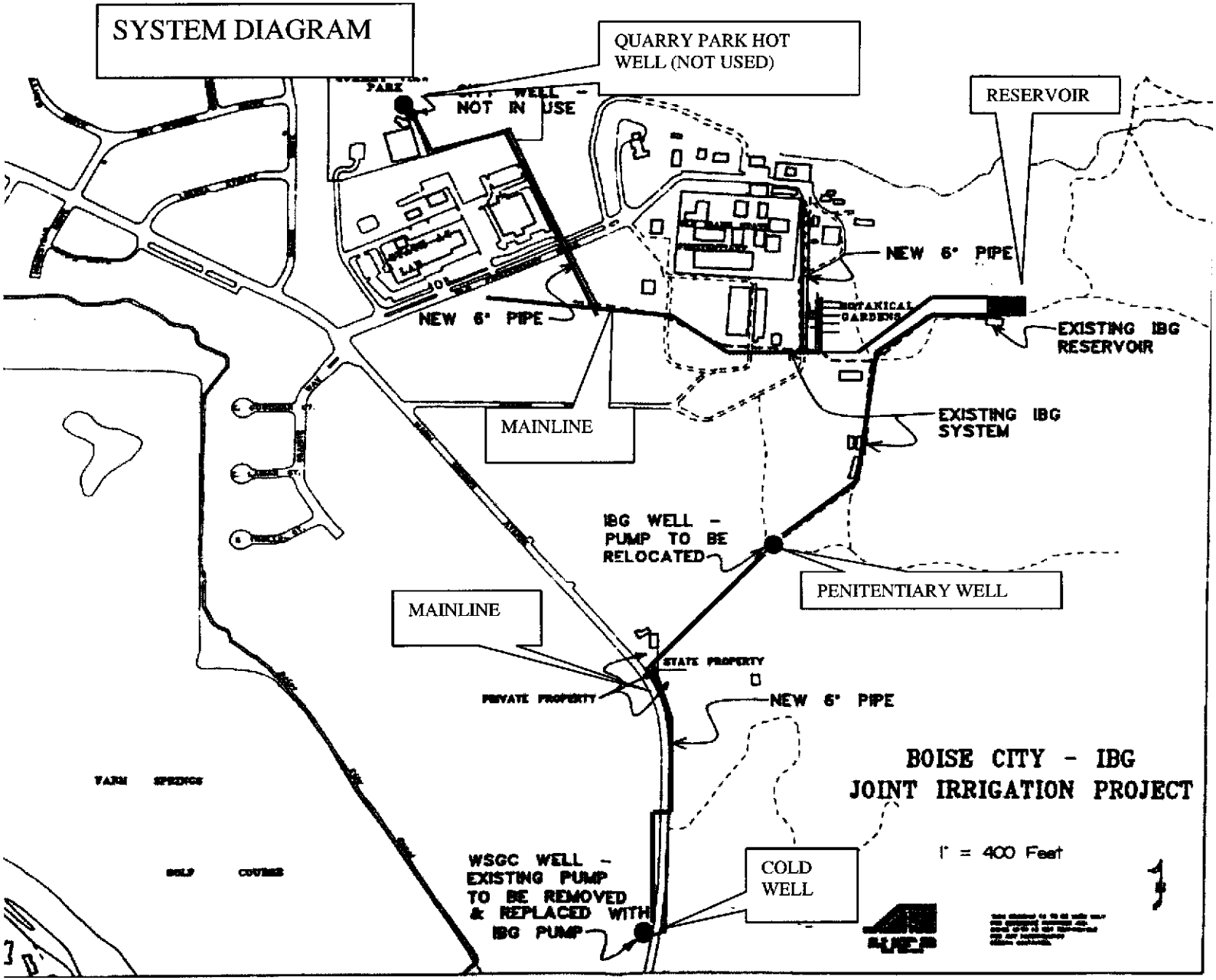


# FIELD EXAM 63-10022
# OVERLAP REVIEW
# BY DAN NELSON

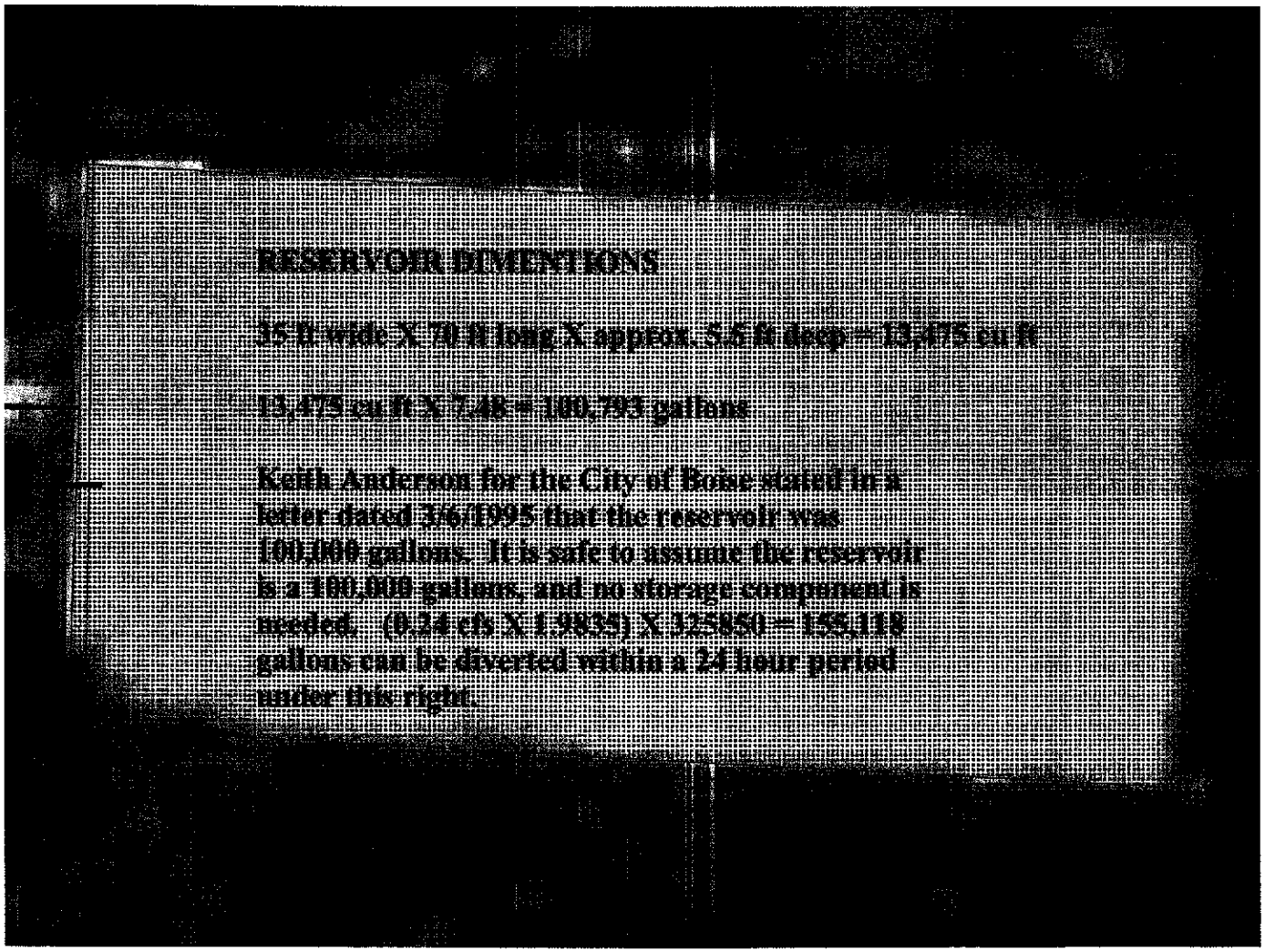



**PLEASE NOTE: Transfer 69327 has been filed to allow the Warm Springs Golf Course to irrigate out of the cold well also. This transfer hasn't been approved, but I wanted to mention it since it will come out of the cold well also. The place of use for the transfer will not affect the place of use for this permit.**


SPRINKLER MAINLINE
reservoir
MAINLINE
PENITENTIARY HOT WELL
MAINLINE FROM RESERVOIR
SYSTEM DIAGRAM 63-10022
QUARRY PARK HOT WELL NOT CONNECTED TO SYSTEM
RELIFT PUMP
COLD WELL
PRESSURE REGULATOR
PRESSURE RELIEVE VALVE
CONTROL VALVE
The water for this system is pumped from the cold water well into a mainline that travels to the reservoir. The Penitentiary well is also connected to this system. The water in the reservoir is run down hill to three separate water users. The Quarry Park is at the end of the system. The water enters a cement vault at Quarry Park and is piped into a 15 Hp pump that re-pressurizes the water for their irrigation system. The pressure is regulated to maintain 60 psi for the sprinklers. The pump is capable of delivering more water than the sprinkler system can divert per


SYSTEM DIAGRAM
QUARRY PARK HOT WELL (NOT USED)
RESERVOIR
NOT IN USE
NEW 6" PIPE
NEW 6" PIPE
EXISTING IBG RESERVOIR
MAINLINE
EXISTING IBG SYSTEM
IBG WELL - PUMP TO BE RELOCATED
PENITENTIARY WELL
MAINLINE
STATE PROPERTY
PRIVATE PROPERTY
NEW 6" PIPE
BOISE CITY - IBG JOINT IRRIGATION PROJECT
1" = 400 Feet
WSGC WELL - EXISTING PUMP TO BE REMOVED & REPLACED WITH IBG PUMP
COLD WELL

# Field Exam 63-10022
# Reservoir Dimensions
# By Dan Nelson




0.003 0 0.003 0.006 Miles

238(4)-1
5/93

# IDAHO DEPARTMENT OF WATER RESOURCES

## WELL INSPECTION FORM

QUARRY PARK HOT well

1. **DRILLING PERMIT NO:** UNKNOWN **OTHER APPLICABLE NO:** 63-10022

2. **OWNER:** City of Boise Phone: 384-4240
Address: 1104 Royal Blvd, Boise, ID 83706-2898

3. **WELL LOCATION:** Twp 3N, Rge. 2E, Sec. 13, NE 1/4 NW 1/4
County ADA (Provide sketch map and photo on reverse.)

4. **DRILLER:** W. E. Stevens & Sons Lic. No. 153
When Drilled? 11-15-1983

5. **WELL CONSTRUCTION:** UNSURE ABOUT CAP SEE COMMENTS
Casing Diameter 10 inches Water tight cap? [ ] Yes [X] No Access Port: [X] Yes [ ] No
Casing ≥ 12 inches above ground? [ ] Yes [X] No - Describe FORMER TURBINE PUMP ON PAD IN a VAULT AT GROUND LEVEL.
Depth of Casing UNKNOWN ft. Method Drilled UNKNOWN
Condition of Well Casing: [ ] Good [ ] Fair [ ] Poor Describe UNKNOWN NO casing visible
Control Valve? [ ] Yes [X] No Pressure Gauge: [ ] Yes [X] No
Condition of Piping and Valving UNKNOWN - NOTHING VISIBLE.
Auger to a depth of — 0 — ft. Evidence of Annular Seal [ ] Yes [X] No CEMENT PAD
Are there obvious constuction problems that may be a source for contamination or waste of water?
[X] Yes [ ] No (Describe in Remarks and Attach Photo - On Reverse)

6. **HYDROLOGIC INFORMATION:**
Depth to Static Water UNKNOWN ft. Water Temperature 137° per owner °F
Flowing Artesian [ ] Yes [X] No Pressure: _____ (psi)
Water Sample Taken? [ ] Yes [X] No If yes, describe purpose _____
Water Quality Measurements/Observations (Describe) _____

7. **WELL USE:**

| | | |
|---|---|---|
| [ ] Domestic | [X] Irrigation | [ ] Stock |
| [ ] Test | [ ] Municipal | [ ] Industrial |
| [X] Abandoned | [ ] Waste Disposal/Injection | [ ] Not Used |

[ ] Other: Was used for irrigation - Now abandoned.

8. **POSSIBLE CONTAMINATION SOURCES:**

Is there evidence of Chemigation? [ ] Yes [X] No

If yes, is there a check-valve present? [ ] Yes [X] No

Is there a possible source of contamination nearby? [ ] Yes [X] No

If yes, what Type? _____

How far away from the well is this source? _____

9. **REMARKS:** This well used to have a TURBINE PUMP. ON The well. The TURBINE PUMP was Removed. A METAL PLATE NO COVERS The well. We didn't have ANY WRENCHES TO Remove The PLATE. I DON'T KNOW IF The CASING is SEALED UNDER The PLATE OR NOT. The well is AT GROUND LEVEL, BUT IS SURROUNDED BY a 3' High CEMENT VAULT. That may PROTECT The well FROM Some CONTAMINATION.

Daniel A. Mekan - Senior Agent
Signature of Dept. Representative & Title

3-21-05
Inspection Date

**PHOTOS, DRAWINGS, OTHER ATTACHMENTS:**

238(4)-1
5/93

# IDAHO DEPARTMENT OF WATER RESOURCES

## WELL INSPECTION FORM

Quarry Park Hot well

1. **DRILLING PERMIT NO:** UNKNOWN **OTHER APPLICABLE NO:** 63-10022

2. **OWNER:** City of Boise Phone: 384-4240
Address: 1104 Royal Blvd, Boise, ID 83706-2898

3. **WELL LOCATION:** Twp 3N, Rge. 2E, Sec. 13, NE 1/4 NW 1/4
County ADA (Provide sketch map and photo on reverse.)

4. **DRILLER:** W. E. Stevens Sons Lic. No. 153
When Drilled? 11-15-1983

5. **WELL CONSTRUCTION:**
Unsure about cap see comments
Casing Diameter 10 inches Water tight cap? [ ] Yes [✓] No Access Port: [✓] Yes [ ] No
Casing ≥ 12 inches above ground? [ ] Yes [✓] No - Describe Former turbine pump on pad in a vault at ground level.
Depth of Casing UNKNOWN ft. Method Drilled UNKNOWN
Condition of Well Casing: [ ] Good [ ] Fair [ ] Poor Describe UNKNOWN no casing visible
Control Valve? [ ] Yes [✓] No Pressure Gauge: [ ] Yes [✓] No
Condition of Piping and Valving UNKNOWN - Nothing visible.
Auger to a depth of — 0 — ft. Evidence of Annular Seal [ ] Yes [✓] No Cement Pad
Are there obvious constuction problems that may be a source for contamination or waste of water?
[✓] Yes [ ] No (Describe in Remarks and Attach Photo - On Reverse)

6. **HYDROLOGIC INFORMATION:**
Depth to Static Water UNKNOWN ft. Water Temperature 137° per owner °F
Flowing Artesian [ ] Yes [✓] No Pressure: _____ (psi)
Water Sample Taken? [ ] Yes [✓] No If yes, describe purpose _____
Water Quality Measurements/Observations (Describe) _____

7. **WELL USE:**

| | | |
|---|---|---|
| [ ] Domestic | [✓] Irrigation | [ ] Stock |
| [ ] Test | [ ] Municipal | [ ] Industrial |
| [✓] Abandoned | [ ] Waste Disposal/Injection | [ ] Not Used |

[ ] Other: Was used for irrigation - Now abandoned.

8. **POSSIBLE CONTAMINATION SOURCES:**

Is there evidence of Chemigation? [ ] Yes [X] No

If yes, is there a check-valve present? [ ] Yes [X] No

Is there a possible source of contamination nearby? [ ] Yes [X] No

If yes, what Type? _____

How far away from the well is this source? _____

9. **REMARKS:** This well used to have a TURBINE PUMP. ON The well. The TURBINE PUMP was Removed. A METAL PLATE NO COVERS The well. We didn't have ANY WRENCHES TO Remove The PLATE. I DON'T KNOW IF The CASING is sealed under The PLATE OR NOT. The well is at ground Level, BUT is SURROUNDED BY a 3' High CEMENT VAULT. That may PROTECT The well FROM Some CONTAMINATION.

Daniel A. Nelson - Senior Agent — Signature of Dept. Representative & Title

3-21-05 — Inspection Date

**PHOTOS, DRAWINGS, OTHER ATTACHMENTS:**

Idaho Department of Water Resources
Estimated Pumping Rate Computer
Flow Analysis Performed by: [redacted]

ed 1/6/2000

Date: [redacted]



| | | | | | | |
|---|---|---|---|---|---|---|
| Record ID | | | | Measured Flow: | 0.37 cfs | |
| Water Right No. | 63-10022 | | | Designed Flow: | | Max Flow fr |
| Name | City of Boise | | | HP/Eff Flow: | 2.21 cfs | <--Max |
| pod | Quarry Park Re-lift Pump | | | Sprinkler Flow: | 0.24 cfs | |
| year: | | | | Pivot/System Flow: | | |
| Flow Measurement: | [redacted] gpm | = | 0.37 cfs | (measured on the hot well in first exam) | | |
| Curve/Pump Design: | [redacted] gpm | = | | | | |

Horsepower / Efficiency Method

| | | | | |
|---|---|---|---|---|
| Horsepower | [redacted] hp | | | (extremely oversized pump. See notes below) |
| PWL | [redacted] ft | | | |
| Disch Psi | [redacted] psi | | | |
| PUMP Eff Estimate | 0.77 % | | | |
| TDH | 46 ft | | | |
| OHP | 11.55 hp | | | |
| Flow | 990 gpm | = | 2.21 cfs | |

System Method:

| | | | | | | |
|---|---|---|---|---|---|---|
| No Lines | [redacted] | | | Nozzle Equation: Q=C*A*sqrt(2*g*h) / sqrt(1-r^4) | | |
| Birds per line | [redacted] | | | C= | 1.00 | Nozzle coefficient; typical 0.97 to 1.00 |
| Ttl no nozzles | 19 | | | r= | 0.0065 ft | Nozzle radius |
| Nozzle size | [redacted] in | | | A= | 0.00013 ft^2 | Nozzle area |
| Nozzle pressure | [redacted] psi | | | h= | 139 ft | Head |
| Flow per nozzle | 5.63 gpm | | | g= | 32.2 ft/sec^2 | Gravitational constant |
| Sprinkler Flow | 107 gpm | | | Q= | 0.013 cfs | Flow per nozzle |
| Percent Leaks | [redacted] % | | | = | 5.628 gpm | Flow per nozzle |
| Total Flow | 107 gpm | = | 0.24 cfs | (per applicant's information) | | |
| Pivot / System rating | [redacted] gpm | = | | | | |

Comments / Data Supplied:

The relift pump is way oversized for this type of use, and could supply well over 2.21 cfs at 60 psi. Therefore they have installed a pressure regulation system to reduce and maintain the pressure on the sprinklers at a constant rate. The pressure regulation system would put approximately 225 psi against the pump. This psi rate seemed extremely high to me, since this type of setup would be serverly inefficient. To ensure this system was reasonable, I spoke to Scott King about this oversized pump, and he told me that this is not an uncommon practice amongst municipalities. Mr. King has inspected many municipalities while working in he ESPA Measurement Districts, and I trust his opinion. The City's head of park maintenance, Mike Woodward, sent me the largest and smallest sprinkler stations on the parks irrigation system. The largest station supplied a maximum of 0.24 cfs for the system. The original field exam measured the diversion into this system as 0.37 cfs from the Hot well that is now abandoned, which seems reasonable even with the maximum drawdown. The earlier exam didn't state what or how many stations were in operation during the measurement. In a letter dated 3/6/1995, the City states that it uses 0.37 cfs of water for irrigation as determined by the measurement during the original field exam. In another letter dated 2/12/1996, another measurement was done on station # 9 which had a diversion rate of 0.27 cfs. The 1996 measurement is very close to the 0.24 cfs supplied by the City of their current system. The diversion rates requested by the applicant seem to vary greatly with very little supporting documentation. I believe that 0.24 cfs has been used on the system, and the right should be licensed for that amount. This is very close to the standard inch and half of water granted by the department for special irrigation needs for smaller systems like the parks.

**Nelson, Dan**

**From:** MIKE WOODWARD [MWOODWARD@cityofboise.org]
**Sent:** Monday, March 21, 2005 11:54 AM
**To:** dnelson@idwr.state.id.us
**Cc:** Maria Minicucci
**Subject:** QuarryView Park Irrigation

Dan,

I hope this is what you are looking for:

The largest station in the park contains 19 Rainbird 5505 irrigation heads with a #6 nozzle, @ 60 psi they should deliver around 5.6 g.p.m.

The smallest station in the park contains 16 Rainbird R-50 irrigation heads with a #3 nozzle, @ 60 psi they should deliver around 4.1 g.p.m.

let me know if you need anything else.

Mike Woodward
Boise Parks and Recreation Department
1104 Royal Blvd.
Boise, ID 83706
mwoodward@cityofboise.org

RAIN BIRD.

# Performance Charts

## 5500 Series Rotors

| English | | | | | |
|---|---|---|---|---|---|
| Pressure (psi) | Nozzle | Radius (ft.) | Flow (GPM) | Precipitation (In/h) ■ | Precipitation (In/h) ▲ |
| 30 | 2 | 33 | 1.4 | 0.25 | 0.29 |
| | 3 | 35 | 2.3 | 0.36 | 0.42 |
| | 4 | 37 | 2.6 | 0.37 | 0.42 |
| | 5 | 37 | 3.2 | 0.45 | 0.52 |
| | 6 | 37 | 3.8 | 0.54 | 0.62 |
| | 8 | 33 | 5.4 | 0.95 | 1.10 |
| 40 | 2 | 37 | 1.6 | 0.23 | 0.27 |
| | 3 | 39 | 2.7 | 0.34 | 0.39 |
| | 4 | 41 | 3.1 | 0.35 | 0.41 |
| | 5 | 41 | 3.8 | 0.43 | 0.50 |
| | 6 | 43 | 4.5 | 0.47 | 0.54 |
| | 8 | 39 | 6.4 | 0.81 | 0.94 |
| | 10 | 41 | 7.5 | 0.86 | 0.99 |
| | 12 | 39 | 9.6 | 1.21 | 1.40 |
| 50 | 2 | 37 | 1.8 | 0.26 | 0.30 |
| | 3 | 41 | 3 | 0.35 | 0.40 |
| | 4 | 43 | 3.5 | 0.36 | 0.42 |
| | 5 | 45 | 4.3 | 0.41 | 0.47 |
| | 6 | 45 | 5.1 | 0.48 | 0.56 |
| | 8 | 43 | 7.3 | 0.76 | 0.88 |
| | 10 | 47 | 7.9 | 0.69 | 0.80 |
| | 12 | 45 | 11.1 | 1.05 | 1.22 |
| 60 | 2 | 37 | 2 | 0.28 | 0.32 |
| | 3 | 41 | 3.4 | 0.38 | 0.44 |
| | 4 | 45 | 3.8 | 0.36 | 0.42 |
| | 5 | 47 | 4.7 | 0.41 | 0.48 |
| | 6 | 47 | 5.6 | 0.49 | 0.56 |
| | 8 | 45 | 8.1 | 0.77 | 0.89 |
| | | | | | |

R50's
60 PSI
4.3 GPM/NOZ
16
68.8
• 15 CFS

5.6
19 BIRDS
106.4 GPM
0.24 CFS

RAIN BIRD.

# Performance Charts

## R-50/R-50 SAM with Rain Curtain Nozzles, Standard Trajectory

| English | | | | | |
|---|---|---|---|---|---|
| **Pressure (psi)** | **Nozzle** | **Radius (ft.)** | **Flow (GPM)** | **Precip (In/h) ■** | **Precip (In/h) ▲** |
| 25 | 1.5 | 27 | 1.6 | 0.42 | 0.49 |
| | 2 | 28 | 1.9 | 0.47 | 0.54 |
| | 3 | 32 | 2.8 | 0.53 | 0.61 |
| | 4 | 33 | 3.8 | 0.67 | 0.78 |
| | 6 | 36 | 5.4 | 0.8 | 0.93 |
| 35 | 1.5 | 28 | 1.9 | 0.47 | 0.54 |
| | 2 | 30 | 2.2 | 0.47 | 0.54 |
| | 3 | 33 | 3.3 | 0.58 | 0.67 |
| | 4 | 34 | 4.4 | 0.73 | 0.85 |
| | 6 | 38 | 6.5 | 0.87 | 1 |
| 45 | 1.5 | 28 | 2.2 | 0.54 | 0.62 |
| | 2 | 30 | 2.6 | 0.56 | 0.64 |
| | 3 | 34 | 3.8 | 0.63 | 0.73 |
| | 4 | 34 | 5.1 | 0.85 | 0.98 |
| | 6 | 40 | 7.3 | 0.88 | 1.01 |
| 55 | 1.5 | 28 | 2.4 | 0.59 | 0.68 |
| | 2 | 30 | 2.9 | 0.62 | 0.72 |
| | 3 | 34 | 4.1 | 0.68 | 0.79 |
| | 4 | 34 | 5.7 | 0.95 | 1.1 |
| | 6 | 40 | 8.1 | 0.98 | 1.13 |
| 60 | 1.5 | 28 | 2.5 | 0.61 | 0.71 |
| | 2 | 30 | 3 | 0.64 | 0.74 |
| | 3 | 34 | 4.3 | 0.72 | 0.83 |
| | 4 | 34 | 6.1 | 1.02 | 1.17 |
| | 6 | 40 | 8.5 | 1.02 | 1.18 |

4.3 gpm
16 Birds
68.8 gpm
0.15 cfs.

| Metric |
|---|

Idaho Department of Water Resources ed 1/6/2000
Estimated Pumping Rate Computer
Flow Analysis Performed by: [redacted] Date: [redacted] Page 1 of 1

| | | | |
|---|---|---|---|
| Record ID | | Measured Flow: | |
| Water Right No. | 63-10022 | Designed Flow: | |
| Name | City of Boise | HP/Eff Flow: | 1.97 cfs <<--Max |
| pod | Cold Water Well | Sprinkler Flow: | |
| year: | | Pivot/System Flow: | |

Flow Measurement: [redacted] gpm =

Curve/Pump Design: [redacted] gpm =

Horsepower / Efficiency Method

| | | | |
|---|---|---|---|
| Horsepower | [redacted] | hp | |
| PWL | [redacted] | ft | (See comments below for pressure and water level data) |
| Disch Psi | [redacted] | psi | |
| PUMP Eff Estimate | 0.79 | % | |
| TDH | 212 | ft | |
| OHP | 47.4 | hp | |
| Flow | 885 | gpm = | 1.97 cfs |

System Method:

| | | | |
|---|---|---|---|
| No Lines | [redacted] | | |
| Birds per line | [redacted] | | |
| Ttl no nozzles | 0 | | |
| Nozzle size | [redacted] | in | |
| Nozzle pressure | [redacted] | psi | |
| Flow per nozzle | 0.00 | gpm | |
| Sprinkler Flow | 0 | gpm | |
| Percent Leaks | [redacted] | % | |
| Total Flow | 0 | gpm = | |

Pivot / System rating [redacted] gpm =

Nozzle Equation: Q=C*A*sqrt(2*g*h) / sqrt(1-r^4)

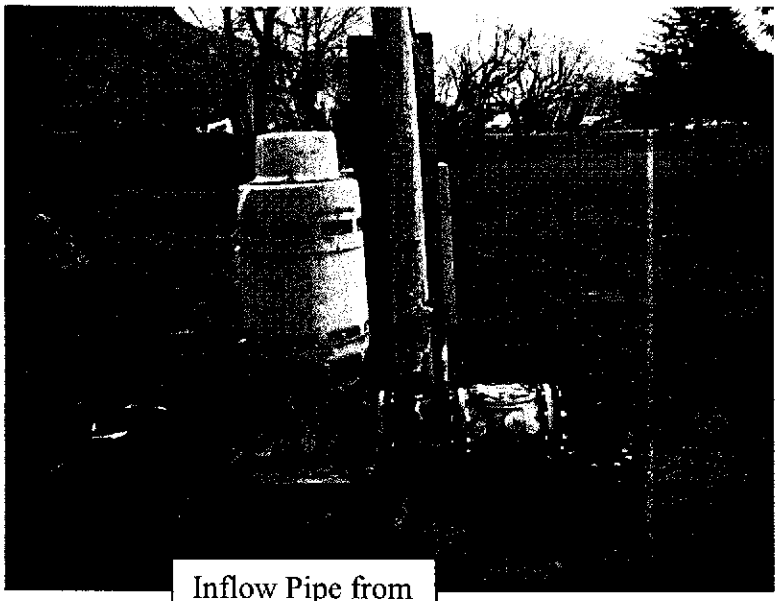
| | | | |
|---|---|---|---|
| C= | 1.00 | | Nozzle coefficient; typical 0.97 to 1.00 |
| r= | 0.0000 | ft | Nozzle radius |
| A= | 0.00000 | ft^2 | Nozzle area |
| h= | 0 | ft | Head |
| g= | 32.2 | ft/sec^2 | Gravitational constant |
| Q= | 0.000 | cfs | Flow per nozzle |
| = | 0.000 | gpm | Flow per nozzle |

Comments / Data Supplied:

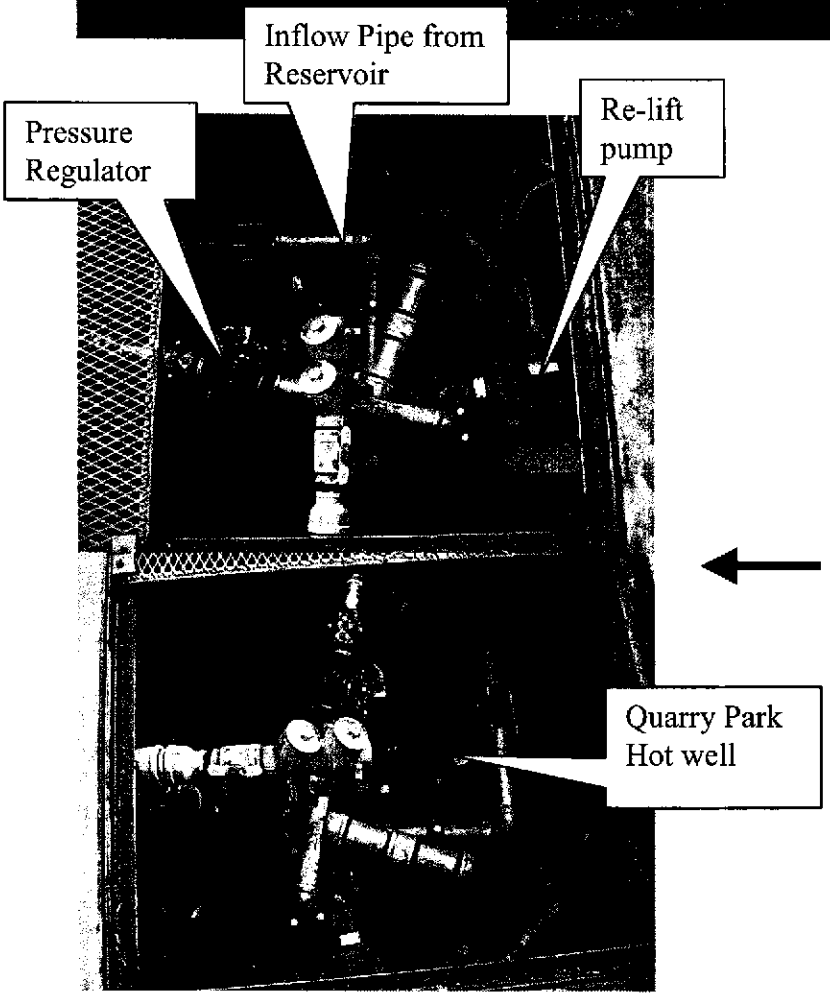
A pump test was performed on the Cold Water well at the Warm Springs Golf Course in July of 1995. This test revealed a pumping level of 21.77 feet at a pumping rate of 587 gpm for a 24 hour period. In a letter Ed Squires to the City during this test, Mr. Squires states that Layne Pump of Idaho did a pump test at the time that the well was drilled with a pumping level of 33 ft at 700 gpm. Therefore, I used the pumping level of 33 feet. It seems reasonable that the higher rate diverted from the pump would cause an increase in the drawdown of the well. During the pump test, the pumping level never did stabilize, so it is safe to assume that an average of 33 feet drawdown would be a reasonable long term pumping water level. The water from the well is pumped up hill approximately 156 feet. I used the Quadrangle map to determine the difference in feet of elevation from the pump to the reservoir or 156 feet difference. A 156 feet of lift from the pump to the reservoir would equal approximately 67.5 psi. I added an additional 10 psi on to this number to account for friction loss and pressure of the open discharge. Therefore, at estimated the pressure on the well at 77.5 psi. The pump test was done at a diversion rate of 587 gpm or 1.31 cfs. In the narrative, it implies that the had the pump valved back to this flow rate. I believe that the above calculation is a reasonable estimation of the pump capacity.

*PHOTOGRAPHER AND DATE OF PHOTOS* DANIEL A NELSON 3/21/2005

*FILE NUMBER* 63-10022

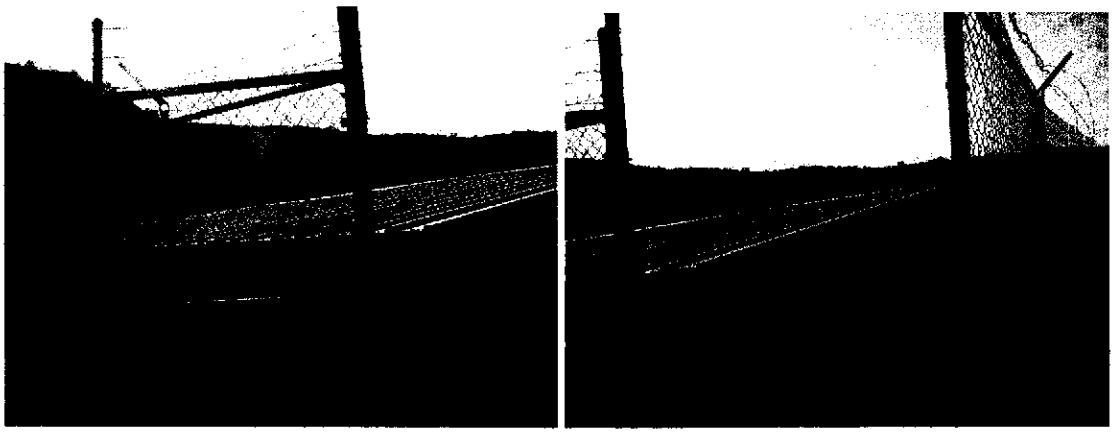


This is a photo of the cold water well located at Warm Springs Golf Course. The well diverts into a mainline the feeds the reservoir. The water from the reservoir then feeds the re-lift pump shown below

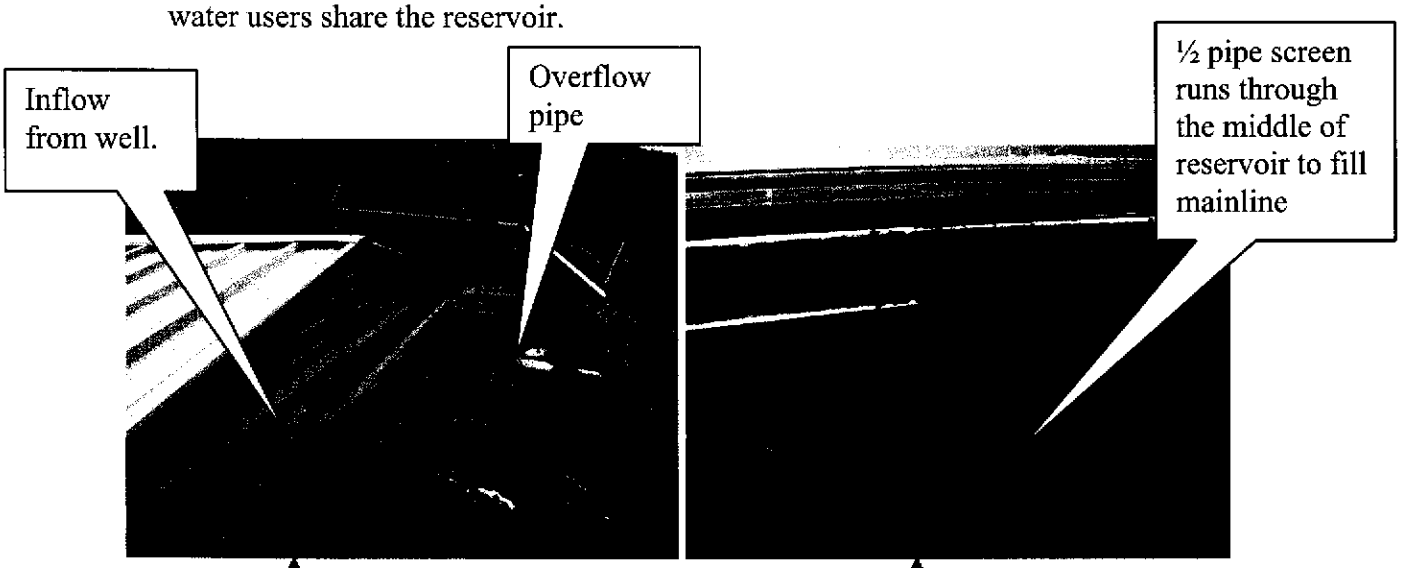



These are pictures of the vault at Quarry Park. The water comes in through the pipeline with the yellow and red connector to a re-lift pump. The relift pump then sends the water through a pressure regulator, and then sends it out to the sprinkler system. The hole in the bottom of the vault is the Quarry Park Hot Well. There is no pump in the well. According to the city representative that accompanied me, the well has been partially filled in, and hasn't been used for some time.

*PHOTOGRAPHER AND DATE OF PHOTOS* DANIEL A NELSON 3/21/2005
*FILE NUMBER* 63-10022



The above pictures are of the reservoir for the irrigation system. 3 different water users share the reservoir.

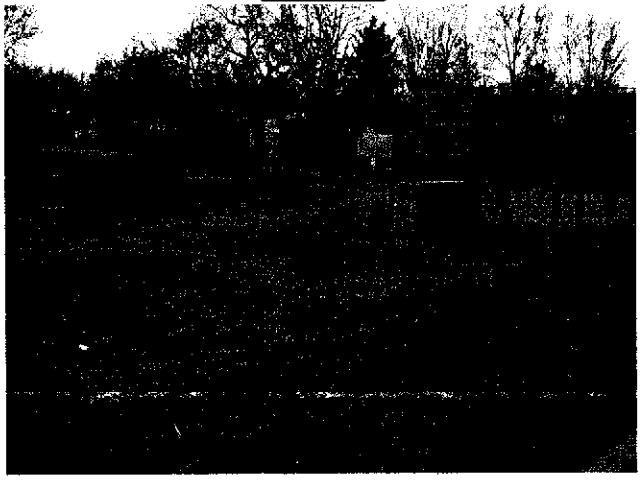



The black pipe above is where the water from the well comes into the reservoir. The white pipe on corner of the building is the overflow in case the automatic floats doesn't work. The cold water well is connected to a float regulation system for the reservoir. Once the reservoir is lowered to a certain point the well kicks on and fills the reservoir.

The above photo is of the inside of the reservoir. A half pipe type screen runs along the bottom of the reservoir. The mainline is filled from the water flowing through the screen.

*PHOTOGRAPHER AND DATE OF PHOTOS* DANIEL A NELSON 3/21/2005

*FILE NUMBER* 63-10022





These are photos of the park. The irrigation vault is located on the other side of the building behind the burgundy vehicle.



Sherl L. Chapman

CONSULTANT
410 S. ORCHARD / SUITE 144 / BOISE, IDAHO 83705 / PHONE 344-6690

RECEIVED
JUL 1 1986
Department of Water Resources

Mr. A. Kenneth Dunn, Director
Idaho Department of Water Resources
Statehouse
Boise, Idaho 83720

Dear Mr. Dunn:

I hereby verify that I have been retained to conduct the water right examination for water right permit #63-10022 in accordance with the laws and regulations of the State of Idaho.

Sherl L. Chapman

Sherl L. Chapman

Dated: 6-30-86

COPY

1ST Exam
Included Per
Shelley Keen's
Request
DAN. 3-31-05

RECEIVED
JUL 9 1986
Department of Water Resources
Western Regional Office

4/86

RECEIVED
JUL 3 1986
Department of Water Resources
Western Regional Office

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

EXAMINATION FEE INFORMATION

[illegible] is conducting exam. BD.

For Office Use Only
Fee Received none
Date 7/1/86
Receipt # ____
Receipt by ____
Sent to S.O. 7-11-86

RECEIVED
JUL 1 1986
Department of Water Resources

1. Permit No. 63-10022 Quarry View Park

ONE OF THE FOLLOWING BOXES SHOULD BE MARKED TO DESIGNATE YOUR CHOICE:

☐ I choose to have the department make the field examination of this permit; attached is the examination fee. (If this box is marked, complete items 1 thru 8.)

2. Permit Holder: BOISE PARK SYSTEM

3. Post Office Address: 1104 Royal Blvd.

Boise, Idaho 83706 Telephone No. 384-4240

4. Source of Water: Ground Water

5. Extent of Use:

Domestic ____ (No. of households) Stockwater ____ (No. and type of stock)

Irrigation 8 (acres) Other/Remark ____

6. Total rate &/or volume for which proof is submitted 0.6 cfs ____ acre-feet

7. Show the date water was first diverted and beneficially used under this permit:

Fall of 1984

8. Person to contact to accompany the department representative during the field examination:

N/A
(Name)

(Address) (Telephone Number)

☒ I choose to have the field examination conducted by a certified water right examiner. Attached is a statement from the certified examiner I have selected verifying that he has been retained to conduct the examination. (If this box is marked, complete items 1 thru 7.)

June 30, 1986 Paul Phillbrook Park Designer
Date Signature of Permit Holder (and title, if appropriate)

Should questions arise during the processing of this application please contact:

SHERL L. CHAPMAN
410 S. Orchard, Suite 144
Boise, ID 83705
344-6690

Form 27
6/84

...ources
Rec'd 1-9-87

RECEIVED
JAN 08 1987
Department of Water Resources

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# BENEFICIAL USE FIELD REPORT

## A. GENERAL INFORMATION

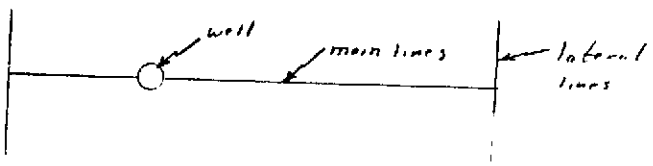
1. Owner: Dept. of Parks - Quarry View — Permit No. 63-10022
   Current Address: 1104 Royal Blvd., Boise, ID 83706 — Phone No. 384-4240
2. Accompanied by: Skip Gates — EXAM. DATE: 11-12-86
   Address: Same as above — Phone No. 384-4240
   Relationship to Permit Holder: Employee
3. Source: Ground Water — tributary to ------

## B. OVERLAP REVIEW

1. Other water rights with same place of use: None recorded
   ☐ Copies Attached
2. Other water rights with same point of diversion: None recorded
   ☐ 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" =* Not to scale

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 i... ...of 10 acres or more).
   ☒ Photo of Diversion and System Attached (required for all but single household domestic groundwater, and ...ter.

*System Description (continued)*

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

System is used to irrigate the Quary View Park lawn and related greenery. Well is used in conjunction with a buried sprinkler system operated by timer. Pump is a small vertical turbine unit in a vault.

4. ☐ 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 |
|---|---|---|---|---|---|
| 1 | US Electric | 30 | R7183-03-884 | Peerless | 6x6x12 "4" |
| | | | | | |
| | | | | | |
| | | | | | |

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

5. **Point(s) of Diversion:**

| Ident. No. | Gov't. Lot | ¼ | ¼ | ¼ | Sec. | Twp. | Rge. | County | Method of Determination/Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | -- | NW | NE | NW | 13 | 3N | 2E | Ada | Field/Map |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

6. **Place(s) of Use:** Indicate Method of Determination

| Twp. | Rge. | Sec. | NE¼ | | | | NW¼ | | | | SW¼ | | | | SE¼ | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | |
| 3N | 2E | 13 | | | | | 7.0 | | | | | | | | | | | | 7.0 |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

*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 |
|---|---|---|---|---|---|---|
| Manometer | Air/water | Collins | 36" | --- | --- | --- |
| | | | | | | |
| | | | | | | |
| | | | | | | |

2. **Measurements:**

Flow measured at 50 psi Q = .37 cfs

## E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method:

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 Ampsx .001732 = _____ (6)
Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

## G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{IR}$ = (Acres Irrigated) x (Irrigation Requirement) = 7 x 4.5 = 31.5

$V_{DR}$ = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = 67.7

V = Smaller of $V_{IR}$ and $V_{DR}$ = 3.15

2. Volume Calculations for Other Uses:

## H. REMARKS AND OVERLAP REVIEW ANALYSIS

## I. RECOMMENDATIONS

1. Recommended Amounts

| Beneficial Use | Period of Use From | Period of Use To | Rate of Diversion Q (cfs) | Annual Volume V (afa) |
|---|---|---|---|---|
| Irrigation | March 15 | Nov. 15 | .14 cfs | 31.5 |
| | | | | |
| | | | | |
| | | | | |
| | | Totals: | .14 | 31.5 |

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: Sheryl L. Chapman

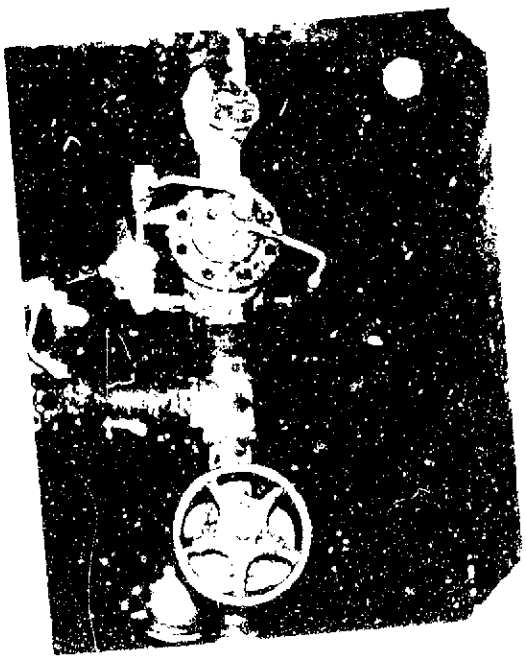
Signature: Sheryl L. Chapman

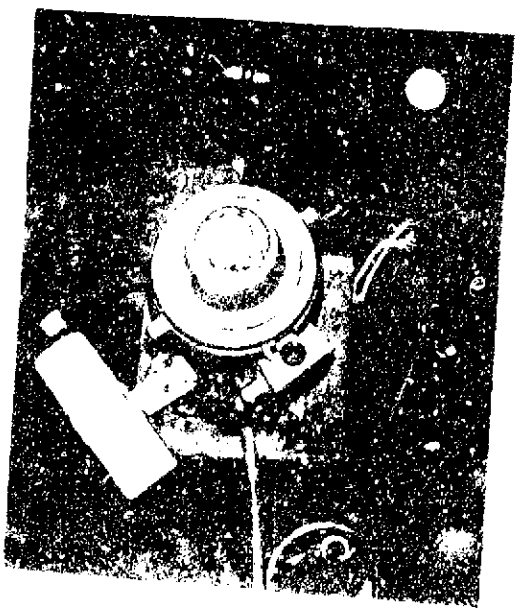
Certification Date: June 5, 1986

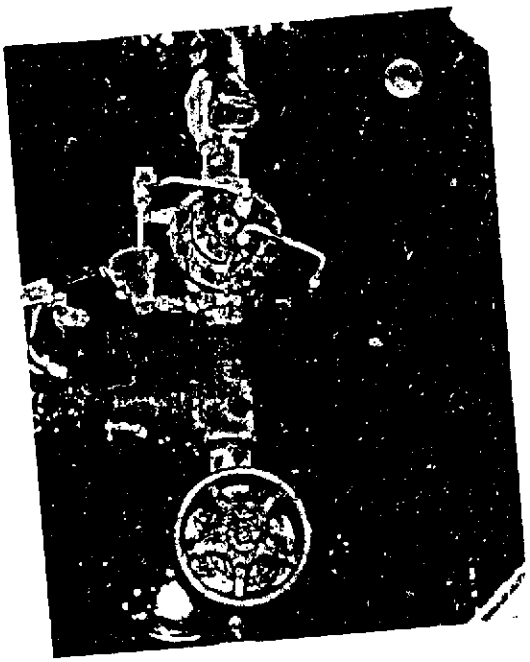
Field Report Preparation Date: 12/26/86

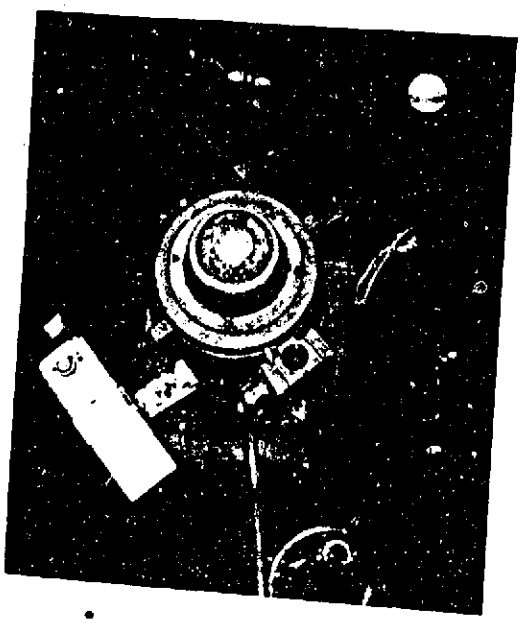
REGISTERED PROFESSIONAL GEOLOGIST SHERYL L. CHAPMAN NO. 21 STATE OF IDAHO CONSULTANT SEAL

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









COLLINS TUBE MEASUREMENT

DATE: 7/11/86

OWNER: Boise Parks Dept - Quarry View

CIRCUMFERENCE: _____ OUTSIDE R: 4.10"

PIPE THICKNESS: _____ INSIDE R: 4.0"

| FACTOR | Mr (IR Factor) | Mp | Velocity |
|---|---|---|---|
| 0.949 Y | | | |
| 0.837 | | | 4.10 |
| 0.707 X | | | |
| 0.547 | | | 4.46 |
| 0.316 X | | | |
| 0.316 | | | 4.65 |
| 0.547 | | | 4.80 |
| 0.707 X | | | |
| 0.837 | | | 4.50 |
| 0.949 X | | | |
| | | | 4.15 |

$\bar{V}$ = 4.44

Mp = P + Mr - O.R. where P is chosen reference point on collins tube

$Q = \bar{V} \pi (IR)^2$ = .37 cfs = 18.5" = 16.7 gpm

Pumping level Not Available Pump Type USE1

Time Operating _____ RPM _____

Pressure at discharge 50ps Rated Flow

Pump motor type US GPM _____

Serial No. _____ Head _____

Horsepower _____ Access Port

RPM _____ Yes _____

Meter Constants No _____

K = _____ Location _____

Kh = _____ _____

Revolutions _____

Time (seconds) _____

Voltage _____

Amperage

L1 _____ L2 _____ L3 _____

# FIELD NOTES

# PERMIT NUMBER 63-10022

**PLEASE NOTE: These documents are for backup purposes only and are not apart of actual Beneficial Use Field Report.**

Cold well Remove Hot well
In Exchange for Municipal

# Year Round Season

System volume
In conditions.

City Cambridge

May 1st

Would like to hold until
Partial decrees are issued
in late 2006.

Mike Woodward
384- 4329
384 - 4190

Maria. Minnineli
1104 Royal Blvd
Boise, 83706

6395

Required Measures Report

IV objectives to meet Goals

A. [redacted]

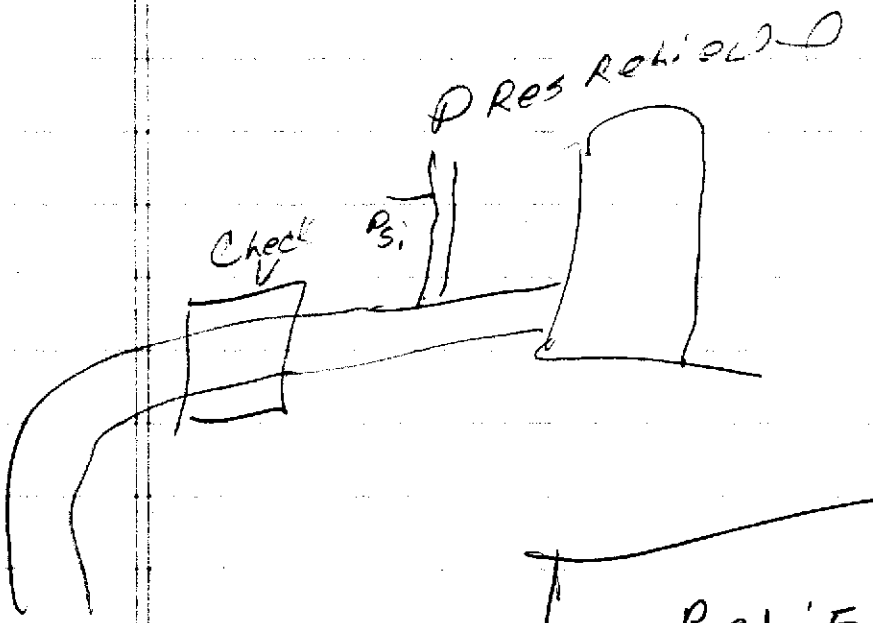
3. IDWR will require substitution of cold water resources for existing uses that do not need the heat value of the low temp geothermal resource wherever practical

Management plan
June 1988.

General Electric
SN 422113

60 Hp

Johnson L 88009
8" Discharge

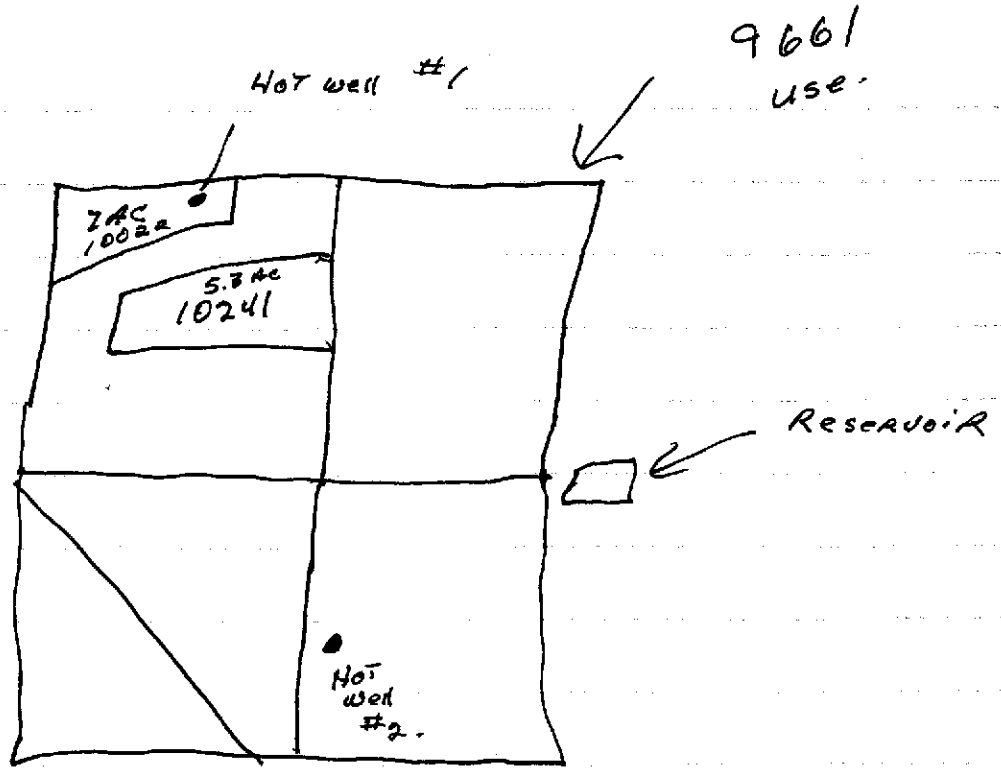



Relift Pump

Mercer Pump

Motor
15 HP
ID# E8771 / 8 12 2302
R 036F

Pump
ID# 110889
26 6 0 A 12
model 20



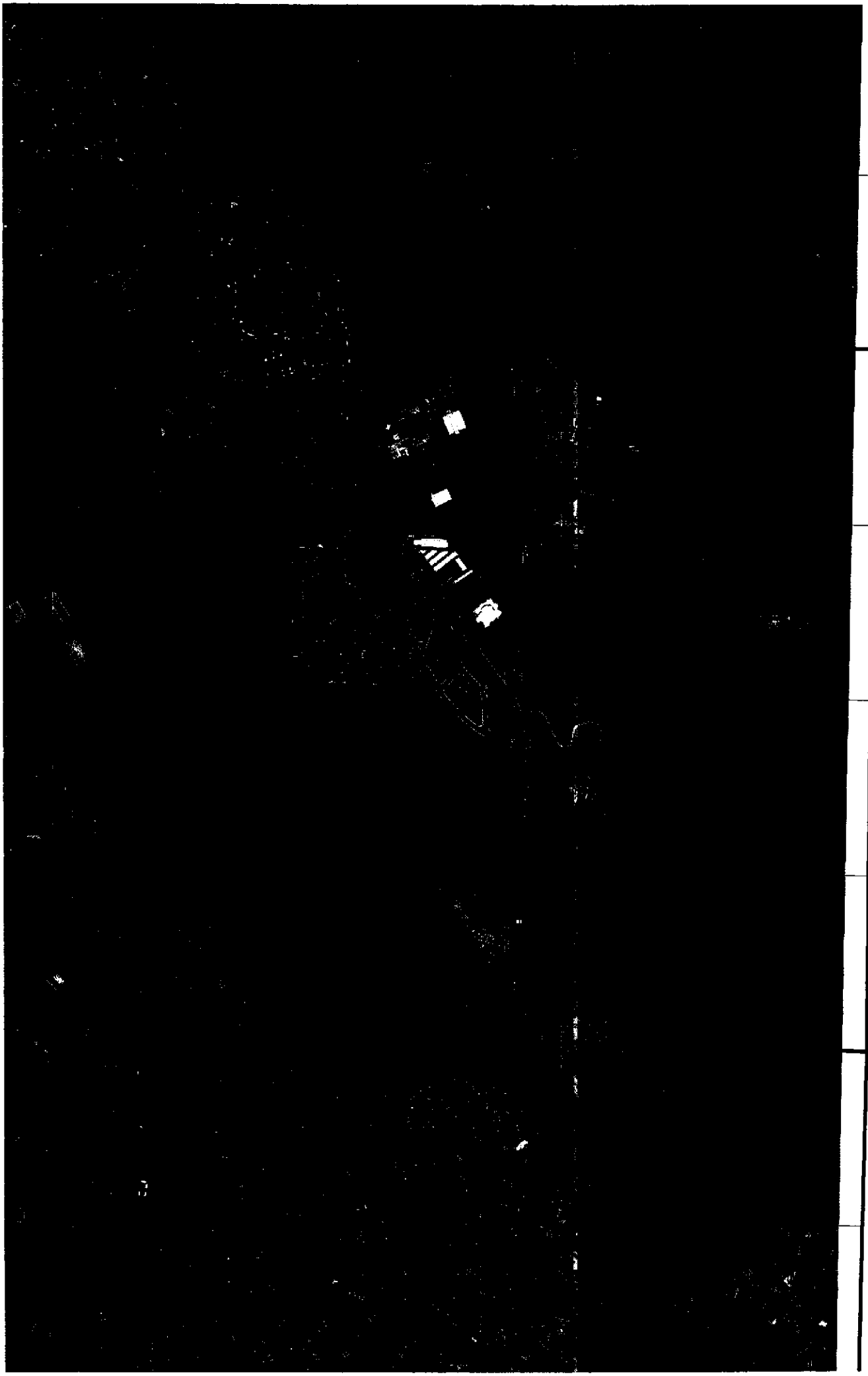

- COLD well

AC irrig would need to DIRECT OVERLAP.

ORIGINALLY

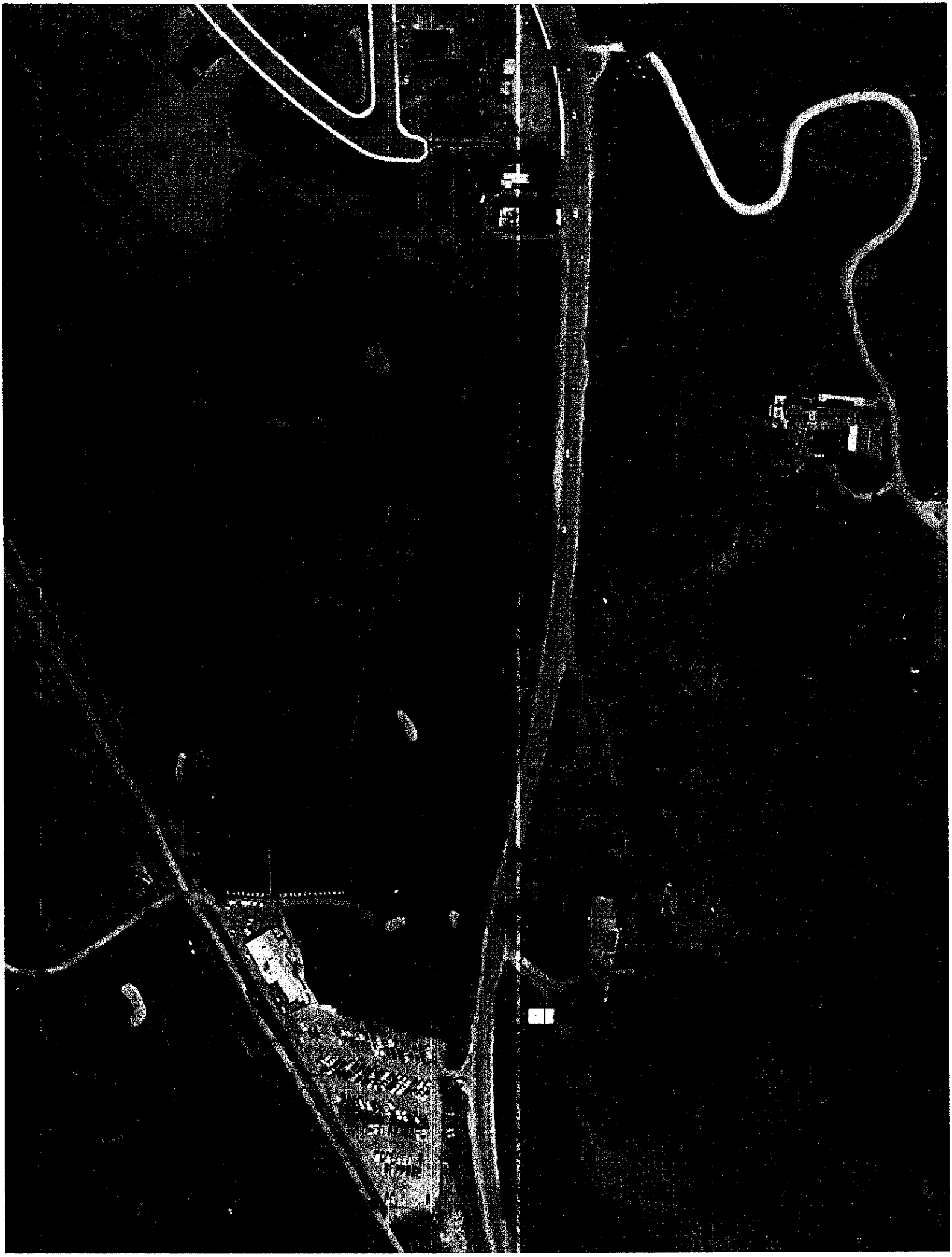
| | | | |
|---|---|---|---|
| 10022 | used | Hot well #1 | irrg. 7 ac |
| 10241 | used | Hot well #2 | irrig. 5ac. |
| 9661 | used | Hot well #2 | irrigated 110 acs |

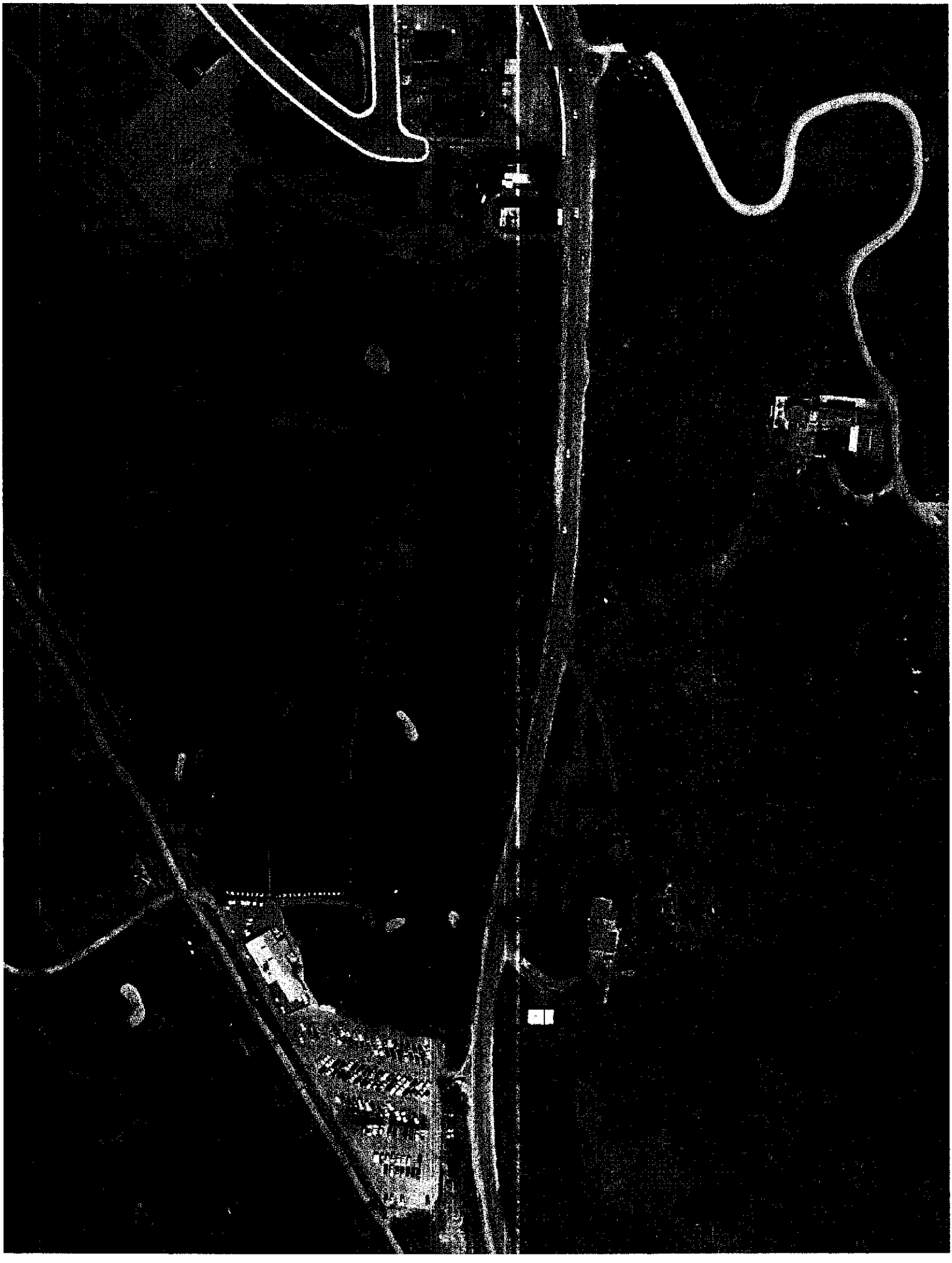
When Cold water well was added TO All 3 RightS.
The 7 acres associated with 10022 were DIRECTLY OVERLAPPING FROM The Same Source.

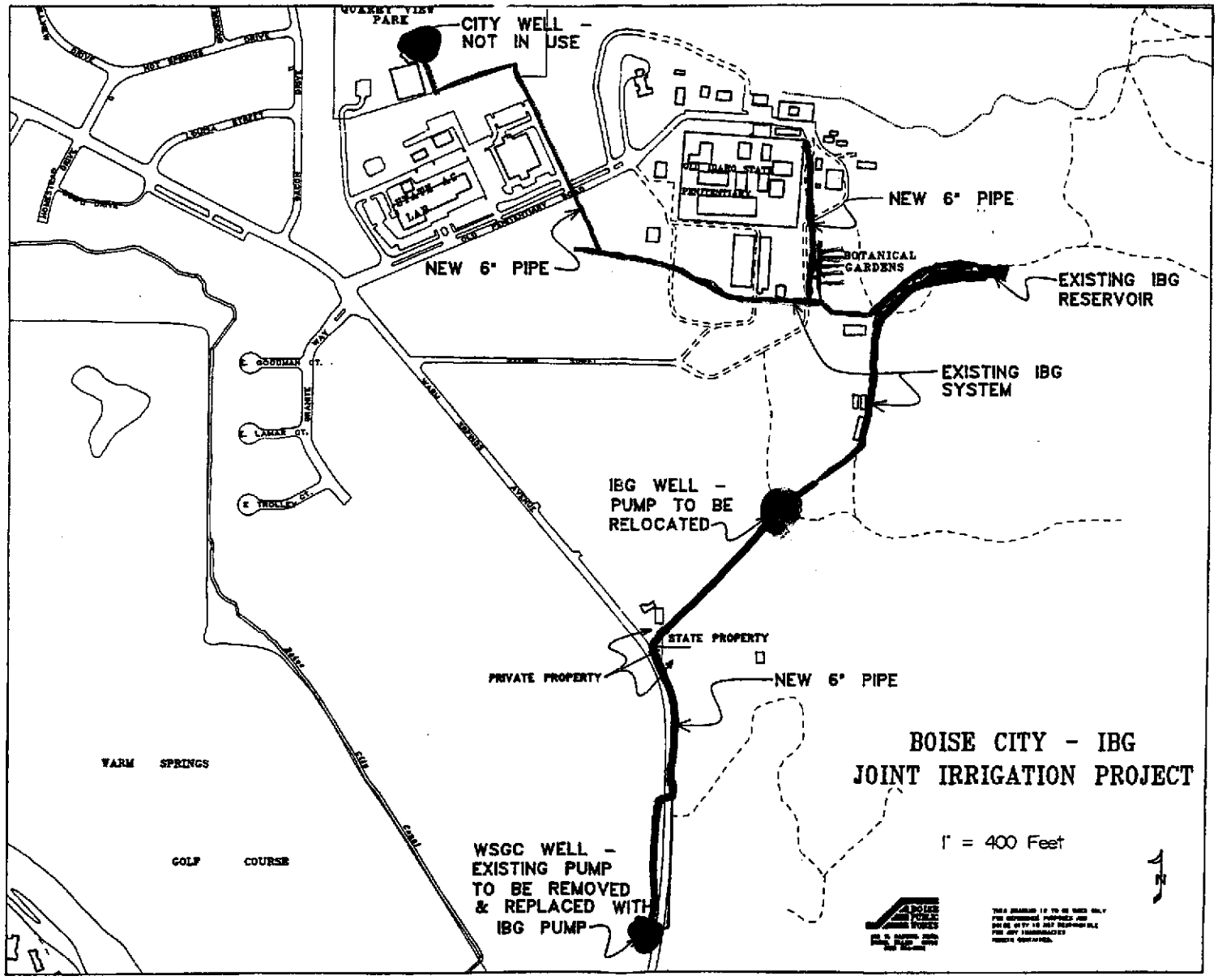


10241
x Fer
4526
Road
Cold
Well

* For
69327
Proposes
moving
water
to cold
well
(no hot wells
included.)






CITY WELL - NOT IN USE
NEW 6" PIPE
NEW 6" PIPE
BOTANICAL GARDENS
EXISTING IBG RESERVOIR
EXISTING IBG SYSTEM
IBG WELL - PUMP TO BE RELOCATED
STATE PROPERTY
PRIVATE PROPERTY
NEW 6" PIPE
WARM SPRINGS GOLF COURSE
WSGC WELL - EXISTING PUMP TO BE REMOVED & REPLACED WITH IBG PUMP
BOISE CITY - IBG JOINT IRRIGATION PROJECT
1" = 400 Feet
N

**Nelson, Dan**

**From:** Keen, Shelley
**Sent:** Thursday, March 17, 2005 8:25 AM
**To:** Nelson, Dan
**Subject:** RE: Field Exam on Oldie Permit 63-10022

Dan,

Interesting situation. Based on your summary, I think we probably can include both wells. I am influenced by three of the facts you presented. First, the fact that the right was initially developed using the geothermal well suggests that had the license been issued timely, IDWR would have included only the geothermal well. Because we don't apply forfeiture to permits, I don't think we can argue that the hot well was abandoned as a point of diversion. Second, the fact that the amendment included both wells suggests that the intent from that point forward was to allow diversions from either well. And third, if the permit was issued prior to passage of the law requiring use of heat primarily, IDWR has typically allowed use of the hot water primarily as water. If you can confirm that the hot well is plumbed into the distribution system, even if there isn't a pump, that would probably clinch the decision for me.

Let me know if we should discuss this in more detail.

Shelley

-----Original Message-----
**From:** Nelson, Dan
**Sent:** Wednesday, March 16, 2005 11:15 AM
**To:** Keen, Shelley
**Subject:** Field Exam on Oldie Permit 63-10022

Hello Shelley,

I am preparing to do the oldie field exam for permit 63-10022. This permit is an oldie for a very good reason. It has several components to it that will create issues that I think need to be clarified in the licensing recommendation. I am hoping to get your impute before I contact the owner, so I can make sure and get everything needed to get this puppy licensed.

I have reviewed the file, and getting the well capacity, flow rates for this permit's use on the cold-water well that is currently being used shouldn't be a problem. Getting the acres and creating a shape file won't be a problem.

There is an issue with recommending the license as a municipal or irrigation use to coincide with SRBA claims and recommendations. I have set up a meeting with Dave Tuthill to go over this information tomorrow at 8:00 am, so we should be able to resolve that issue at that time.

There are two wells listed on this permit, one is a geothermal well and the other a cold water well. Using the hot water well for irrigation creates the concern of whether or not it can be included on the license for two reasons. The owner has stated that the hot water well has not been used for several years, and they are not using the heat value of the geothermal water first.

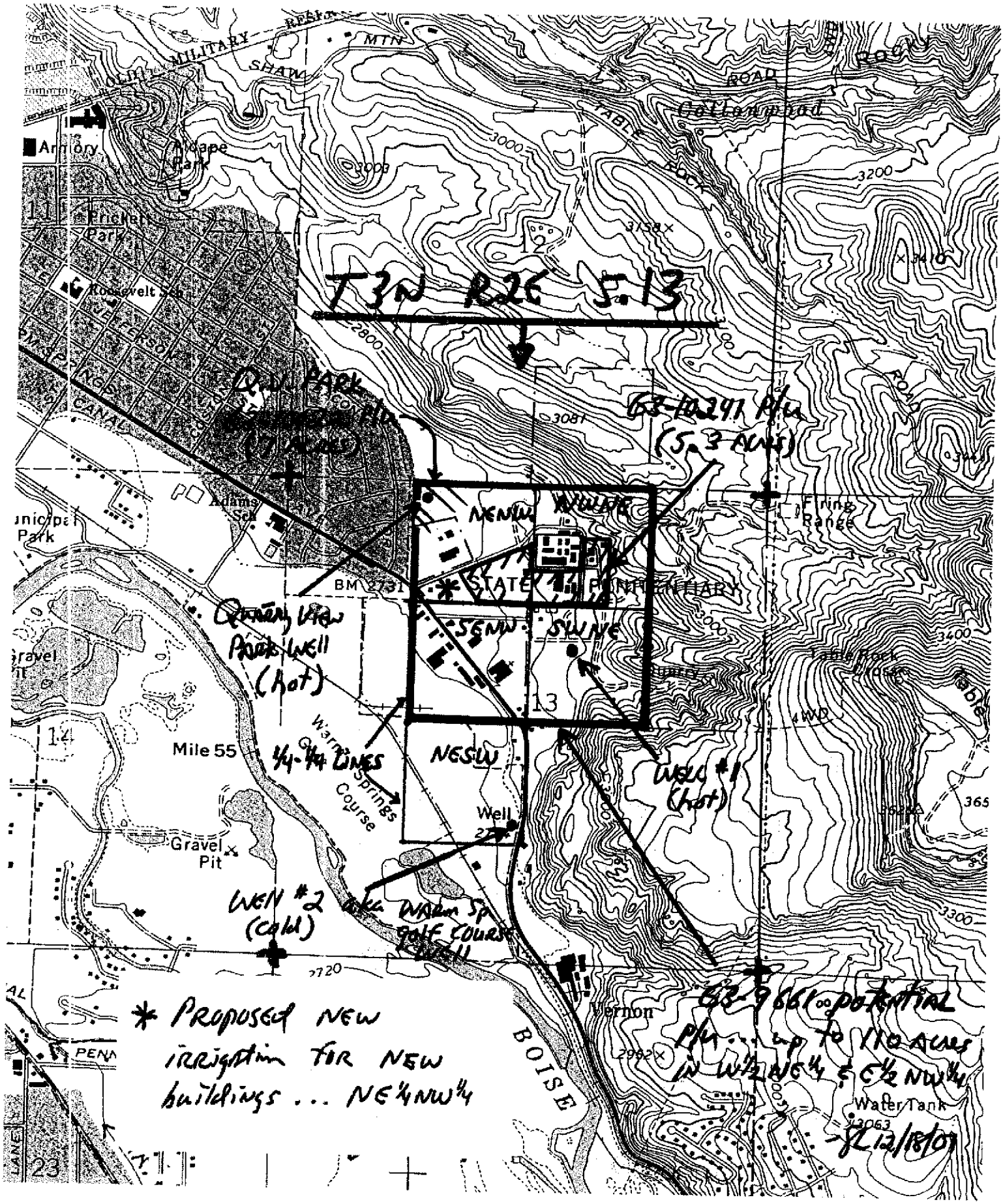
The hot well was the sole source of water used when Sherl Chapman did the original proof of beneficial use exam in 1987. The owner's of the permit filed an amendment to the permit to include the cold water well to avoid conflicts with the Boise Front Geothermal issues. The permit owners have argued that the beneficial use of the hot well was accomplished prior to the Low Temperature Geothermal Resource Statute (Idaho Code § 42-233) instituted in 1987 and the Boise

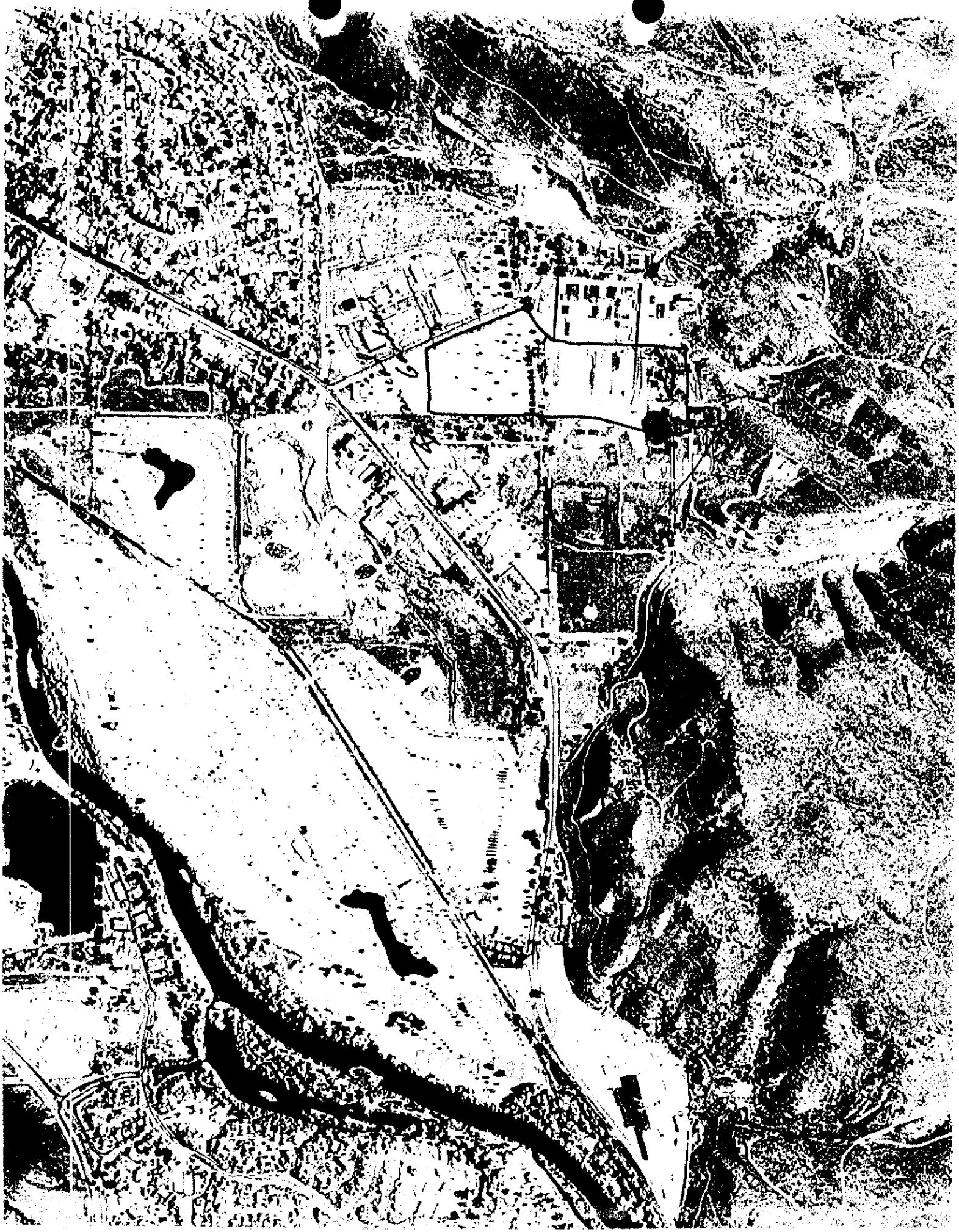
Front Moratorium instituted in 1988. Therefore, they believe that they should be able to maintain the hot water well as a backup well for the water right. The department allowed the geothermal well to be included on the amendment.

The owner of the permit has stated that they have removed the pump for the geothermal well, and are only using it for monitoring purposes. However, in the files there is a suggestion in the correspondence that the hot water well might be used for in the parks restrooms for minimal heating and hot water use under a domestic exemption type use by using less than 2500 gallons per day.

My gut feeling is that the hot water well should be removed from this permit during the licensing process, but I am not sure that is possible with the earlier field exam. I thought I should run this one by you first to see what information is going to be needed to license this permit and to have you focus me in a more specific direction while doing the exam. I will probably get everything together and sit down with you figure out how to present the information in the field report after I complete the field exam.

Dan Nelson
Western Region


T3N R2E S.13
Q.W. PARK Well
(7 ACRES)
63-10241 P/U
(5.3 ACRES)
NENW
NWNE
STATE PENITENTIARY
SENW
SWNE
13
Quinary View Park Well (hot)
Warm Springs Golf Course
¼-¼ LINES
NESW
WELL #1 (hot)
Well
Mile 55
Gravel Pit
WELL #2 (cold)
aka WARM SP GOLF COURSE WELL
* PROPOSED NEW IRRIGATION FOR NEW buildings ... NE¼NW¼
63-9661 POTENTIAL P/U ... up to 110 ACRES IN W½NE¼ & E½NW¼
Vernon
Water Tank
BOISE
Table Rock
Rocky Road
Collonyad
Military Reserve
Armory
Ridler Park
Roosevelt Sch
Adams Sch
Firing Range
Gravel Pit
4WD
JL 12/18/07



RECEIVED
MAR 7 1984
Department of Water Resources

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

Quarry Park 9th 1407 well

Page 3 of 3

## 1. WELL OWNER

Name Boise City Rec Dept

Address 1104 Royal Blvd

Owner's Permit No.

## 2. NATURE OF WORK

☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. on lithologic log)

## 3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other (specify type)

## 4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other

## 5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other

| Thickness | Diameter | From | To |
|---|---|---|---|
| .250 inches | 6 inches | 4.79 feet | 863 feet |
| inches | inches | feet | feet |
| inches | inches | feet | feet |
| inches | inches | feet | feet |

Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☒ Yes ☐ No
How perforated? ☒ Factory ☐ Knife ☐ Torch
Size of perforation 3/16 inches by 3½ inches

| Number | | From | To |
|---|---|---|---|
| 7200 | perforations | 486.13" feet | 857.16" feet |
| | perforations | feet | feet |
| | perforations | feet | feet |

Well screen installed? ☐ Yes ☐ No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? ☐ Yes ☐ No ☐ Size of gravel
Placed from feet to feet
Surface seal depth Material used in seal: ☐ Cement grout ☐ Bentonite ☐ Puddling clay ☐
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port

## 6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Quarry Park
Subdivision Name
Lot No Block No.
County Ada
¼ ¼ ¼ Sec. 13 T. 3 N ☒ R. 2 E ☐

## 7. WATER LEVEL

Static water level feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow
Artesian closed-in pressure p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature °F. Quality
Describe artesian or subartesian zones below

## 8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| | | |

## 9. LITHOLOGIC LOG

| Bore Diam. | Depth From | Depth To | Material | Water Yes | Water No |
|---|---|---|---|---|---|
| | | | This is additional work done on Quarry Park well for City Park Dept, originally dated 6/25-11/15/83. Please add it to your records. W.E. Stevens & Sons #153 | | |

10. Work started 2/20/84 finished 2/25/84

## 11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Firm No. 153
Address Date
Signed by (Firm Official)
and
(Operator)

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
9/82

Quarry Park
Hot well

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

RECEIVED
DEC 7 1983
Department of Water Resources



Pg 1 of 1

## 1. WELL OWNER

Name Boise City Pks Dept.

Address 1104 Royal Blvd.

Owner's Permit No. _____

## 2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

## 3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

## 4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

## 5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

| Thickness | Diameter | From | To |
|---|---|---|---|
| .307 inches | 10 inches | +6" feet | 45 feet |
| .250 inches | 8 inches | 18" feet | 498 feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |

Was casing drive shoe used? ☒ Yes ☐ No 10" & 8"
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | From | To |
|---|---|---|
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☒ Cement grout
☐ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata

## 7. WATER LEVEL

Static water level 33 feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
*Describe artesian or temperature zones below.*

## 8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| 159 | 145 | 30 min |
| 202 | 180 | 30 min |
| 260 | 226 | 30 min |

## 9. LITHOLOGIC LOG

73908

| Bore Diam. | Depth From | Depth To | Material | Water Yes |
|---|---|---|---|---|
| 10 | 0 | 6 | topsoil | |
| | 6 | 25 | cemented gravel | |
| | 25 | 39 | lightly cemented sand & grav | |
| | 39 | 42 | sand & gravel | |
| | 42 | 48 | brown clay | |
| | 48 | 65 | bluish gray clay, silty | |
| | 65 | 100 | cemented blue sand | |
| | 100 | 120 | bluish gray clay | |
| | 120 | 168 | light blue cemented sand & c | |
| | 168 | 203 | darker bluish gray sandy cl | |
| | 203 | 245 | hard blue sand | |
| | 245 | 272 | blue sand, not so hard | |
| | 272 | 303 | more clay & darker | |
| | 303 | 335 | blue gray sandy clay | |
| | 335 | 349 | blue gray hard sticky clay | |
| | 349 | 448 | blue gray sand, clay with hard blue shale streaks | |
| | 448 | 460 | dark blue gray sandy clay | |
| | 460 | 475 | hard sticky clay | |
| | 475 | 495 | gray granite, sandy clay | |
| | 495 | 518 | sticky hard dark gray clay | |
| | 518 | 530 | coarse sandy light blue clay | |
| | 530 | 549 | fine sandy light blue clay | |
| | 549 | 560 | sticky blue clay | |
| | 560 | 570 | dark gray altered basalt cla some platy zeolites | |
| | 570 | 595 | fresh black basalt | |
| | 595 | 645 | gray to brown clay, some altered basalt | |
| | 645 | 705 | gray medium to very coarse s with clay streaks, granite s | |
| | 705 | 725 | dark gray clay, some dark gre black volcanic rock | |
| | 725 | 800 | volcanic rock, dark greenish black, porphyrific with zeoli & minor clay | |

Form 238-1
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# WELL DRILLER'S REPORT

**State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.**

USE TYPEWRITER O
BALLPOINT PEN

RECEIVED
AUG 2 DEC 1983
Department of Water Resourc

Pg 2 of 2

## 1. WELL OWNER

Name Boise City Parks Dept.

Address 1104 Royal Blvd

Owner's Permit No. _____

## 2. NATURE OF WORK

☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

## 3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

## 4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

## 5. WELL CONSTRUCTION

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____

| Thickness | Diameter | From | To |
|---|---|---|---|
| _____ inches | _____ inches + | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |

Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | From | To |
|---|---|---|
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |

Well screen installed? ☐ Yes ☐ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth _____ Material used in seal: ☐ Cement grout
☐ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld
☐ Cemented between strata

## 7. WATER LEVEL

Static water level _____ feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
*Describe artesian or temperature zones below.*

## 8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

#3909

## 9. LITHOLOGIC LOG

| Bore Diam. | Depth From | Depth To | Material | Wat Yes |
|---|---|---|---|---|
| | 800 | 860 | volcanic rock, dark greenish black porphyrific | |
| | 860 | 865 | dark gray clay, altered volcanics | |
| | | | waber showed at 560-865 | |

Form 238-7
9 82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

Page 1 of 2

**1. WELL OWNER**

Name: Boise City Pks Dept.

Address: 1104 royal Blvd.

Owner's Permit No.:

**2. NATURE OF WORK**

[X] New well [ ] Deepened [ ] Replacement
[ ] Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

**3. PROPOSED USE**

[ ] Domestic [X] Irrigation [ ] Test [ ] Municipal
[ ] Industrial [ ] Stock [ ] Waste Disposal or Injection
[ ] Other (specify type)

**4. METHOD DRILLED**

[X] Rotary [ ] Air [ ] Hydraulic [ ] Reverse rotary
[X] Cable [ ] Dug [ ] Other

**5. WELL CONSTRUCTION**

Casing schedule: [X] Steel [ ] Concrete [ ] Other

| Thickness | Diameter | From | To |
|---|---|---|---|
| .307 inches | 10 inches | + 6" feet | 45 feet |
| .250 inches | 8 inches | 18" feet | 498 feet |
| inches | inches | feet | feet |
| inches | inches | feet | feet |

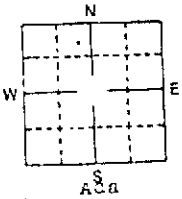
Was casing drive shoe used? [X] Yes [ ] No 10" & 8"
Was a packer or seal used? [ ] Yes [X] No
Perforated? [ ] Yes [X] No
How perforated? [ ] Factory [ ] Knife [ ] Torch
Size of perforation inches by inches

| Number | From | To |
|---|---|---|
| perforations | feet | feet |
| perforations | feet | feet |
| perforations | feet | feet |

Well screen installed? [ ] Yes [X] No
Manufacturer's name
Type Model No.
Diameter Slot size Set from feet to feet
Diameter Slot size Set from feet to feet
Gravel packed? [ ] Yes [X] No [ ] Size of gravel
Placed from feet to feet
Surface seal depth 20 Material used in seal: [X] Cement grout [ ] Bentonite [ ] Puddling clay [ ]
Sealing procedure used: [ ] Slurry pit [X] Temp. surface casing [X] Overbore to seal depth
Method of joining casing: [ ] Threaded [X] Welded [ ] Solvent Weld [ ] Cemented between strata
Describe access port

**6. LOCATION OF WELL**

Sketch map location must agree with written location.




Subdivision Name
Lot No. Block No
County Ada
N/E ¼ N/W ¼ Sec. 13, T. 3 N. R. 2 E. W.

**7. WATER LEVEL** 12-1-11

Static water level 35 feet below land surface
Flowing? [ ] Yes [ ] No G.P.M. flow
Artesian closed-in pressure p.s.i.
Controlled by: [ ] Valve [ ] Cap [ ] Plug
Temperature °F. Quality
Describe artesian or temperature flows below

**8. WELL TEST DATA**

[X] Pump [ ] Bailer [ ] Air [ ] Other

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| 159 | 145 | 30 min |
| 202 | 160 | 30 min |
| 260 | 220 | 30 min |

**9. LITHOLOGIC LOG**

| Bore Diam | Depth From | Depth To | Material | Water Yes | Water No |
|---|---|---|---|---|---|
| 10 | 0 | 6 | topsoil | | X |
| | 6 | 25 | cemented gravel | | X |
| | 25 | 39 | lightly cemented sand & gravel | | X |
| | 39 | 42 | sand & gravel | | X |
| | 42 | 40 | brown clay | | X |
| | 40 | 65 | bluish gray clay, silty | | X |
| | 65 | 100 | cemented blue sand | | X |
| | 100 | 120 | bluish gray clay | | X |
| | 120 | 165 | light blue cemented sand & cla | | |
| | 165 | 203 | darker bluish gray sandy clay | | |
| | 203 | 245 | hard blue sand | | X |
| | 245 | 272 | blue sand, not so hard | | X |
| | 272 | 303 | more clay & darker | | X |
| | 303 | 335 | blue gray sandy clay | | X |
| | 335 | 349 | blue gray hard sticky clay | | X |
| | 349 | 440 | blue gray sand, clay with hard blue shale streaks | | X |
| | 440 | 460 | dark blue gray sandy clay | | X |
| | 460 | 475 | hard sticky clay | | X |
| | 475 | 495 | gray granite, sandy clay | | X |
| | 495 | 515 | sticky hard dark gray clay | | X |
| | 515 | 530 | coarse sandy light blueclay | | X |
| | 530 | 549 | fine sandy light blue clay | | X |
| | 549 | 560 | sticky blue clay | | X |
| | 560 | 570 | dark gray altered basalt clay, some platy zeolites | | |
| | 570 | 595 | fresh black basalt | | X |
| | 595 | 645 | gray to brown clay, some altered basalt | | X |
| | 645 | 705 | gray medium to very coarse sand with clay streaks, granite sand | | X |
| | 705 | 725 | dark gray clay, some dark green black volcanic rock | | X |
| | 725 | 800 | volcanic rock, dark greenish black, porphyritic with zeolite & minor clay | | X |

**10.** Work started 5/25/83 finished 11/6/83

**11. DRILLERS CERTIFICATION**

We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Firm No. 153
Address Date 11/6/83
Signed by (Firm Official)
and
(Operator)

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-3
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

PAGE 2 OF 2

## 1. WELL OWNER

Name Boise City Parks Dept.

Address 1104 Royal Blvd

Owner's Permit No. _____

## 7. WATER LEVEL

1y 2-1 2

Static water level _____ feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
Describe artesian temperature zones below

## 2. NATURE OF WORK

☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

## 8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| | | |

## 3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

## 9. LITHOLOGIC LOG

| Boring Diam. | Depth From | Depth To | Material | Water Yes | Water No |
|---|---|---|---|---|---|
| | 000 | 660 | volcanic rock, dark greenish black porphyritic | | |
| | 660 | 865 | dark gray clay, altered volcanics | | |
| | | | water slowed at 660-865 | | |

## 4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

## 5. WELL CONSTRUCTION

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____

| Thickness | Diameter | From | To |
|---|---|---|---|
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |
| _____ inches | _____ inches | _____ feet | _____ feet |

Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | From | To |
|---|---|---|
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |
| _____ perforations | _____ feet | _____ feet |

Well screen installed? ☐ Yes ☐ No
Manufacturer's name _____ Model No. _____
Type _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth _____ Material used in seal: ☐ Cement grout ☐ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

## 10.

Work started 8/25/83 finished 11/15/83

## 6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name _____
Lot No. _____ Block No. _____

County Ada
N/2 N/2 ¼ Sec. 13, T. 3 N. R. 2 E.W.M.

## 11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name W.K. Stevens & Son Firm No. 193
Address 3709 Hawthorne Driv Date 11/30/83
Signed by (Firm Official) W. Wayne Stevens
and
(Operator) Wayne Stevens

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Well Log Form 1

RECEIVED
JUL 6 1966
Department of Reclamation

# WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL: SEE IDAHO STATUTES 42-238

Permit No. ____ Well No. ____ County ____

Owner ____

Address ____

Driller ____

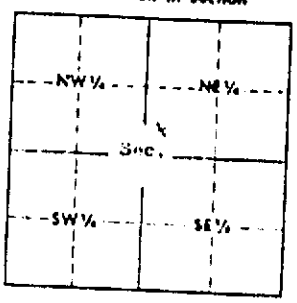
Address ____

Well location ____ ¼ ____ ¼ Sec. ____, T. ____ N/S, R. ____ E/W

Size of drilled hole ____

Total depth of well ____

Locate well in section




Give depth to standing water from the ground ____ Water temp. ____ Fahr.

Test delivery was ____ g.p.m. or ____ c.f.s. Drawdown was ____ feet. Pump? ____ Bailer? ____

Size of pump and motor used to make test ____

Length of time of test ____ hours ____ minutes.

If flowing well, give flow ____ c.f.s or ____ g.p.m and of shut off pressure ____

If flowing well, described control works ____

(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for ____ Weight of casing per lineal foot ____

Thickness of casing ____ Casing material ____

(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing ____

(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

## CASING RECORD

| Diam. Casing | From Feet | To Feet | Length | Remarks—seals, grouting, etc. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Number and size of perforations ____ located ____ feet to ____ feet from ground

Date of commencement of well ____ Date of completion of well ____

NE ¼ - 13 S. 22 E

## WELL LOG

| From Feet | To Feet | Type of Material | Water-bearing Formation Ans. Yes or No | Casing Perforated Ans. Yes or No |
|---|---|---|---|---|
| 0 | 10 | Top soil dirty sand | | |
| 10 | 15 | Coarse sand | | |
| 15 | 45 | Red gravel | Yes | |
| 45 | 60 | Sandy clay | No | |
| 60 | 70 | Shale | No | |
| 70 | 80 | Blue sandy clay gravel | Yes | |
| 80 | 82 | Coarse sand | Yes | |

If more space is required use Sheet No. 2

## WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

Signed T. L. Hayworth

By _____

Dated 1-10-, 1963

License No. 45

Well Driller's helper Sid Hanson

Protected apps

RECEIVED
AUG 16 1995
WATER RESOURCES
WESTERN REGION

Neal S. Oldemeyer, P.E.
Geothermal/Special Projects Coordinator
City of Boise Public Works Department
P.O. Box 500
Boise, ID 83701-0500

Re: Pumping-test of the Warm Springs Golf Course well.

Dear Neal:

Here are the results of our hydraulic testing of the Warm Springs Golf Course well, carried out on July 12-13, 1995. Thank-you for your patience in getting these results from us. Problems with the Mesa Water Company wells caused the initial delays before the full-on pumping season consumed our time. Lee Monroe was very helpful with our efforts.

After review of the hydraulic test data, the downhole camera survey, available construction details, and other information supplied by Keith Anderson, we are satisfied that the proposed water-rights transfers and subsequent pumping will have minimal effects to our well-field in east Boise. We are willing to withdraw our protest with the caveat that the well not be deepened or cleaned out below the present bottom at 192 feet below land surface. It is known from previous studies that wells of this area, completed within the 200-500 foot zone, show severe interference effects under pumping conditions. The Warm Springs Golf Course well (formerly the Old Penitentiary well #2 by Lukehart) was originally drilled and completed to a depth of 470 feet below land surface. The well is apparently silted-in to 190 feet below land surface. We would have continued concern over the proposed water-rights transfer if the well were to be cleaned out to the original drilled depth.

well LOG

For this test, the well was pumped at a discharge rate that was as high as possible, yet could be maintained over the duration of the test. Lee Monroe had indicated that a rate of 600 gpm could be maintained. Because the golf course is unable to irrigate while the well is pumping, the length of the test was dependent on the weather. We were able to run the test for over 24 hours at an estimated pumping rate of 587 gpm. The discharge was measured by means of the "Yardstick" method, where flow is approximated based on how far the top of the discharge stream, flowing from a horizontal pipe, travels before dropping 1 ft. A constant rate was maintained by adjusting a gate valve to regulate flow. The water-level in the well was measured using an electric sounder.

10' static 21 ft Pumping Level

Over the 1.27 day duration of our test there was only 11.17 feet of drawdown in the well and calculated specific capacity at the end of the test was over 50 gpm/ft. The semi-logarithmic plot of drawdown-versus-time shows that a straight line fitted to the later-time data has a greater slope than one matched to data from the first few hours. The change in trend seen on the semi-log plot indicates a negative boundary condition, which may be due to truncation of the aquifer, subsurface fault, a change in permeability at some distance from the well, or interference from nearby pumping wells, possibly the Warm Springs Mesa #1 well. The relatively small amount of total drawdown in the golf course well, however, is indicative of a shallow cone of depression which would not be expected to cause significant decline in adjacent wells.

According to Lee Monroe, the previous pumping test of the well, carried out by Layne of Idaho, resulted in 15 feet of drawdown after 23 hours of pumping the well at 700 gpm from a static water-level of 18 feet (a specific capacity of 46.6 gpm/ft.). This lower static water-level, compared to a higher static level measured by us, is most likely due to pumping the well prior to the testing carried out by Layne; i.e. the well had not fully recovered prior to the commencement of measurements.

DR Pumping Level 22 TO 33 FT.

31 1996

Details of well construction obtained by viewing the video of the well done by Northwest Underground Surveys shows that the well has perforations beginning at 101 feet and is cased to a depth of 190 feet. The casing in the vicinity of the upper perforations is clean and the perforations are open. The perforations are 12 to-the-round, two sets per foot and cut $^{1}/_{4}$ by 4 inches long. Below about 120 feet the perforations are visible but encrusted and partially closed. From about 136 feet and below there is quite a bit of scale sticking out from the casing wall. Below 140 feet some perforations appear completely closed, and below 160 feet perforations are only occasionally visible. The most encrusted perforations are probably the ones which are opposite the more permeable zones of the aquifer.

In summary, the relatively shallow depth from which the golf course well obtains its water, in contrast to United Water's wells, and the small amount of drawdown in the well, suggest that interference will be minimal. The well is apparently open to a very productive aquifer. Limited step-test data suggest that specific capacity declines due to well loss at higher discharge. We suggest the encrustation, visible on the video, be scaled when pumps are changed-out to improve specific capacity.

Sincerely,
Ed Squires

cc: Keith Anderson
Dave Tuthill
Paul Wise
Kathy Shiflet

JAN 31 1995

# WARM SPRINGS GOLF COURSE

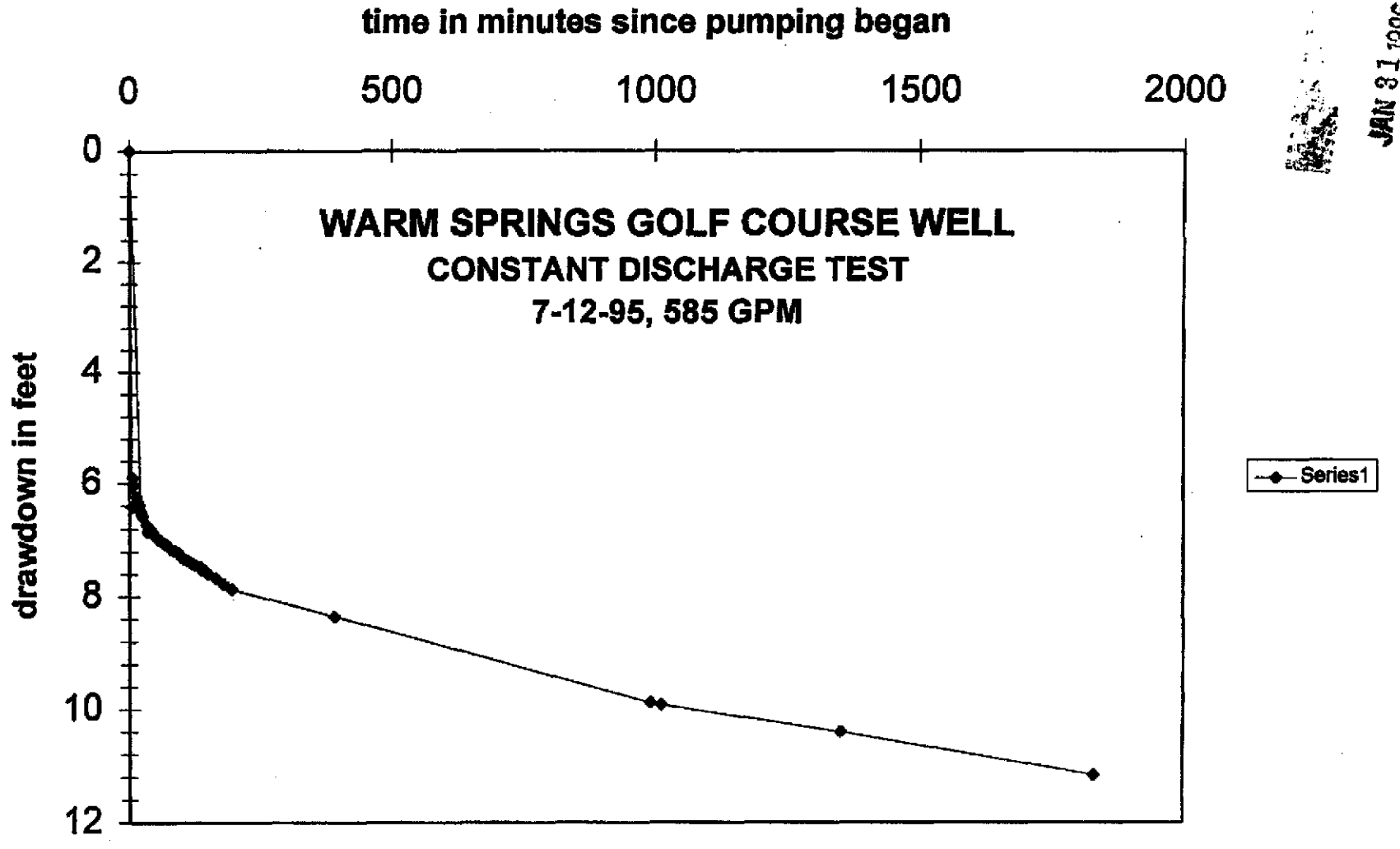
## Constant Discharge Test (587 gpm)
## beginning 7-12-95

| | | | | |
|---|---|---|---|---|
| 14:15 | 10.60 | | | static water-level |
| 14:45 | 10.60 | | | measuring point = 0.6 ft. above ground level |
| 15:15 | 10.60 | | | |
| 15:35 | 10.60 | | 0.00 | Pump-On: |
| 15:40 | 17.01 | 5 | 6.41 | |
| 15:42 | 16.50 | 7 | 5.90 | |
| 15:44 | 16.64 | 9 | 6.04 | |
| 15:50 | 16.84 | 15 | 6.24 | checked discharge ( 587 gpm: on target) |
| 15:52 | 16.93 | 17 | 6.33 | |
| 15:54 | 16.99 | 19 | 6.39 | |
| 15:56 | 17.08 | 21 | 6.48 | |
| 15:58 | 17.13 | 23 | 6.53 | |
| 16:00 | 17.18 | 25 | 6.58 | |
| 16:04 | | 29 | | temperature = 56°F, Cs = 250 uS |
| 16:08 | 17.33 | 33 | 6.73 | |
| 16:10 | 17.45 | 35 | 6.85 | |
| 16:15 | 17.41 | 40 | 6.81 | |
| 16:20 | 17.46 | 45 | 6.86 | |
| 16:25 | 17.53 | 50 | 6.93 | |
| 16:30 | 17.58 | 55 | 6.98 | |
| 16:35 | 17.60 | 60 | | |
| 16:39 | | 64 | | checked discharge ( 587 gpm: on target) |
| 16:42 | 17.65 | 67 | 7.05 | |
| 16:45 | 17.67 | 70 | 7.07 | |
| 16:50 | 17.70 | 75 | 7.10 | |
| 16:55 | 17.75 | 80 | 7.15 | |
| 17:00 | 17.78 | 85 | 7.18 | |
| 17:03 | | 88 | | temperature = 56°F |
| 17:05 | | 90 | | Cs = 250 uS |
| 17:08 | 17.82 | 93 | 7.22 | |
| 17:10 | 17.85 | 95 | 7.25 | |
| 17:15 | 17.90 | 100 | 7.30 | |
| 17:20 | 17.93 | 105 | 7.33 | |
| 17:25 | 17.95 | 110 | 7.35 | |
| 17:30 | 17.98 | 115 | 7.38 | |
| 17:35 | 18.01 | 120 | 7.41 | |
| 17:40 | 18.03 | 125 | 7.43 | |
| 17:43 | | 128 | | checked discharge ( 587 gpm: on target) |
| 17:45 | | 130 | | temperature = 56°F |
| 17:47 | | 132 | | Cs = 250 uS |

JAN 31 1996

| | | | | |
|---|---|---|---|---|
| 17:50 | 18.07 | 135 | 7.47 | |
| 17:55 | 18.13 | 140 | 7.53 | |
| 18:00 | 18.14 | 145 | 7.54 | |
| 18:05 | 18.19 | 150 | 7.59 | |
| 18:20 | 18.27 | 165 | 7.67 | |
| 18:24 | | 169 | | checked discharge ( 587 gpm: on target) |
| 18:26 | | 171 | | temperature = 56°F, Cs = 250 uS |
| 18:35 | 18.38 | 180 | 7.78 | |
| 18:50 | 18.47 | 195 | 7.87 | |
| 22:05 | 18.96 | 390 | 8.36 | |
| 7-13-95 | | | | |
| 8:05 | 20.48 | 990 | 9.88 | |
| 8:12 | | 997 | | checked discharge and adjusted back up slightly to 587 gpm, temperature = 56°F, Cs = 330 uS |
| 8:25 | 20.52 | 1010 | 9.92 | Cs = 310 uS |
| 13:49 | | 1334 | | checked discharge ( 587 gpm: on target), temperature = 56°F |
| 13:52 | | 1337 | | |
| 14:05 | 21.01 | 1350 | 10.41 | |
| 22:05 | 21.77 | 1830 | 11.17 | |

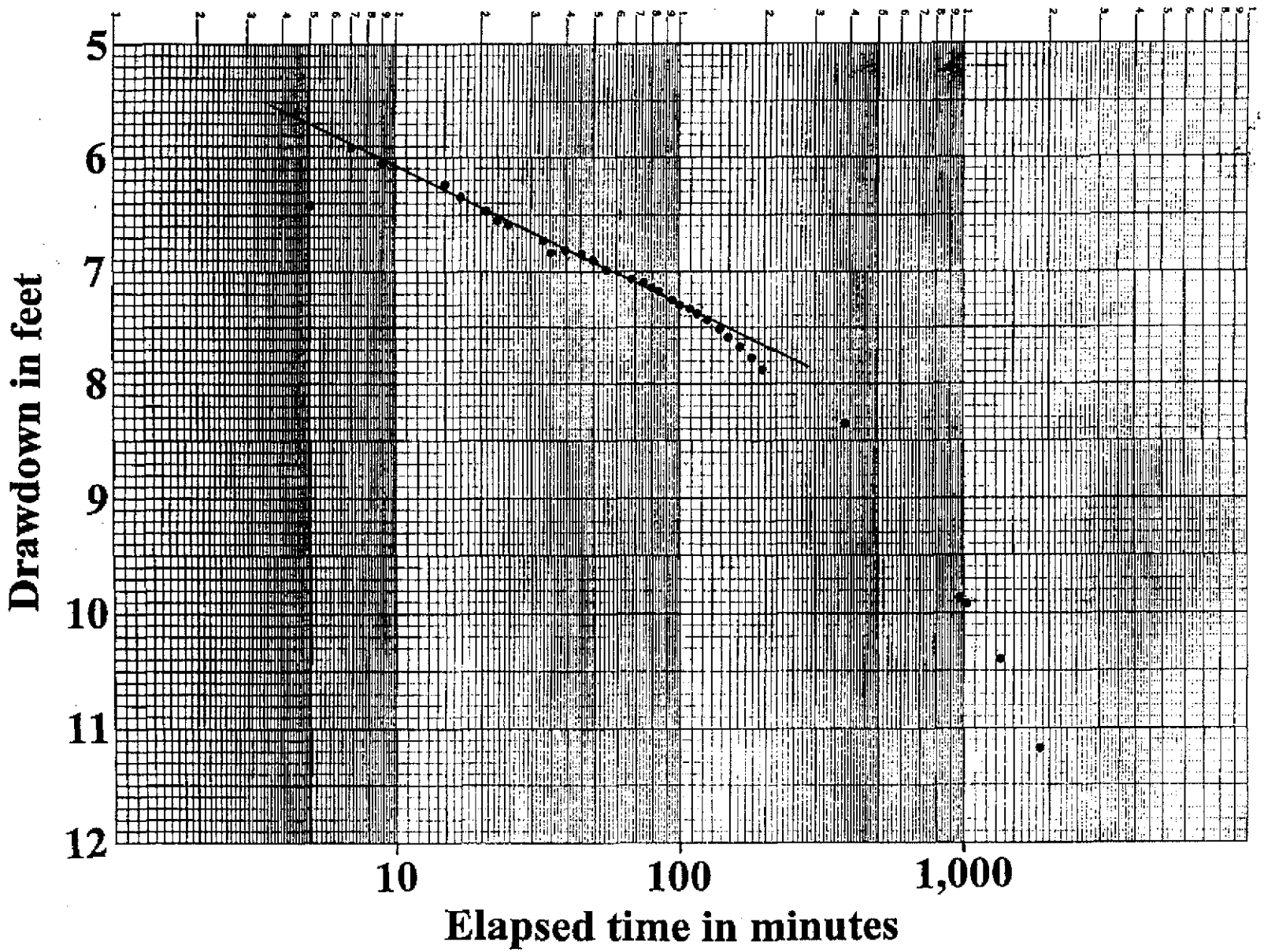
JAN 31 1996


time in minutes since pumping began
0
500
1000
1500
2000
drawdown in feet
0
2
4
6
8
10
12
WARM SPRINGS GOLF COURSE WELL
CONSTANT DISCHARGE TEST
7-12-95, 585 GPM
Series1

JAN 31 1996

# WARM SPRINGS GOLF COURSE

## Constant Discharge Test (587 gpm)




pumping began 7-12-95 at 15:35 hrs

JAN 31 1996

Well Log; copy 1

Department of Reclamation

# WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL. See Idaho Statutes 42-238

Permit No. 52-52 Well No. 2 County

Owner State of Idaho, Boise

Address

Driller Tebbetts

Address 4642 Indian Hills Dr.

Well location SE¼ SW¼ Sec. 13, T. 3N, N/S, R. 2 E/W

Size of drilled hole 16"

Total depth of well 410'

Locate well in section

| | |
|---|---|
| NW¼ | NE¼ |
| Sec. | |
| SW¼ | SE¼ |

Give depth to standing water from the ground 10' Water temp. 68 Feb.

Test delivery was 1600 g.p.m. or c.f.s. Drawdown was 75 feet. Pump? No. Bail?

Size of pump and motor used to make test

Length of time of test. ½ hours minutes.

If flowing well, give flow. No c.f.s. or No g.p.m. and of shut off pressure No

If flowing well, described control works No (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for Weight of casing per lineal foot

Thickness of casing .375 Casing material Steel (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 16" - 105' 12" 410'
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

## CASING RECORD

| Diam. Casing | From Feet | To Feet | Length | Remarks—seals, grouting, etc. |
|---|---|---|---|---|
| | | | | Pumping Test Measured at Diameter |
| 16" | 0 | 105' | 105' | 1350 GPM 75' " |
| 12" | 0 | 410' | 410' | 1600 GPM 75' " |
| | | | | |
| | | | | |

Number and size of perforations ¼ x 1" located 210' feet to 410' feet from ground

Date of commencement of well Aug 1-65 Date of completion of well Sept 1-65'

FSL 13 31 2 C

WELL LOG

| From Feet | To Feet | Type of Material | Encountered (Yes or No) | Cased (Yes or No) |
|---|---|---|---|---|
| 0 | | | | |
| 0 | 10 | Soil | No | No |
| 10 | 30 | Hard sand | Yes | " |
| 30 | 68 | Sand | No | " |
| 68 | 120 | Blue shale | No | " |
| 120 | 243 | Stringers of Blackish Sand | Yes | Yes |
| 243 | 305 | Hard Blue Shale with stringers of sand | No | Yes |
| 305 | 315 | Blue shale | No | Yes |
| 315 | 415 | Hard blue shale with stringers of sand | Yes | Yes |
| 415 | 432 | Sandy shale | Yes | Yes |
| 432 | 436 | Blue shale - gypsum | No | Yes |
| 436 | 439 | Lava rock | Yes | No |
| 439 | 470 | Blue shale | | |

If more space is required use Sheet No. 2

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

Signed Eddie J. Fairchild

By

License No. 122

Dated Oct 8, 1965

Well driller's helper

**CONVERSATION MEMORANDUM**

DATE 12/18/01

FILE 63-10022
63-10241

NAME OF PARTY —

EMPLOYEE SL

RE: BOISE CITY
BOTANICAL GARDEN
ID DEPT. LANDS
ID HISTORICAL SOCIETY
} AGREEMENT & SHARED USE OF WELL(S) IN EAST BOISE

a) WARM SPRINGS golf COURSE
b) QUARRY VIEW PARK
c) SITE & OLD PENITENTIARY

2 HOT WELLS & b + c
1 COLD WELL & a

Summary INFO provided to ID HIST. SOCIETY PER REQUEST & POSSIBLE INCREASE IN IRRIGATION North of WARM SPRINGS AVE. & EAST OF PENITENTIARY Rd.... SEVERAL ACRES RE SOME NEW buildings planned.... CAN they use COLD WELL AT golf COURSE for this NEW IRRIGATION?

MAYBE .... per Boise Front GWMA Mgt. Policy.

SEE 63-9661 for 12/18/01 Summary, MAP SHOWING WELLS, ETC.

MICROFILMED

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

| | |
|---|---|
| IN THE MATTER OF THE BOISE FRONT LOW TEMPERATURE GEOTHERMAL RESOURCE GROUND WATER MANAGEMENT AREA | **FINAL ORDER EXTENDING MORATORIUM** |

WHEREAS, on June 15, 1987, the Director of the Idaho Department of Water Resources (IDWR) designated the Boise Front Low Temperature Geothermal Resource Ground Water Management Area in Ada County, Idaho, due to reported declines in aquifer water levels and water pressure; and

WHEREAS, on June 11, 1988, IDWR issued an order establishing a five (5) year moratorium to prevent further development or additional use of the low temperature geothermal water resource (resource); and

WHEREAS, on July 7, 1998, IDWR advised the users of the resource that IDWR was reviewing the need for the moratorium and whether it should be modified or extended. IDWR requested written comments on the nature of the action IDWR should take in connection with the expiring moratorium; and

WHEREAS, six (6) parties submitted written comment to IDWR. All major users supported extending the moratorium for an additional five (5) years.

NOW THEREFORE, pursuant to Section 42-1805(7), Idaho Code, and IDAPA Rule 37.03.08055 (Water Appropriation Rule 55), IT IS HEREBY ORDERED that:

(1) The order dated June 10, 1988 which established a moratorium on further development and additional use of the low temperature geothermal water resource in the Boise Front Ground Water Management area is extended.

(2) The provisions of this order are effective for five (5) years from the date issued unless rescinded or modified by order of a court of competent jurisdiction or unless rescinded or modified by order of the Director.

Dated this 1st day of September, 1998.

KARL J. DREHER
Director

MICROFILMED
JAN 05 1999

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000
Phone: (208) 327-7900 FAX: (208) 327-7866

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

FEBRUARY 16, 1996

CITY OF BOISE
DEPARTMENT OF PARKS
1104 ROYAL BLVD
BOISE ID 83706

RE: Permit No. 63-10022

Dear Water Right Holder(s):

Enclosed is a copy of your approved Application for Amendment submitted in connection with the above referenced permit.

If you have any questions concerning this document, please contact me at (208) 327-7946.

Sincerely,

for JIM JOHNSON, Manager
Water Right Permits Section

JJ:rl

Enclosure

RECEIVED
FEB 22 1996

## AMENDMENT OF PERMIT REVIEW

Reviewed by Cindy Zimmerman
on ~~1/10/96~~ 2/15/96

**PERMIT NO.** 63-10022 **NAME** Boise Park System (Quarry View Park.) **Ad OK?** ✓

**TYPE:**
A = AMENDED; B = CHANGE P/D; (C) = ADD P/D; D = CHANGE P/U; E = CHANGE N/U; F = CHANGE Per/U; G = OTHER; H = CHANGE P/D & + P/D; I = CHANGE P/D & P/U; J = ADD P/D & CHANGE P/U

**AREA OF CONCERN:** _____ Mor. Boise Low GWMA (est. 6/10/88) Trust/Non-trust
Temp. Moratorium

**B/U PROOF DUE DATE:** 6/1/86 **Submitted?** (Yes) No **Due -6 months?** Yes/No
5/30/86 no fees; Sheri Chapman examined 11/4/86.

**SURFACE WATER:** <*flow chart*>
- In Water District - 005; WD No. _____
  - + 0.2 cfs - 01J
  - - 0.2 cfs - 01H
- Not in WD; +0.2 cfs - 01M
  - -0.2 cfs - No MD

**GROUNDWATER:** <*flow chart*>
- + 0.2 cfs - 01M Per correspondence, allow 0.37 cfs.
- - 0.2 cfs - No MD
- Drilling Permit - Included? No. ____-____-___-_____-____
  - existing well - Not included? 046-46B
  - NA

**LOCATION:**
- Swan Falls Flag - B (1, Blank or Other)
- Trust - 051-052-053 (Consumptive Uses); NA
- Non Trust <1> - 048-049; NA

**RIVER BASINS** (Surface Water)
- Boise (63) - 05A & 11E, N/A
- Payette (65) - 047 (Payette Lake), 064 (consump. use), NA
- Snake (01, 02 & 03) - 11A (01), 061 (02/03 No WD Cond.), NA

**USE:**
- Fish Propagation - 06A/09E/010 (WQ/Choose One), 042-002, 07A (Spec.), 044 (Policy 5G)
- Power - _____ (Use Power Review)
- Mining - 06A/010/09E (WQ) & 054 (req.)
- Storage (3 comp?) - 18A (multi MD in WD), 18B (+10' dam)
- Domestic - 021 (Boise R ↑ L Peak), 064 (Payette R)

**NON LAND OWNER** - ~~004~~ on permit
**PROTEST AGREEMENT** - 020

Recommended conditions same as on the permit or subsequent amendment(s) to the permit? Yes ____ Yes + cond ✓ No ____

Conditions of Approval: Standard, DIM
(do not include any conditions already on permit)

Comments Per correspondence allow 0.37 cfs rate.

History (Time Line)

4/20/83 - Application received.

6/13/83 - Permit approved. Proof due 6/1/86

5/29/86 - Proof filed

6/19/86 - Exam fee requested

6/30/86 - No fees. Blent Chapman to examine.

11/12/86 - Exam made by Chapman.

6/10/88 - Boise Low Temp. Geothermal GWMA established.

12/13/88 - Memos from Jim & Paul Castelin - questioning water use & temperature.

12/30/88 - Gary asks Boise Park director to classify if water is used. No response.

12/7/10/89 - Gary asks Boise City Engineer if water is being used.

10/19/89 - Boise City Engineer sends copy of 3 yr. agreement where water will not be used from the well. Well used for monitoring. City doesn't want to relinquish right. Agreement expires 9/30/92 with option to extend.

11/15/89 - Glen's memo to Norm & Norm agreeing to hold licensing while exceptions to GWMA are considered.

4/2/92 - Gary's memo offering to Botanical Gardens.

1/13/93 - John Beal's memo to Norm; user's request for grant/loan may need additional info. & identifying additional rights 63-9661 & 63-10211.

1/14/93 - Glen's response to John Beal's Memo.

12/6/94 - Transfer filed to add cold water well located in Warm Spr. G.C. (3/4 m. away)

12/29/94 - Transfer withdrawn & replaced with amendment (based on draft license) and a 'memo. of understanding' (unsigned) for joint use of hot well & cold well.

1/11/95 - Steve Lester's letter questioning intended uses of hot/cold water.

1/26/95 - Keith Anderson reply to Steve's letter addressing use of hot wells.

1/19&26/95 - Amend advertized. protest period until 2/6/95

2/6/95 - Protest, Boise Water Corp.

2/3/95 - Protest, Paul Wise of Mesa Water Co

2/14/95 - Steve letter to Keith Anderson requesting info on specific use of hot wells.

3/8/95 - Keith's response to Steve's 2/14 letter - neither hot wells need for irr. City to heat park bldgs, State heat greenhouse, all irr from new plds cold well. only if approved otherwise back to permitted uses of hot water to irr.

8/16/95 - United Water w/d protest if cold well not deepended.

10/20/95 Wise "

KEITH E. ANDERSON
CONSULTANT IN ENGINEERING AND GEOLOGY
432 SUMMIT RIDGE
BOISE, IDAHO 83702
TELEPHONE (208) 336-2718 OR 344-3888

RECEIVED
FEB 13 1996
Department of Water Resources

February 12, 1996

Mr. Jim Johnson
Manager, Water Right Permits Section
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, ID 83720-9000

Subject: Application for Amendment of Permit No. 63-10022
City of Boise, Department of Parks

Dear Mr. Johnson:

This letter is in further response to our telephone conversation last week concerning the pending application for amendment of the above permit, and your request for further information supporting the historical use of water at Quarry View Park--particularly the rate of diversion required in order to fully irrigate during nighttime hours.

The park's sprinkler irrigation system consists of 18 stations (circuits) connected to the supply well covered by this permit. The capacity of the system is 2,500 gpm (5.57 cfs) if all stations were being used--or an average of 139 gpm (0.31 cfs) per station. In operation, the entire pump discharge is fed to only one station--and then rotated between stations by a timer switch.

Not all stations have the same number of sprinkler heads, however, so the rate of discharge of the well pump--which is equal to the rate of application to beneficial use on the irrigated area--will vary somewhat from one station to another.

The well pump is a 30-HP Peerless 7-LB submersible unit designed to supply 175 gpm (0.39 cfs).

A recent field measurement of the flow on station No. 9 (with water supplied by United Water Idaho, since the well was inoperative) was 120 gpm (0.27 cfs) through 16 nozzles rated at 7.5 gpm each.

The field examiner's measurement of the flow in the system, made in connection with the applicant's proof of beneficial use, was 0.37 cfs. As I stated in my February 7, 1996 letter to Cindy Zimmerman on this subject, I can affirm that this measured 0.37 cfs was being beneficially applied for irrigation of the park.

MICROFILMED
FEB 23 1996

I would therefore renew my request, on behalf of the applicant Boise City, that the pending Application for Amendment of Permit No. 63-10022 be approved for the addition of one new point of diversion, and in the amount of 0.37 cfs (as measured by the field examiner) for the irrigation of seven acres. Such approval would seem to be in conformance with IDWR procedures in similar instances.

As mentioned in my letter to Ms. Zimmerman, we would appreciate very much the processing and approval of this Application for Amendment as soon as possible in order to make the presentation for a proposed project to the Idaho Water Resource Board on February 29, 1996.

Please let me know immediately if you have questions or need further information or clarification.

Sincerely,

Keith E. Anderson

Keith E. Anderson, P.E., P.G.

Copy: Norman C. Young, IDWR
L. Glen Saxton, IDWR
John Tensen, Boise Public Works
Paul Philbrook, Boise Parks

RECEIVED
FEB 23 1996

C-D1


# KEITH E. ANDERSON

CONSULTANT IN ENGINEERING AND GEOLOGY
432 SUMMIT RIDGE
BOISE, IDAHO 83702
TELEPHONE (208) 336-2718 OR 344-3888



RECEIVED
FEB 0 8 1996
Department of Water Resources


February 7, 1996

Ms. Cindy Zimmerman
Water Resource Agent
Idaho Department of Water Resources
1301 North Orchard St.
Statehouse Mail
Boise, ID 82720-9000

Subject: Application for Amendment of Permit No. 63-10022
City of Boise, Department of Parks

Dear Ms. Zimmerman:

This letter is in further response to our discussion yesterday concerning the pending application for amendment of the above permit and your intention to propose a reduction in the allowable rate of diversion from 0.37 cfs (as shown on an earlier proposed license and also in the Notice of Amendment of this permit which was published January 19 and 26, 1995) to 0.14 cfs (based on an allowable rate of only 0.02 cfs per acre for seven irrigated acres. Mr. John Tensen, City Engineer, has authorized me to prepare and submit this reply on behalf of Boise City and the Park Department.

The original application for permit, approved June 13, 1983 by L. Glen Saxton, was for 0.6 cfs to irrigate 8 acres. The application included the following statement in support for the request for this diversion rate:

> "Water will be used for night irrigation of Quarry View Park lawn and planting areas. The amount applied for exceeds that normally used for irrigation but this is necessary to insure minimum public inconvenience during daylight hours and is consistent with previous applications approved for city parks. The high application rate is necessary to provide peak irrigation requirements during the maximum growing season within the limited time available for night irrigation during long daylight-hour days in the summer."

The applicant duly submitted Proof of Beneficial Use and the subsequent field examination for IDWR indicated an actual diversion rate of 0.37 cfs and an irrigated area of 7 acres. This rate and area were made a part of the IDWR draft license--but the license was not made effective (see April 2, 1992 file memo concerning delays in licensing, and December 29 letter from Steve Lester, Water Rights Supervisor, Western Region, IDWR to Neal Oldemeyer, Public Works Dept., City of Boise).

The now proposed reduction in allowable diversion rate from 0.37 to 0.14 cfs is apparently based upon the field examiner's "recommendation" of an allowance of only the statutory 0.02 cfs per acre (I.C. 42-202). This allowance, however,


NORTHERN DIV

FEB 23 1996

is for a continuous flow and the field examiner was no doubt unaware of the request for the increased allowance, set forth in the original approved application, based upon the necessity for irrigation on a less than continuous basis (emphasis supplied). Allowing such a diversion rate in excess of 0.02 cfs per acre has been approved in the past, for the same reason, for many Boise City parks for which I have prepared water-right applications--and which have subsequently been licensed.

My former consulting firm (Anderson & Kelly) was retained by the Park Department of Boise City to prepare the original Application for Permit for this development, as well as Plans and Specifications for the well and pump at Quarry View park. The field examiner's measurement of actual diversion (at a rate of 0.37 cfs at 50 psi pressure) conforms to the engineering specifications. I can affirm that this measured flow rate of 0.37 cfs was benefically applied for irrigation of the Quarry View park area. It is in no way comparable to a situation in which a claim for a diversion rate greater than 0.02 cfs per acre is made simply upon the basis that an irrigation ditch has a much greater capacity.

I would therefore request, on behalf of the applicant Boise City, that the pending Application for Amendment of Permit No. 63-10022 be approved for the addition of one new point of diversion, and in the amount of 0.37 cfs for the irrigation of 7 acres.

I should also point out one minor correction that should be made under Item 4 of the application. Under 4a, the property at P.D. No. 1 is owned by the State of Idaho and at the proposed P.D. No. 2 by the Applicant. Under 4b, the land to be irrigated at the place of use (Quarry View park) is owned by the State of Idaho. Under 4c, the arrangement enabling the Applicant to make the filing is a 50-year renewable lease (No. M-2033) from the Idaho Department of Lands to Boise City.

We would appreciate processing and approval of this Application for Amendment as soon as possible. As you are doubtless aware, this item--together with the already approved Amendment to 63-09661 and Transfer No. 4526 to Water Right No. 63-10241--is part of a "package" in the proposed joint-venture project to be discussed with the Idaho Water Resource Board on February 29, 1996. Hopefully the joint-venture project can eliminate the need for hearings on a Petition by the Idaho Botanical Garden that has been pending before IDWR for more than six years!

Please let me know if you have questions or need further information.

Sincerely,

Keith E Anderson

Keith E. Anderson, P.E., P.G.

Copy: Norman C. Young, IDWR
L. Glen Saxton, IDWR
John Tensen, Boise City
Paul Philbrook, Boise City

FEB 23 1996

# MEMORANDUM

DATE: January 24, 1996

TO: File No. 63-10022

FROM: Cindy Zimmerman

SUBJECT: Telephone Conversation

---

John Tenson of Boise Parks Dept called today. He asked why we were recommending irrigation flow at 0.14 cfs instead of 0.37 as applied for on the amendment. I explained that the City had hired Sheryl Chapman to do the field exam and in his exam he identified the well's capacity to be 0.37 cfs, however, he found that only 0.14 cfs was put to beneficial use.

Mr. Pensen requested an extension of time to respond to enable him to contact the appropriate people at the park. I agreed to hold further processing on this amendment until February 2, 1996.

2/1/96 Jon Penson called. Boise Parks Dept is working with Keith Anderson. He requested an additional week to respond. He committed to responding by Feb. 9, '96.

RECEIVED

FEB 23 1996

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000
Phone: (208) 327-7900 FAX: (208) 327-7866

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

January 10, 1996

CITY OF BOISE
DEPT OF PARKS
1104 ROYAL BLVD
BOISE ID 83706

RE: Application for Amendment of Permit No. 63-10022

Dear Sirs:

I received the above application for amendment of permit requesting an additional point of diversion under this permit for final review.

I intend to recommend approval of this application for amendment for 0.14 cfs (1" per acre) for the 7 acres identified on the amendment unless you can provide other information to show that more than 0.14 cfs is needed.

I will hold further processing on your application for amendment for 14 days pending your response.

If you have any questions, please feel free to contact me at (208) 327-7944.

Sincerely,

Cindy Zimmerman

Cindy Zimmerman
Water Resource Agent

RECEIVED
FEB 23 1996

From: DWR80::DTUTHILL 10-JAN-1996 14:50:19.72
To: DWR03::JJOHNSON
CC:
Subj: RE: Amendment of Application 63-10022

Sounds fine to me...

Thanks for the quick review.

Dave

From: DWR03::JJOHNSON 10-JAN-1996 13:29:56.47
To: DWR80::DTUTHILL
CC: JJOHNSON
Subj: Amendment of Application 63-10022

RE: Permit No. 63-10022

I understand you asked Cindy to process this application and two others that are related ASAP.

During the review of this amendment we found that an examination had been completed by a certified examiner, Sherl Chapman. Normally we would have licensed the water right by now, in fact a prelicense letter was sent to the right holder on April 15, 1988, but because of the hot water being used for irrigation issue, the license was not signed. Now we have this amendment which lists more water than was recommended by the examiner. I have discussed this with Glen and he suggested we contact the right holder and inform them that we are proposing to limit the approval to the 0.14 cfs for irrigation of seven acres rather than the 0.37 listed on the amendment. If you have reasons why we should not pursue this direction let me know right away. Thanks

**MEMORANDUM**

**To:** Jim Johnson

**From:** L. Glen Saxton GLS

**RE:** **APPLICATION FOR AMENDMENT OF PERMIT**

**Date:** January 10, 1996

I have not reviewed this file in any more detail than you have, however, it appears that we should not approve an amendment for more than measured during the field exam.

I suggest writing to the applicant advising that the department intends to approve the amendment for the amount measured by Chapman during his 1986 field examination unless the applicant can provide information within ____ days to show that the Chapman measurement was not correct or can provide other information to show that more than 0. 14 cfs has been diverted and applied to a beneficial use under terms of the permit.

We might even want to inquire of past use history of the well since about 1986. It seems that the well hasn't been used for a long time, since the original well produced hot water and came under scrutiny about the time the Boise Front Groundwater Management Area was designated in June 1987.

Input from Dave T requested via E mail 1-10-96
Hold processing until response is received.

Jim
1-10-96.

**MEMORANDUM**

**Date:** January 9, 1996

**From:** Jim Johnson

**To:** Glen Saxton

**Subject:** Application for Amendment of Permit

==========

I have not made a detailed review of all the material in the file so I may be missing some important facts. However, my question is simple. The application for amendment identifies 0.37 cfs, a lesser amount than shown on the permit which is 0.6 cfs. A field exam was conducted by a certified examiner, Sherl Chapman, who measured the well with a collins meter, and reported 0.14 cfs being diverted.

Normally we would approve the amendment for the amount shown on the field exam, however, without knowing all the background about this right and the existing issues, I thought you should be aware of the difference. If you will let me know what rate the flow should be approved for I'll have the amendment prepared.

Form No. 211a
11/78

RECOMMENDED AMENDMENT OPTION TO REPLACE TRANSFER APPL. FILED 12/21/94

State of Idaho
Department of Water Resources

* AMENDMENT ANALYSIS SHEET

INITIAL REVIEW BY: SL & LG

Right Number 63-10022 Applicant City of Boise

Purpose of Amendment: ☐ Change point of diversion. ☑ Add diversion point(s).
☐ Increase amount. ☐ Change place of use. ☐ Other _____

CHECK:

☑ Description of amended point(s) of diversion.
☑ Amount, nature and period of use. If increased. delay date of priority.
☑ Description of amended places of use. If expanded, delay date of priority. NO CHANGE IN P/U
☑ Ownership of point of diversion and place of use.
☑ Map.
☑ Signature (must be permit holder).
☑ Fee. $50 refund per 1/10/95 memo
☑ Existing water rights from the same source, amended place of use.
☑ Right number(s) _____
☑ Yes ☐ No Should amendment be advertised?
☐ Yes ☑ No Should date of priority be delayed? If yes, to what date? _____

RE: BOISE FRONT GWMA: add cold water well to "Kut water right" in effort to allow licensing of right to proceed. Same well will be used in 63-09661 & 63-10241

DWR30: Vault 1-11-95 at

FINAL REGIONAL PROCESSING REVIEW:

☑ Affidavit of publication received.
☑ Amendment published correctly.
☑ Protests processed. Conditionally withdrawn
☑ Approve.
☐ Deny.

Conditions No additional well drilling or deepening is authorized under this water right.

By _____ Date 12/26/95

RECEIVED
JAN 0 3 1996
Department of Water Resources

STATE OFFICE PROCESSING:

☐ Amendment correct and complete. By _____ Date _____
☑ Approved copy sent to applicant and to Region. By _____ Date 1/16/96

* Permit where proof filed, exam conducted, draft license prepared but unable to license due to Boise Front GWMA concerns (see 4/2/92 memo by GS). So normal procedure that could only complete licensing & then like transfer does not quite apply here. Applicant trying to find way to get right licensed by relying more (or perhaps exclusively?) on cold water well.

## POINT OF DIVERSION AND STREAM INDEX INFORMATION

| TRACT | SEC | TWP | RGE | gov't lot | rediv. (R) | REACH |
|---|---|---|---|---|---|---|
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IDAHO STREAM CODE INDEX

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| TRACT | SEC | TWP | RGE | gov't lot | rediv. (R) | REACH |
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IDAHO STREAM CODE INDEX

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IDAHO STREAM CODE INDEX

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IDAHO STREAM CODE INDEX

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| TRACT | SEC | TWP | RGE | gov't lot | rediv. (R) | REACH |
|---|---|---|---|---|---|---|
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IDAHO STREAM CODE INDEX

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| | | | | | | | | | |

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

October 27, 1995

BENJAMIN M HEPLER
UNITED WATER IDAHO INC
PO BOX 7488
BOISE ID 83707-1488

Re: Application for Transfer No. 63-10241 in the Name of Idaho State Historical Society, Application for Amendment No. 63-9661 in the Name of Idaho Department of Education Historical Society and Application for Amendment No. 63-10022 in the Name of the City of Boise

Dear Protestant:

This letter is to acknowledge your withdrawal of protest against the above-referenced applications.

There is still a protest pending against the above-referenced applications so we will continue to hold these applications until an agreement can be reached between the parties.

If you have any questions please call this office.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Manager, Western Regional Office

DRT:st

CC: Applicants

[illegible]
FEB 23 1996

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

November 1, 1995

PAUL WISE
2843 STAR CIRCLE
BOISE ID 83723

Re: Application for Transfer No. 63-10241 in the Name of Idaho State Historical Society, Application for Amendment No. 63-9661 in the Name of Idaho Department of Education Historical Society and Application for Amendment No. 63-10022 in the Name of the City of Boise

Dear Protestant:

This letter is to acknowledge your withdrawal of protest against the above-referenced applications.

The Department now will continue to process the application, subject to certain conditions of approval.

If you have any questions please call this office.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Manager, Western Regional Office

DRT:st

CC: Applicants

MICROFILMED

FEB 23 1996

October 27, 1995

Mr. Dave r. Tuthill Jr. P.E.
Western Regional Office
Idaho Department of Water Resources
2736 Airport Way
Boise, Idaho 83705

Dear Mr. Tuthill

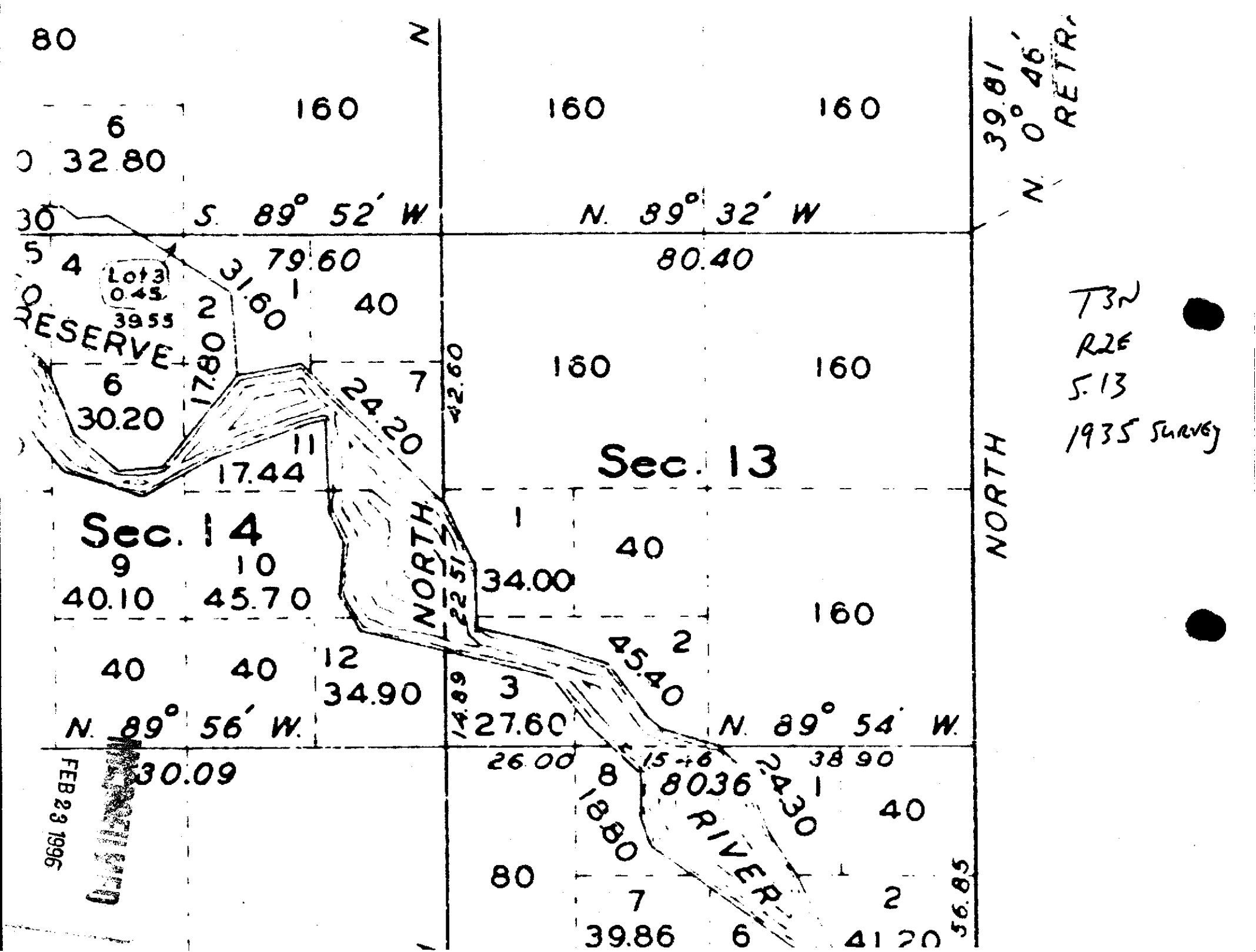
Pleese accept this letter as formal notification of conditional withdrawal to our protest to Amendment of Permit No. 63-09661. Change in Point of Diversion No. 63-10241 (Transfer #4526) and Amendment of Permit No. 63 -10022.

We withdraw our protest on the condition that the well not be deepened or opened up to water-bearing stata below the present bottom of 192 feet below land surface.

Warm Springs Mesa, Inc.
Paul W. Wise, President

RECEIVED
FEB 23 1996


This map per applicants' info & town file -PL 12/28/94
T3N R2E
S.13
(Gov't. Lots SW¼ exc NESW)
BOIS
7.5 MI
2771 II NW
(BOISE NORTH)
R.2E.
R.3E.
Ft Boise Military Cem
Veterans Hospital
St Joseph Sch
Federal Bldg
Lincoln Sch
Courthouse
Capitol Pk
Library
Ft Boise Park
Armory
St Lukes Hosp
Neble Park
Pioneer Cem
Prickett Park
Roosevelt Sch
East Jr High Sch
Jefferson St
Warm Springs Ave
Canal
Bacon St
Boise State College
Municipal Park
Adams Sch
Gravel Pit
Mile 55
Golf Course
Well
Quarry
Firing Range
State Penitentiary
BM 2731
Military Reservation
Table Rock
Cottonwood Road
Jeep Trail
Proposed P/D
Existing Access
All 3 Rights (cold)
Existing P/D 63-10241 (hot)
Applic. 63-10241
Applic. 63-09661 (SENW 13)
Parks
Garfield Sch
Pennsylvania St
Vernon
Water Tank
Boise River
Tarbee St
W Linden St
Gallagher
Holden Lane
Canal
Drive-in Theater
Fire Sta
Well
FEB 23 1995
Elevation
Proposed P/D ~2720'
River ~2700'


80
N
160
160
160
6
32.80
39.81
N. 0° 46' RETR.
30
S. 89° 52' W
N. 89° 32' W
5
4
Lot 3
0.45
39.55
79.60
80.40
31.60
1
40
2
RESERVE
17.80
6
30.20
7
160
160
42.60
24.20
11
17.44
Sec. 13
Sec. 14
1
40
9
10
34.00
40.10
45.70
NORTH
22.51
160
2
45.40
40
40
12
34.90
3
14.89
27.60
N. 89° 56' W.
N. 89° 54' W.
26.00
15.6
38.90
30.09
8
8036
24.30
1
40
18.80
RIVER
80
7
2
56.85
39.86
6
41.20
NORTH
T3N
R2E
5.13
1935 SURVEY
FEB 23 1996

Well Log Form 1

RECEIVED
NOV 1 1965

# WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL; SEE IDAHO STATUTES 42-238

Permit No. 63-2252 Well No. 1 County Ada

Owner State of Idaho

Address

Driller Layhart

Address 4061 Federal Way

Well location SW¼ NE¼ Sec. 13 T. 3 N N/S, R. 2 E/W

Size of drilled hole 16"

Total depth of well 872'

Give depth to standing water from the ground 73' Water temp. 97 °Fahr.

Test delivery was 70 g.p.m. or ____ c.f.s. Drawdown was 220 feet. Pump? X Bail? ____

Size of pump and motor used to make test 8" Col. 240' setting

Length of time of test 10 hours ____ minutes.

If flowing well, give flow No c.f.s. or No g.p.m. and of shut off pressure No

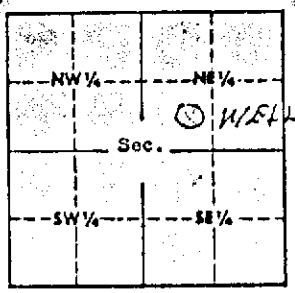
If flowing well, described control works No (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for ____ Weight of casing per lineal foot .54

Thickness of casing .375 Casing material Steel (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 16" (CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

Locate well in section




Appears to be the old pent. well (lot)

## CASING RECORD

| Diam. Casing | From Feet | To Feet | Length | Remarks—seals, grouting, etc. |
|---|---|---|---|---|
| 16 | 0 | 117 | 117' | |
| 12 | 0 | 872 | 872 | |
| | | | | |
| | | | | |
| | | | | USHL |

Number and size of perforations 1/4 x 4" located 220 feet to ~~872~~ 862 feet from ground

Date of commencement of well July 5-65 Date of completion of well Sept 6, 1965

SWNE 5.13 3N 2E

FEB 8 1966

63

## WELL LOG

| From Feet | To Feet | Type of Material | Water-bearing Formation Any. Yes or No | Casing Perforated Any. Yes or No |
|---|---|---|---|---|
| 0 | 17 | Soil | No | No |
| 17 | 20 | Gravel | No | No |
| 20 | 195 | Blue Clay + Sand | No | No |
| 195 | 220 | Blue Clay | No | No |
| 220 | 247 | Seams of Blue Clay + Sand | Yes | Yes |
| 247 | 311 | Seams of Quartz sand + Clay | Yes | Yes |
| 311 | 390 | Blue Clay | No | Yes |
| 390 | 585 | Blue Clay | No | Yes |
| 585 | 643 | Stringers of Sand + Clay | Yes | Yes |
| 643 | 685 | Blue Clay | No | Yes |
| 685 | 698 | Green Clay | No | Yes |
| 698 | 765 | 2 Seams of Brown + Green Clay | No | Yes |
| 765 | 799 | Grey Clay | No | Yes |
| 799 | 819 | Blue Clay Quartz sand seams | Yes | Yes |
| 819 | 840 | Red Sticky Shale | No | Yes |
| 840 | 857 | Hard Quartz sand | Yes | Yes |
| 857 | 872 | Hard Grey Clay | No | No |

If more space is required use Sheet No. 2

### WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

Signed Billie M. Lockhart

By _____

License No. 122

Dated Oct 8, 1965

Well Driller's Helper _____

FEB 23 1996

Well Log Form 1

RECEIVED
NOV 1 1965
Department of Reclamation

# WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL. SEE IDAHO STATUTES 42-238

Permit No. 2-32252 Well No. 2 County Ada

Owner State of Idaho (Prison)

Address

Driller Layhart

Address 4642 Federal Way

Well location SE¼ SW¼ Sec. 13 T. 3 N/S, R. 2 E/W

Size of drilled hole 16"

Total depth of well 470

Give depth to standing water from the ground 10' Water temp. 68 °Fahr.

Test delivery was 1600 g.p.m. or ____ c.f.s. Drawdown was 48 feet. Pump? X Bail? ____

Size of pump and motor used to make test 100' of 8" Col. + Design Engrs

Length of time of test 8 hours ____ minutes.

If flowing well, give flow No c.f.s. or No g.p.m. and of shut off pressure No

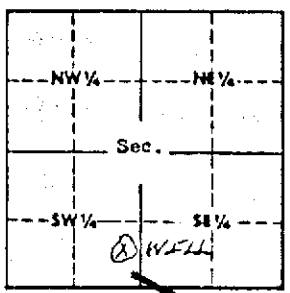
If flowing well, described control works No
(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for ____ Weight of casing per lineal foot 54

Thickness of casing .375 Casing material Steel
(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 16" - 105' 12" 470'
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

Locate well in section




Location shown as denoted per 1994-95 Application

Appears to be the old Dept. well #2 (Cold)

## CASING RECORD

| Diam. Casing | From Feet | To Feet | Length | Remarks—seals, grouting, etc. |
|---|---|---|---|---|
| | | | | Pumping Test 1600 GPM 48' Drawdown |
| 16" | 0 | 105' | 105' | 1350 GPM 42' " |
| 12" | 0 | 470 | 470 | 1000 GPM 33' " |
| | | | | |
| | | | | |

Number and size of perforations ¼ x 4" located 120' feet to 460' feet from ground

Date of commencement of well Aug 1-65 Date of completion of well Sept 6-65

SE SW S.13 3N 2E

63

This matches Keith Anderson's specs. in his 1/26/95 letter to Region

WELL LOG

| From Feet | To Feet | Type of Material | Water-bearing Formation Any Yes or No | Casing Perforated Any Yes or No |
|---|---|---|---|---|
| 0' | 10' | Soil | No | No |
| 10' | 30' | Gravel + sand | Yes | No |
| 30' | 65' | Sand | Yes | No |
| 65' | 120' | Blue clay | No | No |
| 120' | 242' | Strips of Blue clay + sand | Yes | Yes |
| 242' | 305' | Hard Blue clay + sand formation | Yes | Yes |
| 305' | 315' | Blue clay | No | Yes |
| 315' | 415' | Hard blue clay + sand | Yes | Yes |
| 415' | 433' | Sandy clay | Yes | Yes |
| 433' | 436' | Coarse sand | Yes | Yes |
| 436' | 451' | Fine sand | No | Yes |
| 451' | 471' | Blue clay | No | No |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | If more space is required use Sheet No. 2 | | |

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is complete, true and correct to the best of my knowledge and belief.

Signed Silas Yoder

By

License No.

Dated 12-28, 19 35

Well Driller's Helper

FEB 28 1936

orm 238-7
/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

RECEIVED
Department of Water Resources
DEC 6 1983



## 1. WELL OWNER

Name Boise City Pks Dept.

Address 1104 Royal Blvd.

Owner's Permit No. _____

Quarry View Park (Hotwell)

## 2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

## 3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

## 4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

## 5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

| Thickness | | Diameter | | From | | To | |
|---|---|---|---|---|---|---|---|
| .307 | inches | 10 | inches | + 6" | feet | 45 | feet |
| .250 | inches | 8 | inches | 18" | feet | 498 | feet |
| | inches | | inches | | feet | | feet |
| | inches | | inches | | feet | | feet |

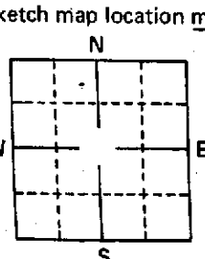
Was casing drive shoe used? ☒ Yes ☐ No 10" & 8"
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | | From | | To | |
|---|---|---|---|---|---|
| | perforations | | feet | | feet |
| | perforations | | feet | | feet |
| | perforations | | feet | | feet |

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☒ Cement grout
☐ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

## 6. LOCATION OF WELL

Sketch map location must agree with written location.




Subdivision Name _____
Lot No. _____ Block No. _____
County Ada
NE ¼ NW ¼ Sec. 13, T. 3 N/S R. 2 E/W

## 7. WATER LEVEL

Static water level 33 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
*Describe artesian or temperature zones below.*

## 8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| 159 | 145 | 30 min |
| 202 | 180 | 30 min |
| 260 | 226 | 30 min |

## 9. LITHOLOGIC LOG

| Bore Diam. | Depth From | Depth To | Material | Water Yes | Water No |
|---|---|---|---|---|---|
| 10 | 0 | 6 | topsoil | | X |
| | 6 | 25 | cemented gravel | | X |
| | 25 | 39 | lightly cemented sand & gravel | | X |
| | 39 | 42 | sand & gravel | | X |
| | 42 | 48 | brown clay | | X |
| | 48 | 65 | bluish gray clay, silty | | X |
| | 65 | 100 | cemented blue sand | | X |
| | 100 | 120 | bluish gray clay | | X |
| | 120 | 168 | light blue cemented sand & cla | | X |
| | 168 | 203 | darker bluish gray sandy clay | | X |
| | 203 | 245 | hard blue sand | | X |
| | 245 | 272 | blue sand, not so hard | | X |
| | 272 | 303 | more clay & darker | | X |
| | 303 | 335 | blue gray sandy clay | | X |
| | 335 | 349 | blue gray hard sticky clay | | X |
| | 349 | 440 | blue gray sand, clay with hard blue shale streaks | | X |
| | 440 | 460 | dark blue gray sandy clay | | X |
| | 460 | 475 | hard sticky clay | | X |
| | 475 | 495 | gray granite, sandy clay | | X |
| | 495 | 518 | sticky hard dark gray clay | | X |
| | 518 | 530 | coarse sandy light blueclay | | X |
| | 530 | 549 | fine sandy light blue clay | | X |
| | 549 | 560 | sticky blue clay | | X |
| | 560 | 570 | dark gray altered basalt clay, some platy zeolites | | X |
| | 570 | 595 | fresh black basalt | | X |
| | 595 | 645 | gray to brown clay, some altered basalt | | X |
| | 645 | 705 | gray medium to very coarse sa with clay streaks, granite sa | | X |
| | 705 | 725 | dark gray clay, some dark gree black volcanic rock | | X |
| | 725 | 800 | volcanic rock, dark greenish- black, porphyritic with zeoli & minor clay | | X |

## 10.

Work started _____ finished _____

## 11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name _____ Firm No. 153
Address _____ Date _____
Signed by (Firm Official) _____
and
(Operator) _____

FEB 23 1996

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.



RECEIVED

## 1. WELL OWNER

Name Boise City Parks Dept.

Address 1104 Royal Blvd

Owner's Permit No. _____

## 2. NATURE OF WORK

☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

## 3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

## 4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

## 5. WELL CONSTRUCTION

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____

| Thickness | Diameter | | From | To |
|---|---|---|---|---|
| _____ inches | _____ inches | + | _____ feet | _____ feet |
| _____ inches | _____ inches | | _____ feet | _____ feet |
| _____ inches | _____ inches | | _____ feet | _____ feet |
| _____ inches | _____ inches | | _____ feet | _____ feet |

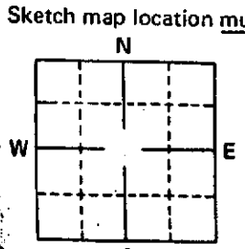
Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

| Number | | From | To |
|---|---|---|---|
| _____ | perforations | _____ feet | _____ feet |
| _____ | perforations | _____ feet | _____ feet |
| _____ | perforations | _____ feet | _____ feet |

Well screen installed? ☐ Yes ☐ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth _____ Material used in seal: ☐ Cement grout
☐ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing
☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

## 6. LOCATION OF WELL

Sketch map location must agree with written location.




Subdivision Name _____

Lot No. _____ Block No. _____

County Ada

N/E ¼ N/W ¼ Sec. 13, T. 3 N/S R. 2 E/W

## 7. WATER LEVEL

Static water level _____ feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
*Describe artesian or temperature zones below.*

## 8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

## 9. LITHOLOGIC LOG

| Bore Diam. | Depth From | Depth To | Material | Wat Yes |
|---|---|---|---|---|
| | 800 | 860 | volcanic rock, dark greenish black porphyrific | |
| | 860 | 865 | dark gray clay, altered volcanics | |
| | | | water showed at 560-865 | |

## 10.

Work started 8/25/83 finished 11/15/83

## 11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name W.E. Stevens & Sons Firm No. 153

Address 3709 Hawthorne Drive Date 11/30/83

Signed by (Firm Official) _____

and

(Operator) _____

FEB 23 1996

USE ADDITIONAL SHEET IF NEEDED

This is additional work done on Quarry Park well
for city park dept, originally dated 8/25-11/15/83.
Please add it to your records.

W.E. Stevens & Sons
# 153

RECEIVED
MAR 7 1984
Department of Water Resources

RECEIVED
FEB 23 1996

RECEIVED
MAR 8 1991
Department of Water Resources
Western Service Office

RECEIVED
MAR 7 1984
Department of Water Resources

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

# WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.



**1. WELL OWNER**

Name Boise City Pks Dept

Address 1104 Royal Blvd

Owner's Permit No. _____

**2. NATURE OF WORK**

☐ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

**3. PROPOSED USE**

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

**4. METHOD DRILLED**

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

**5. WELL CONSTRUCTION**

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

| Thickness | | Diameter | | From | | To | |
|---|---|---|---|---|---|---|---|
| .250 | inches | 6 | inches | +4791' | feet | 863 | feet |
| | inches | | inches | | feet | | feet |
| | inches | | inches | | feet | | feet |
| | inches | | inches | | feet | | feet |

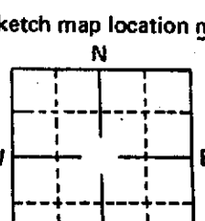
Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☒ Yes ☐ No
How perforated? ☒ Factory ☐ Knife ☐ Torch
Size of perforation 3/16 inches by 3½ inches

| Number | | From | | To | |
|---|---|---|---|---|---|
| 7200 | perforations | 486'3" | feet | 857'6" | feet |
| | perforations | | feet | | feet |
| | perforations | | feet | | feet |

Well screen installed? ☐ Yes ☐ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth ____ Material used in seal: ☐ Cement grout ☐ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

**6. LOCATION OF WELL**

Sketch map location must agree with written location.




Quarry Park
Subdivision Name FEB 29 1996
Lot No. ____ Block No. ____
County Ada
N/E ¼ N/W ¼ Sec. 13, T. 3 N/S, R. 2 E/W.

**7. WATER LEVEL**

Static water level _____ feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ °F. Quality _____
*Describe artesian or temperature zones below.*

**8. WELL TEST DATA**

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

| Discharge G.P.M. | Pumping Level | Hours Pumped |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**9. LITHOLOGIC LOG**

| Bore Diam. | Depth From | Depth To | Material | W Ye |
|---|---|---|---|---|
| | | | | |

RECEIVED
MAR 7 1984
Department of Water Resources
Western Regional Office

**10.**

Work started 2/20/84 finished 2/28/84

**11. DRILLERS CERTIFICATION**

I/We certify that all minimum well construction standards w complied with at the time the rig was removed.

Firm Name _____ Firm No. _____
Address _____ Date _____
Signed by (Firm Official) _____
and
(Operator) _____

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DE...

KEITH E. ANDERSON
CONSULTANT IN ENGINEERING AND GEOLOGY
432 SUMMIT RIDGE
BOISE, IDAHO 83702
TELEPHONE (208) 336-2718 OR 344-3888

RECEIVED
MAR 0 8 1995
WATER RESOURCES
WESTERN REGION

March 8, 1995

Mr. Steve Lester
Water Rights Supervisor
Idaho Department of Water Resources
Western Region
2735 Airport Way
Boise, ID 83705-5082

RE: Water Rights Nos. 63-09661
63-10241
63-10022
(Applications for Amendment and Transfer)

Dear Mr. Lester:

This letter is in response to your letter of February 14, 1995 requesting additional information as to the extent to which the two existing low-temperature geothermal wells involved in the above applications may be used in the future. This response is submitted to you as a joint reply at the request of, and on behalf of, the Idaho Department of Lands (as present administrator of the well covered previously by the Idaho State Historical Society) and the City of Boise--as well as the Idaho Botanical Garden who use the Old Penitentiary Irrigation Well No. 1 as lessee from the Department of Lands.

As you know, the sole purpose of these applications is to provide an additional point of diversion for non-geothermal water to supply a Joint-Project proposed by the above three parties that would be used for irrigation of the City's Quarry View Park, the State's Old Penitentiary grounds, and the Idaho Botanical Garden. An agreement for construction and operation of the Joint-Project is now being finalized, with implementation subject only to approval of these applications and financing arrangements. This agreement will provide that neither of the two "hot" wells will be used for irrigation once the Joint-Project is completed and operating satisfactorily.

Future beneficial use directly related to the heat value of water from either of the existing wells would be minor. In the case of the City, it would probably be for such use as heating of buildings on the park--such as rest rooms. In the case of the State, it would probably be for such use as heating of a small greenhouse for propagation or display of plants. It is not possible at this time to even make an estimate of either diversion rates or volumes--but they would be small.

– hot wells

The estimated rate of flow and annual volume of use of the non-geothermal water from the new (additional) point of diversion for irrigation would therefore be governed by the existing permits/licenses. For the City of Boise,

– cold well (new pt to use)

heating w/o water right coverage OK if ≤ 42-111B limits

RECEIVED
FEB 23 1996

the irrigation of 7 acres at Quarry View Park has required a diversion rate of 0.37 cfs and an annual volume of 31.5 AF. For the State of Idaho, it is estimated that the ultimate irrigated area (for the Idaho Botanical Garden and other adjacent grounds at the Old Penitentiary site) would probably not exceed 30 acres with a maximum annual volume of 135 AF and a maximum diversion rate of 1.20 cfs (because of limited available daily hours for irrigation). The estimated combined maximum irrigation use from the additional point of diversion would then be about 1.6 cfs and 165-170 AF.

— could well estimated use

It is contemplated that the existing pump in the State well would be removed and reinstalled at the additional point of diversion. This pump will deliver about 1.20 cfs which, when used conjunctively with the existing storage reservoir of about 100,000-gallon capacity, will supply the needed volume. (Permit 63-09661 is for 2.20 cfs and 110 acres).

As to continued irrigation use from the "hot" wells if the Joint-Project does not proceed: The City will continue its non-use of the Quarry View Park well during the Moratorium. It will also continue to look for other less expensive alternatives to Boise Water Corporation water for park irrigation. The State, under terms of the fifth paragraph of the Order Extending the Moratorium, would plan on continued use of their well. Diversion rates and volumes would be as described above.

If you have questions or need additional information, please let me know.

Sincerely,

Keith E. Anderson

Keith E. Anderson

Copy: Idaho Department of Lands (Bryce Taylor)
Boise City, Dept. of Public Works (Neal Oldemeyer)
Idaho Botanical Garden (Wayne Meuleman)

FEB 23 1995

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

| | |
|---|---|
| IN THE MATTER OF APPLICATION FOR TRANSFER OF LICENSE NO. 63-10241 AND APPLICATION FOR AMENDMENT OF PERMIT NO. 63-9661 IN THE NAME OF IDAHO STATE HISTORICAL SOCIETY, AND APPLICATION FOR AMENDMENT OF PERMIT NO. 63-10022 IN THE NAME OF CITY OF BOISE | NOTICE OF CONFERENCE |

On November 21, 1994, the Idaho State Historical Society filed with the Department of Water Resources application for transfer of license no. 63-10241, and application for amendment of permit no. 63-9661. On January 9, 1995, the City of Boise, Dept. of Parks filed application for amendment of permit no. 63-10022. All three applications were protested by Paul W. Wise and Boise Water Corporation.

The Department has set the matter of protests for a conference to be held on Wednesday, March 15, 1995, at 10:00 a.m., at the Division of Environmental Quality, 1410 N. Hilton, Conference Room D., Boise, Idaho. The conference will be held in accordance with provisions of Chapters 2 and 17, Title 42, and Chapter 52, Title 67, of the Idaho Code, the adopted Rules of Practice and Procedure of the Department of Water Resources, and Rules 40 and 45 of the adopted Rules of Water Appropriation of the Department of Water Resources.

FEB 23 1996

Opportunity shall be afforded all parties to respond and present information and argument on all issues involved.

Dated this 28th day of February, 1995.

David R. Tuthill Jr.
DAVID R. TUTHILL, JR., P. E.
Manager, Western Regional Office

I hereby certify that on the 28th day of February, 1995, I mailed a true and correct copy, postage prepaid, of this document to the applicant(s) and protestant(s) listed:

Sue Taylor
Sue Taylor
Secretary-Office Coordinator

Cerfified Mail

ID STATE HISTORICAL SOCIETY
210 W MAIN
BOISE ID 83702

CITY OF BOISE
DEPT OF PARKS
1104 ROYAL BLVD
BOISE ID 83706

PAUL WISE
2843 STAR CIRCLE
BOISE ID 83712

BOISE WATER CORP
PO BOX 7488
BOISE ID 83707

Non-Certified Mail

KEITH ANDERSON
432 SUMMITT
BOISE ID 83702

FEB 23 1996

## CONFERENCE AND HEARING PROCEDURE
## APPLICATION FOR TRANSFER

### ISSUES

Section 42-222, Idaho Code, identifies the following potential issues that the department can consider in connection with an application for transfer

1) Will the proposed transfer injure other water rights?

2) Will the proposed transfer constitute an enlargement in use of the original right?

3) Is the proposed transfer in the local public interest, where local public interest is defined as the affairs of the people in the area directly affected by the proposed use?

4) Is the proposed use contrary to conservation of water resources within the state of Idaho?

### BURDEN OF PROOF

The applicant has the initial burden of proof for issues 1,2 and 4 above and must provide evidence for the department to evaluate these criteria.

The initial burden of proof on issue 3 above lies with both the applicant and protestant as to factors of which they are most knowledgeable and cognizant. The applicant has the ultimate burden of persuasion, however, for this issue.

### PROCEDURE

The department generally conducts an informal conference with the parties to determine the issues and to try to settle a protested matter before a hearing is scheduled. If a hearing is held, the department will issue a written decision based on the hearing record.

### CONFERENCE

The purpose of a pre-hearing conference is to provide the opportunity for the parties and the department to familiarize themselves with a contested matter and to attempt to resolve the matter. At the conference, the department may also formulate and simplify the issues, identify documents to avoid unnecessary proof, exchange proposed exhibits or prepared testimony, limit witnesses, discuss settlement or make settlement offers,schedule hearings, establish procedure or at hearing and address other matters that may expedite orderly conduct and disposition of the proceeding or its settlement.

FEB 23 1996

**HEARING**

The department will tape record the hearing. Copies of the hearing are available upon request and the payment of the cost of reproducing the tape.

The hearing likely will be conducted by a hearing officer appointed by the Director rather than by the Director himself.If so, the hearing officer will prepare a recommended order for the Director's consideration. Parties can file exceptions to a recommended order, briefs in support of the exceptions or may request oral argument. Parties may seek judicial review of any final order issued by the Director.

Parties by written stipulation, may waive their right to a recommended order, particularly when a shortened decision process is desirable or necessary. Such a waiver does not eliminate any rights of the parties in connection with the final order and judicial review of the order.

**EXHIBITS**

A party who plans to offer an exhibit as part of the hearing record must provide a copy of the proposed exhibit to the parties and to the hearing officer.

**AMERICANS WITH DISABILITIES ACT**

Any hearing scheduled will be conducted in a facility which meets the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations in order to attend, participate in or understand the hearing, please advise the department within (10) days prior to the hearing.

RECEIVED

FEB 23 1996

**CONFERENCE AND HEARING PROCEDURE**
**APPLICATION FOR AMENDMENT**

Section 42-203A, Idaho Code, requires the department to consider the following issues in connection with an application for permit:

1) Will the proposed appropriation injure other water rights?

2) Is the proposed water supply sufficient for the purpose for which it is sought to be appropriated?

**BURDEN OF PROOF**

The Applicant has the initial burden of proof on issues 1 and 2 above and must provide evidence for the department to evaluate these criteria.

**PROCEDURE**

The department generally conducts an informal conference with the parties to determine the issues and to try to settle a protested matter before a hearing is scheduled. If a hearing is held, the department will issue a written decision based on the hearing record.

**CONFERENCE**

The purpose of a prehearing conference is to provide the opportunity for the parties and the department to familiarize themselves with a contested matter and to attempt to resolve the matter. At the conference, the department may alos formulate and simplify the issues, identiry documents to avoid unnecessary proof, exchange proposed exhibits or prepared testimony, limit witnesses, discuss settlement offers, schedule hearings, establish procedure at hearings and address other matters that may expedite orderly conduct and disposition of the proceeding or its settlement.

**HEARING**

The department will tape record the hearing. Copies of a hearing tape are available upon request and the payment of the cost of reproducing the tape.

The hearing likely will be conducted by a hearing officer appointed by the Director rather than the Director himself. If so, the hearing officer will prepare a recommended order for the Director's consideration. Parties can file exceptions to

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1996

recommended order, briefs in support of the exceptions or may request oral argument. Parties may seek judicial review of any final order issued by the Director.

Parties may be written stipulation waive their right to a recommended order, particularly when a shortened decision process is desirable or necessary. Such a waiver does not eliminate any rights of the parties in connection with the final order of the Director and judicial review of the order.

**EXHIBITS**

A party who plans to offer an exhibit as part of the hearing record must provide a copy of the proposed exhibit to the parties and to the hearing officer.

**AMERICANS WITH DISABILITIES ACT**

Any hearing scheduled will be conducted in a facility which meets the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations in order to attend, participate in or understand the hearing please advise the department within ten (10) days prior to the hearing.

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FEB 0 8 1995
WATER RESOURCES
WESTERN REGION

February 6, 1995

City of Boise
Deparment of Parks
1104 Royal Blvd
Boise, Idaho 83706

PROTEST1

Subject: Amendment of Water Right Permit 63-1002

Gentlemen:

Please find attached our protest to ammend water right 63-1002.

There are a great number of unanswered questions relating to the above request, which gives body to the attached Protest and should be answered to the satisfaction of the Water Resources Commission prior to approval of any change to present water rights.

Respectfully yours

J. H . WISE & SON, INC.
WARM SPRINGS MESA, INC.

Paul W. Wise

Paul W. Wise, President

cc; Water Resources
Keith Anderson
Peter Boyd, Att.

FEB 23 1995

RECEIVED
FEB 0 8 1995
WATER RESOURCES
WESTERN REGION

February 6, 1995

State of Idaho
Idaho Historical Society
210 E Main Street 83702
Boise, Idaho

PROTEST

Subject: Protest-Application for Amendment of Permit

Gentlemen:

Please find attached our protest to change of water right No. 63-10241, transfer No. 4526 and amendment of water right 63-09661.

There are a great number of unanswered questions relating to the above requests, which gives body to the attched Protest and should be answered to the satisfaction of the Water Resources Commission, prior to approval of any change to present water rights.

Respectfully yours

J. H. WISE & SON, INC.
WARM SPRINGS MESA, INC

Paul W. Wise

Paul W. Wise, President

cc: Water Resources
Keith Anderson
Peter Boyd Att.

FEB 23 1995

RECEIVED
FEB 17 1995
WATER RESOURCES
WESTERN REGION

**KEITH E. ANDERSON**
CONSULTANT IN ENGINEERING AND GEOLOGY
432 SUMMIT RIDGE
BOISE, IDAHO 83702
TELEPHONE (208) 336-2718 OR 344-3888

February 16, 1995

Mr. Steve Lester
Water Rights Supervisor
Idaho Department of Water Resources
Western Region
2735 Airport Way
Boise, ID 83705-5082

RE: Water Right Nos. 63-09661
63-10241
63-10022
(Applications for Amendment and Transfer)

Dear Mr. Lester:

Thank you for your letter to me of February 14, 1995 on the above subject (with copies to the Idaho State Historical Society and Boise City Public Works Department).

I will be out of the state for a period of approximately two weeks, returning on or about March 1. At that time I will submit a response to your questions concerning the extent to which the existing two low-temperature geothermal wells may be used in the future.

Please also send a copy of any future correspondence on this matter directly to: Bryce Taylor, Idaho Department of Lands, 1215 W. State Street, Boise, ID 83702. As I indicated to you, the Department of Lands is now the administrator for the lease between the State and the Idaho Botanical Garden, including the use of the Old Penitentiary Irrigation Well No. 1 under the terms of that lease, as a result of formal action taken by the State Board of Land Commissioners at their December 1994 regular meeting.

Sincerely,

Keith Anderson

Keith E. Anderson

Copy: Idaho Department of Lands (Bryce Taylor)
Boise City, Dept. of Public Works (Neal Oldemeyer)
Idaho Botanical Garden (Wayne Meuleman)

FEB 2 3 1996

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

February 14, 1995

PHILIP E. BATT
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

Mr. Keith E. Anderson, P.E., P.G.
432 Summit Ridge
Boise, ID 83702

Re: Water Right Nos. 63-09661, 63-10022 and 63-10241
Applications for Amendment and Transfer

Dear Mr. Anderson:

Thank you for the January 26 response to my recent letter that I had sent to the applicants for the above-referenced water right items. I am writing directly to you with a copy of this letter being sent to the applicants to comply with a preferred process noted by you and the applicants.

Your information confirmed that the water right changes will add a cold water diversion point known as the old penitentiary well #2 to the three rights. Although it is noted that an existing pump in old pentitentiary well #1 will be relocated to well #2, continued use of the geothermal wells ("hot wells") is implied in your response and in the water right filings. The question posed in my letter regarding to what extent geothermal resource use will continue from the two hot wells is not addressed in your response.

Please provide information relating to the following questions.

1) What is the extent of beneficial use that will continue from each hot well?

2) Within the answer to question #1, notwithstanding your comments in prior correspondence with department staff that use of this hot water resource constitutes a de facto beneficial use of heat value due to unique aquifer circumstances, to what extent will the hot wells be used for uses directly related to heat value? My question excludes irrigation use to the extent that I am trying to quantify estimated uses for non-irrigation practices regarding the two hot wells.

3) Assuming that a beneficial use directly related to heat value of the hot wells will occur under the proposed change, what are the estimated rate of flow and estimated annual volume of such (non-irrigation) uses per well?

4) What are the estimated rate of flow and estimated annual volume for any continued irrigation use from the hot wells after cold water well use begins? Estimates per well will be helpful.

In other words, I am seeking to understand to what extent the hot wells will be used for irrigation and/or other beneficial uses. Rate of flow and annual volume are important. The answer will also imply at least the expected rate of flow that will be associated with the cold water well.

FEB 2 3 1996

The technical information concerning the conjunctive management issue for ground water and Boise River flows will be evaluated by technical staff during this review process. The well log details noted in your letter certainly agree with the log on file with this agency for cancelled right no. 63-03439 (old no. G32252).

Your recent letter and previous correspondence on file with this office, together with answers to the above items, will facilitate review of the three applications. Please contact me if I can assist you in this process.

Sincerely,

Steve Lester
Water Rights Supervisor

cc: John R. Hill, Director, Idaho State Historical Society
Neal S. Oldemeyer, P.E., City of Boise

RECEIVED
FEB 0 8 1995
WATER RESOURCES
WESTERN REGION

**PROTEST**

COME NOW, J. H. Wise and Sons, Inc., an Idaho corporation and Warm Springs Mesa, Inc., an Idaho Corporation, by and through their president, Paul Wise, and protests the amendment of water right permit Nos. 63-09661, 63-10022 and change of water right No. 63-10241, transfer No. 4526, all of which notices of amendment and proposed change had been published in The Idaho Statesman pursuant to 42-211 of the Idaho Code. That this protest is made pursuant to the provisions of 42-222 et seq. Idaho Code. Request is hereby made pursuant to said statute, that the Director of The Department of Water Resources investigate the proposed amendments and change and conduct a hearing thereon as provided by statute. That the grounds for said protest, among other things, are as follows:

1. That the water right sought to be changed from its present location, upon information and belief, has been forfeited and abandoned by nonuse;

2. That the transfer of the waters affected by the change in diversion will affect, interfere with and substantially harm the present water supply from protesters wells located in the immediate area, the exact location of which will be provided to the Director at the time of hearing;

3. Upon information and belief, protestors state that because of the nonuse of said water that the ownership of said

FEB 2 3 1996

water has reverted to the State of Idaho and is not subject to diversion.

DATED This 3 day of February, 1995.

WARM SPRINGS MESA, INC.

By: Paul W Wise
Paul Wise, President

J. H. WISE & SONS, INC.

By: Paul W Wise
Paul Wise, President

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WATER RESOURCES
WESTERN REGION

Pd Chk # 1531
W0185666 2/3/95

1531

MESA WATER CO.
2843 E. STAR CIR. PH. 208-344-2603
BOISE, ID 83712

92-155/1241

February 03 19 95

PAY TO THE ORDER OF STATE OF IDAHO WATER RESOURSES $75.00

THE SUM 75 DOLLARS 00 CTS

DOLLARS

KEY BANK
Key Bank of Idaho
Capital Center Office
P.O. Box 2602
Boise, Idaho 83701
1-800-678-5301

FOR PROTEST FEE

Homer T. Wise

⑈001531⑈ ⑆124101555⑆01 201012 2⑈

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

February 7, 1995

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

PAUL WISE
2843 STAR CIRCLE
BOISE ID 83712

BOISE WATER CORP
PO BOX 7488
BOISE ID 83707

Re: Application for Transfer No. 63-10241 in the Name of the ID State Historical Society

Dear Protestant:

This office acknowledges receipt of your protests to the approval of the above-referenced application for transfer. The following are the principle items we can consider with respect to either approving or denying an application for transfer:

1. Are other water rights injured by the transfer?

2. Does the change constitute an enlargement in the use of the original right?

3. Will the proposed change conflict with the local public interest?

4. Will the proposed use be contrary to conservation of water resources within the state of Idaho?

The Department suggests you contact the applicant(s) directly in an effort to determine what is proposed by the application and to attempt to resolve the protest.

If this office has not been advised within twenty (20) days that the protest has been resolved, the matter will be scheduled for conference. At the conference, the Department will review possibilities for resolution of the protest. If the matter cannot be resolved at that time, a formal hearing will be arranged for a future date.

If we may be of assistance, please contact us.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Manager, Western Regional Office

DRT:st

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FEB 23 1996

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

February 7, 1995

PAUL WISE
2843 STAR CIRCLE
BOISE ID 83712

BOISE WATER CORP
PO BOX 7488
BOISE ID 83707

Re: Applications for Amendment Nos. 63-10022 in the Name of The City of Boise and 63-9661 in the Name of The ID Historical Society

Dear Protestant:

This office acknowledges receipt of your protest to the approval of the above-referenced application for amendment. The following are the principle items we can consider with respect to either approving or denying an application for amendment:

1. Will the approval of the application result in the diversion and use of more water than originally permitted?

2. Will the rights of others be adversely affected thereby?

The Department suggests you contact the applicant(s) directly in an effort to determine what is proposed by the application and to attempt to resolve the protest.

If this office has not been advised within twenty (20) days that the protest has been resolved, the matter will be scheduled for conference. At the conference, the Department will review possibilities for resolution of the protest. If the matter cannot be resolved at that time, a formal hearing will be arranged for a future date.

If we may be of assistance, please contact us.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Manager, Western Regional Office

DRT:st

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State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

February 7, 1995

ID HISTORICAL SOCIETY
210 W MAIN
BOISE ID 83702

Re: Application for Transfer of Water Right No. 63-10241

Dear Applicant:

Enclosed please find a copy of the protest(s) filed against the above-referenced application. You should be aware that the following are the items we can consider at a conference in either approving or denying an application for transfer:

1. Are other water rights injured by the transfer?

2. Does the change constitute an enlargement in the use of the original right?

3. Will the proposed change conflict with the local public interest?

4. Will the proposed use be contrary to conservation of water resources within the state of Idaho?

The Department suggests you contact the protestant(s) directly in an effort to determine what is proposed by the application and to attempt to resolve the protest.

If this office has not been advised within twenty (20) days that the protest has been resolved, the matter will be scheduled for conference. At the conference, the Department will review possibilities for resolution of the protest. If the matter cannot be resolved at that time, a formal hearing will be arranged for a future date.

If we may be of assistance, please contact us.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Manager, Western Regional Office

DRT:st

Enclosure

CC: Keith Anderson

FEB 8 1995

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

February 7, 1995

ID STATE HISTORICAL SOCIETY
210 W MAIN
BOISE ID 83702

CITY OF BOISE
DEPT OF PARKS
1104 ROYAL BLVD
BOISE ID 83706

Re: Applications for Amendment of Water Rights Nos. 63-10022 in the Name of City of Boise and 63-9661 in the Name of ID Historical Society

Dear Applicant:

Enclosed please find a copy of the protest(s) filed against the above-referenced application. You should be aware that the following are the items we can consider at a conference in either approving or denying an application for amendment:

1. Will the approval of the application result in the diversion and use or more water than originally permitted?

2. Will the rights of others be adversely affected thereby?

The Department suggests you contact the protestant(s) directly in an effort to determine what is proposed by the application and to attempt to resolve the protest. If this office has not been advised within twenty (20) days that the protest has been resolved, the matter will be scheduled for conference. At the conference, the Department will review possibilities for resolution of the protest. If the matter cannot be resolved at that time, a formal hearing will be arranged for a future date.

If we may be of assistance, please contact us.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Manager, Western Regional Office

DRT:st

Enclosure

CC: Keith Anderson

7/94

# STATE OF IDAHO
# DEPARTMENT OF WATER RESOURCES
# NOTICE OF PROTEST

This form may be used to file a protest with the department under sections 42-108B, 42-203A, 42-203C, 42-211, 42-222 and 42-224, Idaho Code. The department will also accept a timely protest not completed on this form if it contains all necessary information.

1. Matter being protested Attached Change in point of diversion. Transfer # 4526 Add points of diversion for Rights 63-10022 and 63-0966
2. Name of protestant Boise Water Corporation
3. Protestant's representative for service (If different than protestant)

   _____
4. Service mailing address Boise Water Corporation RO Box 7488 Boise, ID 83707
5. Service telephone no. 362-1704
6. Basis of protest (including statement of facts and law upon which the protest is based) _____
   Boise Water Corporation (BWC) owns and operates several municipal wells in the vicinity. BWC is concerned about well interference effects and is interested in these Amendments owing to the geothermal/cold water rights relationship

   *(additional pages may be attached to describe the nature of the protest)*
7. What would resolve your protest? Please refer to: "Groundwater Conditions and Hydraulic Testing of the Boise Fan Aquifer of Southeast Boise River Valley, Ada County, Idaho," Professional Report submitted to Director, IDWR October 1993,

I hereby, acknowledge that if I, or my designated representative, fails to appear at any regularly scheduled conference or hearing in the matter of which I have been notified at the address above, the department may issue a notice of proposed default against me in this matter for failure to appear. I also verify that I have served a copy of this protest upon the applicant.

Signed this 6th day of February, 19 95.

Boise Water Corporation
PROTESTANT

_____
PROTESTANT'S REPRESENTATIVE

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WATER RESOURCES
WESTERN REGION

NOTICE OF AMENDMENT
OF WATER RIGHT PERMIT
NO. 63-09661

Notice is hereby given that the State of Idaho (Dept. of Education, Idaho Historical Society) proposes an amendment of permit pursuant to Section 42-211 ofIdaho Code.

WATER RIGHT AS RECORDED:

| | |
|---|---|
| PERMIT NO. | 63-09661 |
| PRIORITY | 1/16/1981 |
| SOURCE | Groundwater |
| POINT OF DIV | SWNE, S13, T3N, R2E, Ada County within the Boise Front (Geothermal) Ground Water Mgmt. Area. The well is also known as old penitentiary well #1. |
| AMOUNT | 2.20 cfs |
| USE | Irrigation |
| PLACE OF USE | 110 acres in NWNE, SWNE & NENW, S13, T3N, R2E |

WATER RIGHT TO BE CHANGED AS FOLLOWS:

| | |
|---|---|
| POINT OF DIV | Add use of existing cold water well located in NESW, S13, T3N, R2E This is a Warm Springs Golf Course well aka old penitentiary irrigation well #2 |
| PLACE OF USE | 110 acres in NWNE, SWNE, E1/2NW, S13, T3N, R2E |

This well is also proposed for use in two other current filings: Application for Transfer of Right No. 63-10241 and Amendment of Permit No. 63-10022. All applications for the cold water well propose to augment or replace use of hot water wells.

The permit will be subject to all prior water rights. Any protest against the approval of the proposed amendment must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705, together with a protest fee of $25.00 on or before February 6, 1995. The protestant must also send a copy of the protest to the applicant.

R. Keith Higginson
Director

Published in the Idaho Statesman on January 19 and 26, 1995.

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WATER RESOURCES
WESTERN REGION

3 1996

NOTICE OF PROPOSED CHANGE OF WATER RIGHT NO. 63-10241
TRANSFER #4526

Notice is hereby given that State of Idaho (ID. Historical Society) has applied to the Department of Water Resources for a Change in Point of Diversion of the following described water right to be changed pursuant to Section 42-222 of Idaho Code:

WATER RIGHT AS RECORDED:

| | |
|---|---|
| LICENSE NO. | 63-10241 |
| DATE OF PRIORITY | 5/30/1984 |
| SOURCE | Groundwater |
| AMOUNT | 0.26 cfs |
| USE | Irrigation (.22cfs)<br>Domestic (.04 cfs) |
| POINT OF DIV | SWNE, S13, T3N, R2E, Ada County<br>(old penitentiary well #1) within Boise Front (Geothermal) Ground Water Mgmt. Area |
| PLACE OF USE | NWNE, NENW, S13, T3N, R2E (5.3 acres and offices at ID. Botanical Gardens) |

WATER RIGHT TO BE CHANGED AS FOLLOWS:

| | |
|---|---|
| POINT OF DIV | Add use of existing cold water well located in NESW,. S13, T3N, R2E<br>This is a Warm Springs Golf Course well aka old penitentiary well #2. |

This well is also proposed for use in two other current filings: Amendment of Permit No. 63-09661 and Amendment of Permit No. 63-10022. All applications for the cold water well propose to augment or replace use of hot water wells.

Any protest against approval of the proposed water right application must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, ID 83705, together with a protest fee of $25.00 on or before February 6, 1995. The protestant must also send a copy of the protest to the applicant.

R. Keith Higginson
Director

Published in the Idaho Statesman on January 19 and 26, 1995.

FEB 2 3 1996

NOTICE OF AMENDMENT
OF WATER RIGHT PERMIT
NO. 63-10022

Notice is hereby given that the City of Boise proposes an amendment of permit pursuant to Section 42-211 of Idaho Code.

WATER RIGHT AS RECORDED:

| | |
|---|---|
| PERMIT NO. | 63-10022 |
| PRIORITY | 4/20/83 |
| SOURCE | Groundwater |
| POINT OF DIV | NENW, S13, T3N, R2E, Ada County<br>within the Boise Front (Geothermal) Ground Water Mgmt. Area. |
| AMOUNT | 0.37 cfs |
| USE | Irrigation |
| PLACE OF USE | 7 acres in NENW, S13, T3N, R2E, Quarry View Park |

WATER RIGHT TO BE CHANGED AS FOLLOWS:

| | |
|---|---|
| POINT OF DIV | Add use of existing cold water well located in NESW, S13, T3N, R2E<br>This is a Warm Springs Golf Course well aka old penitentiary irrigation well #2 |

This well is also proposed for use in two other current filings by the State of Idaho: Amendment of Permit No. 63-09661 and Application for Transfer of Right No. 63-10241. All applications for the cold water well propose to augment or replace use of hot water wells.

The permit will be subject to all prior water rights. Any protest against the approval of the proposed amendment must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705, together with a protest fee of $25.00 on or before February 6, 1995. The protestant must also send a copy of the protest to the applicant.

R. Keith Higginson
Director

Published in the Idaho Statesman on January 19, and 26, 1995.

FEB 23 1996

**PROTEST**

COME NOW, J. H. Wise and Sons, Inc., an Idaho corporation and Warm Springs Mesa, Inc., an Idaho Corporation, by and through their president, Paul Wise, and protests the amendment of water right permit Nos. 63-09661, 63-10022 and change of water right No. 63-10241, transfer No. 4526, all of which notices of amendment and proposed change had been published in The Idaho Statesman pursuant to 42-211 of the Idaho Code. That this protest is made pursuant to the provisions of 42-222 et seq. Idaho Code. Request is hereby made pursuant to said statute, that the Director of The Department of Water Resources investigate the proposed amendments and change and conduct a hearing thereon as provided by statute. That the grounds for said protest, among other things, are as follows:

1. That the water right sought to be changed from its present location, upon information and belief, has been forfeited and abandoned by nonuse;

2. That the transfer of the waters affected by the change in diversion will affect, interfere with and substantially harm the present water supply from protesters wells located in the immediate area, the exact location of which will be provided to the Director at the time of hearing;

3. Upon information and belief, protestors state that because of the nonuse of said water that the ownership of said

FEB 2 3 1996

water has reverted to the State of Idaho and is not subject to diversion.

DATED This 3 day of February, 1995.

WARM SPRINGS MESA, INC.

By: Paul W Wise
Paul Wise, President

J. H. WISE & SONS, INC.

By: Paul W Wise
Paul Wise, President

pd Chk # 1531
W018566 2/3/95

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WATER RESOURCES
WESTERN REGION

# The Idaho Statesman

P.O. BOX 40, BOISE, IDAHO 83707

## LEGAL ADVERTISING INVOICE

| Amount Due |
|---|
| $59.16 |

| Account Number | Identification |
|---|---|
| 04762800 | NOTICE OF AMENDMENT OF WATER RIGHT PERMIT NO. 63-10022 |

| Ordered By | P.O. Number | Rate | Run Dates |
|---|---|---|---|
| Sue Taylor | | NT | January 19 & 26, 1995 |

DEPARTMENT OF WATER RESOURCES
Western Region
Attn: Sue Taylor
2735 Airport Way
Boise, Idaho 83705

| Estimated Inches | Real Inches |
|---|---|
| | |
| # Affidavits | Legal Number |
| 1 | 1076 |

**LEGAL NOTICE**

**NOTICE OF AMENDMENT OF WATER RIGHT PERMIT NO. 63-10022**

Notice is hereby given that Permit No. 63-10022 in the name of City of Boise, ID with a priority date 4/20/1983 is recorded as follows:

**SOURCE & POINT OF DIVERSION:** Ground Water (hot water well) in NENW, S13, T3N, R2E, Ada County, within the Boise Front (Geothermal) Ground Water Mgmt. Area.

**AMOUNT & USE & PERIOD:** .37 cfs for Irrigation from 4/1 to 10/31.

**PLACE OF USE:** NENW, S13, T3N, R2E for 7 acres, Quarry View Park.

The permit owner now proposes to Amend the Permit pursuant to Section 42-211 of Idaho Code by Adding a Point of Diversion as follows:

**ADDED POINT OF DIV:** Add use of existing cold water well located in NESW of above-referenced section. This is a Warm Springs Golf Course well aka old penitentiary irrigation well #2.

**REMARKS:** This well is also proposed for use in two other current filings by the State of Idaho as follows: Amendment of Permit No. 63-09661 and Application for Transfer of Right No. 63-10241. All applications for the cold water well propose to augment or replace use of hot water wells.

The permit will be subject to all prior water rights. Any protest against the approval of the proposed amendment must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705, together with a protest fee of $25.00 on or before February 6, 1995. The protestant must also send a copy of the protest to the applicant.

R. KEITH HIGGINSON
Director

Pub. Jan. 19 & 26, 1995 1076

LINDA PORTER, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto; that said notice was published in The Idaho Statesman in conformity with Section 60-108, Idaho Code as amended, for TWO

☒ consecutive weekly ☐ consecutive daily ☐ single ☐ odd skip

insertion(s) beginning with the issue of JANUARY 19, 1995

and ending with the issue of JANUARY 26, 1995

Linda Porter

STATE OF IDAHO )
ss.
COUNTY OF ADA )

On this 26th day of JANUARY in the year of 1995, before me, a Notary Public, personally appeared LINDA PORTER, known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

FEB 3 1995

Notary Public for Idaho
Residing at Boise, Idaho
My commission expires: 11-27-99

NOTICE OF AMENDMENT
OF WATER RIGHT PERMIT
NO. 63-10022

Notice is hereby given that Permit No. 63-10022 in the name of City of Boise, ID with a priority date 4/20/1983 is recorded as follows:

SOURCE & POINT OF DIVERSION: Ground Water (hot water well) in NENW, S13, T3N, R2E, Ada County, within the Boise Front (Geothermal) Ground Water Mgmt. Area.

AMOUNT & USE & PERIOD: .37 cfs for Irrigation from 4/1 to 10/31.

PLACE OF USE: NENW, S13, T3N, R2E for 7 acres, Quarry View Park.

The permit owner now proposes to Amend the Permit pursuant to Section 42-211 of Idaho Code by Adding a Point of Diversion as follows:

ADDED POINT OF DIV: Add use of existing cold water well located in NESW of above-referenced section. This is a Warm Springs Golf Course well aka old penitentiary irrigation well #2.

REMARKS: This well is also proposed for use in two other current filings by the State of Idaho as follows: Amendment of Permit No. 63-09661 and Application for Transfer of Right No. 63-10241. All applications for the cold water well propose to augment or replace use of hot water wells.

The permit will be subject to all prior water rights. Any protest against the approval of the proposed amendment must be filed with the Department of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705, together with a protest fee of $25.00 on or before February 6, 1995. The protestant must also send a copy of the protest to the applicant.

R. Keith Higginson
Director

Published in the Idaho Statesman on January 19, and 26, 1995.

RECEIVED
FEB 3 3 1996

KEITH E. ANDERSON
CONSULTANT IN ENGINEERING AND GEOLOGY
432 SUMMIT RIDGE
BOISE, IDAHO 83702
TELEPHONE (208) 336-2718 OR 344-3888

RECEIVED
JAN 27 1995
WATER RESOURCES
WESTERN REGION

January 26, 1995

Mr. Steve Lester
Water Rights Supervisor
Idaho Department of Water Resources
Western Region
2735 Airport Way
Boise, ID 83705-5082

RE: Water Right Nos. 63-09661
63-10241
63-10022
(Applications for Amendment and Transfer)

Dear Mr. Lester:

With reference to your letter of January 11, 1995 on the above subject (to the Idaho State Historical Society and Boise City Public Works Department), this letter constitutes a joint-reply to your questions.

Because of my familiarity with background and history of these matters, I have prepared this joint-response at the request of both Bryce Taylor (Idaho Department of Lands) and Neal Oldemeyer (Boise City Department of Public Works). Please also be advised that--as a result of the formal action taken by the Idaho State Board of Land Commissioners at their regular meeting on December 13, 1994--the administration of the lease between the State of Idaho and the Idaho Botanical Garden has been transferred from the Idaho State Historical Society to the Idaho Department of Lands. The Idaho Department of Lands will be filing an assignment of water rights 63-09661 and 63-10241, from the Historical Society to the Department of Lands, to reflect such action.

implies continual use of 1st well(s)

Background

The pending applications are submitted solely to provide an additional point of diversion for the water rights presently applicable to two existing wells: the City's Quarry View Park well (63-10022) and the State's Old Penitentiary Irrigation Well No. 1 (63-09661 and 63-10241). This additional point of diversion requested is Old Penitentiary Irrigation Well No. 2 (located on City's Warm Springs Golf Course). The additional point of diversion would provide a source of non-geothermal water for the irrigation of both: (1) the City's Quarry View Park, and (2) for the Idaho Botanical Garden area leased from the State (and possibly other State lands covered by 63-09661).

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All three water rights have priority dates (1981, 1983, and 1984) that are earlier than the July 1, 1987 effective date specified at the time of adoption of the Low Temperature Geothermal Resource statute (I.C. 42-233).

On June 3, 1988 your department adopted a Management Policy applicable to the Boise Front Ground Water Management Area that had been designated on June 15, 1987. The Management Policy was followed, on June 10, 1988, by the Director of the department issuing the Order Establishing a Moratorium.

In order to comply with the goals of the Management Policy, the City and the Idaho Botanical Garden (acting for the State) have been working for several years toward a Joint Irrigation Project that could provide a non-geothermal water source for continued irrigation of their respective areas. The adopted plan for a Joint Irrigation Project uses the Old Penitentiary Irrigation Well No. 2 (Golf Course) as the added point of diversion for cold water. It is proposed that the existing pump in the Old Pen No. 1 well be moved to the Old Pen No. 2 well, and cold water be pumped through a combination of existing and new pipelines to both parties. Meters would be installed to measure the quantity of water going to each water right. Operation and maintenance costs would be shared. Preparation of an agreement between the parties, for the construction and operation of the Joint Irrigation Project, is currently in progress. In the event that this Project is not jointly funded and operational within five (5) years, it is the intention of both parties to relinquish this added point of diversion.

So no use hot well #1? OR Replace with another pump?

Existing Wells (Future Use)

The parties are in agreement that when the Joint Irrigation Project is completed, and so long as it remains operational and provides an adequate supply of cold water from the added point of diversion at the Old Pen No. 2 well, neither the Quarry View Park well or the Old Pen No. 1 well will be used for irrigation. I am familiar with the construction of all three existing wells and systems and they conform to IV-A-4 of the Management Policy. There is no intention to permanently abandon either of the existing wells at this time.

prevent waste above + below ground

So what use will come from hot well(s)? quantity?

Conjunctive Management

Although the proposed added point of diversion (Old Pen No. 2 well) is situated within the floodplain of the Boise River, the location and construction of this well--and the geologic and hydrologic conditions in the vicinity--would preclude any significant or measurable adverse effects on river flows resulting from the proposed use of Old Pen No. 2 well.

The well is constructed with two strings of casing; (1) a solid string of 16-inch steel casing (0.375-inch wall thickness) extending from the surface to a depth of 105 feet--62 feet below the top of a thick impervious layer of "blue clay", and (2) 12-inch steel casing (0.375-inch wall thickness) extending from the surface to the well's total depth of 470 feet. The 12-inch casing is perforated only below a depth of 120 feet. Production from the well is from primarily from thin seams or "stringers" of sand in a thick sequence of impermeable clays, with the water occurring under artesian (confined) conditions.

Compare to -105, agrees

The well, furthermore, is situated nearly one-quarter mile distant from the

JAN 31 1995

channel of the Boise River. The transmissivity of this deep aquifer is high, probably on the order of 9,000 feet squared per day, and drawdown in the well when pumping will only be an estimated 15 feet. The resulting drawdown in the aquifer at the river channel location would be only a few feet and any change in vertical flux (through the thick clay aquiclude separating the river from the aquifer) resulting from pumping the well would be insignificant and negligible.

In the context of the "Rules for Conjunctive Management of Surface and Ground Water Resources" adopted a few months ago by your department, it is my professional opinion that any "Delivery Call" made by a senior appropriator in the river that alleged injury from pumping at this alternate point of diversion (and assuming such appropriator "was using water efficiently and without waste, and in a manner consistent with the goal of reasonable use of surface and ground waters"--(040.03)) would clearly fall within the provisions of a "Futile Call" (010.08).

Partially Developed Permit

Continued use under 63-09661, pending approval of these applications and implementation of the Joint Irrigation Project described above, would come under the provision of Management Policy IV-B-1. This is addressed more fully in my letters and attached data of April 13 and June 9, 1993 to Norman C. Young, IDWR, State Office (copies of which were also attached to my November 11, 1994 letter to David Tuthill, IDWR, Western Region).

addresses in part Rational that use of for irrig. is "using heat resource"

Please let me know if you have questions, or need further information at this time, concerning these pending applications for Amendment and Transfer. I would appreciate it if you could furnish me with a copy of any protests that may be filed.

completed 2/8/95

Sincerely,

Keith E Anderson

Keith E. Anderson, P.E., P.G.

REGISTERED PROFESSIONAL ENGINEER 1027 STATE OF IDAHO KEITH E. ANDERSON 1/26/95

REGISTERED PROFESSIONAL GEOLOGIST KEITH E. ANDERSON NO. 2 STATE OF IDAHO

Copy: Idaho Department of Lands (Bryce Taylor)
Boise City, Dept. of Public Works (Neal Oldemeyer)
Idaho Department of Water Resources (Norman Young)
Idaho Botanical Garden (Wayne Meuleman)

FEB 8 1995

CONVERSATION MEMORANDUM

DATE 1/20/95

FILE 63-09661
-10241
-10022

NAME OF PARTY Keith Anderson, Consultant 336-2718 or 344-3888

EMPLOYEE Steve Lester

RE:

PER OWNERS' REQUEST, WE WILL RESPOND TO MY RECENT LETTER & ADD'TL. INFORMATION

ALSO, IF ANY PROTESTS RECEIVED, SEND COPY TO KEITH ANDERSON, CONSULTANT
432 SUMMIT RIDGE
BOISE 83702

FEB 2 3 1995

**MEMORANDUM**

**TO:** MARY McCULLEY

**FROM:** STEVE LESTER

**DATE:** JANUARY 11, 1995

**RE:** REFUND

**********

The City of Boise, Dept. of Parks, filed a Transfer Application on 12/21/94 with a fee paid of $100, Receipt #W018454. Subsequently, the transfer was replaced by an Amendment Application with a $50 fee (same PCA as transfer). The $50 amendment fee can be covered by part of the $100 payment and the remaining $50 can be refunded.

Please issue a $50 refund to the City of Boise, Dept. of Parks as follows:

Attn. Neal Oldemeyer, P. E. (Receipt No. W018454 Reason: Replacement)
City of Boise
Public Works Dept.
PO Box 500
Boise, ID 83701-0500

(384-3900)

c: Neal Oldemeyer
File #63-10022

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

January 11, 1995

Mr. John R. Hill, Director
Idaho State Historical Society
210 W. Main Street
Boise, ID 83702

Mr. Neal S. Oldemeyer, P. E.
Geothermal / Special Projects Coord.
Public Works Dept., City of Boise
PO Box 500
Boise, ID 83701-0500

**RE: Water Right Nos. 63-09661 and 63-10241 (Idaho Historical Society) and 63-10022 (City of Boise), Applications for Amendment and Transfer**

Dear Sirs:

I am writing to both of you regarding the three water right applications that will be advertised in the "Idaho Statesman" on two consecutive Thursdays, January 19 and 26. The protest deadline for the filings will be on February 6, 1995. While this proceeds, please take the opportunity to submit additional information detailed in this letter.

As you know, use of geothermal resources in the Boise Front Ground Water Management Area (BFGWMA) remains limited, and the BFGWMA Moratorium has been extended to June 10, 1998. Extension of the moratorium could affect Permit No. 63-09661 as explained later in this letter. Management policies for existing uses are distinguished from undeveloped or partially developed permitted uses in the BFGWMA. A copy of pages 9 through 12 from the BFGWMA Management Policy is included for your convenience.

All three of the applications state that a common cold water well will be added to the geothermal rights in question. This suggests that use of the geothermal resource developed in the existing hot wells will continue or is contemplated at some unspecified level of use.

**EXISTING USES -- RIGHT NOS. 63-10022 (CITY) AND 63-10241 (IHS)**

Permit No. 63-10022 for Quarry View Park and License No. 63-10241 for the Botanical Gardens are existing uses where development under the respective rights cannot expand. Items IV-A1 through A8 (pages 9 & 10) from the policy apply to these two rights.

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The applications that you have filed to change these rights address item A3. However, it is not clear to what extent, if any, that hot water from either the Quarry View Park well or the old penitentiary well #1 would continue to be used under the proposed changes for the two water rights.

If hot water will continue to be used from either well, to what extent will the heat value of the resource be used? Will hot water be reinjected; if not, why not? Note that item V-C (page 11) indicates that heat value must be used or that a cold water source must substitute for the geothermal resource use. In other words, it does not appear that the hot wells are usable for other than heating purposes (either as specified in a water right or for exempted uses in Section 42-111 Idaho Code, copy attached) without prior approval as defined in the management policy.

Please show how your continued use, if any, of the geothermal resource will meet the requirements of policy items IV-A1 through A6.

Regarding the proposed use of cold water identifed as the old penitentiary well #2 in NESW of Section 13, please address the issue of conjunctive management. What information do you have that shows that water produced via this well is not related to Boise River flows? Due to the fully appropriated status of the river except for flooding spills at Lucky Peak Dam, mitigation for any additional impacts on the river system must be arranged. For example, storage water from the Boise River Water Supply Bank might be secured.

**UNDEVELOPED OR PARTIALLY DEVELOPED PERMITS -- RIGHT NO. 63-09661 (IHS)**

Management policies IV-B1 through B4 apply to this permit. Development of this right has not been completed as evidenced by the pending Request for Extension of Time to File Proof of Beneficial Use. Again, use of the cold water well is offered as a mitigation plan for item B1. Will any use of the old penitentiary well #1 occur under the permit? If so, how would you respond to items B1 through B4 regarding use of the geothermal resource?

Of course, the same question previously posed applies to this permit with respect to use of the cold water well and conjunctive management with the Boise River.

Please respond at your earliest convenience to facilitate processing of the three applications. I will be glad to assist you in any way in this endeavor.

Sincerely,

Steve Lester
Water Rights Supervisor

c: Keith E. Anderson

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for Mgt. Policy BFSWM

2. Minimize administrative paper work,

3. Minimize management cost to users and the public, and

4. Provide a reliable basis for actions of both users and IDWR.

D. Stabilize depletions from the aquifer at existing or reasonable rates (whichever is less), until a new equilibrium condition can be accurately predicted. The goals of protection for existing users and for maximizing public benefit from the resource may appear to be in conflict, one seeking to minimize the number of users and the other seeking to maximize development. IDWR must balance these goals to obtain a workable management plan. The key to balance is adequate knowledge of the resource. In particular, IDWR needs reliable estimates of the volume of water the resource can yield, how this volume changes if water levels or pressures are reduced in the aquifer, the effect of reduced water levels or pressures on water temperature, the degree of interconnection between present and future wells, how interconnection can be minimized, and a workable estimate for reasonable pumping (pressure) levels.

Development of this information will be facilitated by the maintenance of stable conditions in the aquifer.

## IV. OBJECTIVES TO MEET GOALS

### A. Existing Uses

1. Each use will be limited to the lesser of the recorded right, beneficial use being made of the water or sustained historic diversion rate and/or volume.

2. Use with reasonable efficiency will be required.

3. IDWR will require the substitution of cold water resources for existing uses that do not need the heat value of the low temperature geothermal resource, wherever practical.

4. Well and system construction to prevent waste above and and below ground will be required.

5. Reinjection will be required unless it can be shown to the satisfaction of the Director that reinjection is not economically and technically feasible.

6. Uniform monitoring equipment, data collection, and reporting will be required where possible.

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7. Diversion and use of water will be administered through the authority in Sections 42-237a.g., 42-311, 42-350 and 42-351, Idaho Code, until a water district can be formed.

8. IDWR will create a water district and appoint a watermaster upon entry of an interim decree in the Snake River Adjudication (or other adjudication) to measure and deliver water to the users.

B. Undeveloped and Partially Developed Permits

1. Permits to use the low temperature geothermal resource for which the full extent of authorized diversion rate, volume and beneficial use has not been diverted and beneficially used may not be further developed until IDWR determines from information submitted that further development will not:

   a) Increase depletions from the aquifer,

   b) Increase pumping lift or decrease pressurefor existing senior users,

   c) Reduce temperature to existing users causing systems operating at reasonable efficiency to no longer operate.

   Permit holders may submit proposed mitigation approved by IDWR to accomplish a), b), and c).

   Further development can only occur if specifically authorized by IDWR after review and approval of development plans and other applicable information.

2. Permits which do not use heat as a primary purpose will be cancelled.

3. Reinjection to the aquifer will be required unless determined by the Director to be unreasonable.

4. All systems will be required to use water and heat with a reasonable efficiency as determined by the Director.

C. Applications

1. Pending and future applications will be rejected unless information is provided by the applicant to demonstrate the use will not cause:

   a) Additional depletion of the aquifer,

   b) An increase in pumping lift or pressure reduction



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to existing users or undeveloped permit holders,

c) Temperature to be reduced to present users or undeveloped permit holders below that necessary for a system operating at reasonable efficiency to operate.

Applicants may propose mitigation necessary to accomplish a), b), and c).

2. Protested applications will not be set for hearing unless the Director makes a preliminary determination that a), b) and c) are satisfied or acceptable mitigation has been proposed.

3. The applicant is responsible to provide all existing users and holders of undeveloped permits a copy of the application and supporting information upon request.

4. Applications which do not propose heat as the primary use will be rejected. Exceptions will be considered based upon the following factors:

   a) Reinjection is proposed.
   b) The system is designed to achieve reasonable efficiency.
   c) Only non consumptive uses are proposed.
   d) Water quality will not be impaired.
   e) A reliable practical source of cold water does not exist.

5. Domestic uses (exempted from the filing of a water appropriation permit by Sec. 42-227, Idaho Code) will be authorized only after approval of a drilling prospectus submitted with the required drilling permit.

## V. ADMINISTRATIVE ACTIONS REQUIRED TO IMPLEMENT OBJECTIVES

A. Impose a moratorium pursuant to Section 42-1805(7), Idaho Code, and Rule 7 of the Water Appropriation rules on further development of undeveloped permits until IDWR determines further development is authorized.

B. Require uniform monitoring equipment, data collection and reporting where possible.

C. Require existing users to have systems evaluated by a qualified licensed engineer or geologist with a report to IDWR to confirm adequacy of system construction (including wells) to prevent waste and to use water and heat with reasonable efficiency as determined by the Director. The studies shall include an analysis of the



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practicality and efficiency of reinjecting all or a portion of water diverted and retrofitting of existing systems. For systems which do not use or need the heat value of the resource, an analysis of the practicality of substituting a cold water source will be required.

D. Issue administrative orders to enjoin unauthorized or excessive use and to require system reconstruction or repair and reinjection.

E. Continue IDWR data collection efforts and seek funding to conduct studies to increase knowledge of aquifer, water, and heat resources.

F. Issue administrative orders to amend licenses and permits within the BFGWMA which show "heating" as a use but which do not take water from the low temperature geothermal aquifer.

G. Require a drilling prospectus to be submitted for review and approval with each drilling permit proposing to construct a well into the low temperature geothermal aquifer or which exceeds a 300 ft depth.

H. Retain designation as a ground water management area rather than revise the designation to a critical ground water area. This will keep in place the authority to require instrumentation, monitoring, reporting and recordkeeping.

I. Require applicants for water appropriation to furnish sufficient technical data and plans to allow a preliminary determination by the Director that water is available, that existing users will not be damaged, and that depletion of the aquifer will not be increased. Applications will not be advertised and protest hearings will not be scheduled until an affirmative preliminary determination is made by IDWR.

J. Develop a complete inventory of wells constructed into the low temperature geothermal aquifer.

Signed this 3rd day of June, 1988 in Boise, Idaho.

R. KEITH HIGGINSON, Director

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State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

December 29, 1994

Mr. Neal Oldemeyer, P. E.
Geothermal Coordinator
City of Boise, Public Works Dept.
PO Box 500
Boise, ID 83701-0500

Re: Permit No. 63-10022

Dear Neal:

I reviewed the Application for Transfer that you recently submitted for Permit No. 63-10022. Although a draft license has been prepared for 63-10022, the water right remains a permit at this time as indicated in the April 2, 1992 file memo concerning delays in licensing. I understand that you have a copy of that memo.

The appropriate method to change a permit is an Application for Amendment instead of a transfer filing. Enclosed is a partly completed amendment form to replace the transfer application. Please review it and have the appropriate party sign it. The completed amendment form can be returned to me as soon as possible. No fee is needed -- $50 from the transfer filing will be applied to the amendment route while the remaining $50 of the transfer fee will be refunded to the city.

The act of submitting the amendment application will serve to withdraw the transfer application. The amendment can then be processed by this office along with similar filings by the Idaho State Historical Society.

Please contact me if you have any questions about this procedure.

Sincerely,

Steve Lester
Water Rights Supervisor

Enclosure

FEB 2 8 1995

PUBLIC WORKS DEPARTMENT
CITY HALL
4TH FLOOR

BOISE
CITY OF TREES

H. BRENT COLES
MAYOR

COUNCIL MEMBERS

PAULA FORNEY
COUNCIL PRESIDENT

CAROLYN TERTELING
COUNCIL PRO TEM

SARA BAKER
ANNE STITES HAUSRATH
M. JEROME MAPP
MIKE WETHERELL

December 20, 1994

Mr. Steve Lester
Idaho Department of Water Resources
Western Region Office
2735 Airport Way
Boise, ID 83705

RE: Water Rights Applications for Joint Irrigation Project

Dear Steve:

Enclosed is an Application for a Transfer of Water Right and a Notice of Claim to a Water Right, both associated with the Boise City's Quarry View Park irrigation well. These applications are integral to a joint irrigation project which will serve Quarry View Park, the Idaho Botanical Garden, and the Old Penitentiary. As you are aware, we would like these to be advertised and processed in conjunction with the similar applications submitted by the Idaho Botanical Garden (IBG) on behalf of the State.

We had originally hoped we could include a signed copy of the enclosed Memorandum of Understanding (MOU). It has been approved by City Council and IBG, however, it still lacks the signature from the State. We are hopeful that we can get this signature by the end of the week.

To keep things moving along, however, I am writing this letter to ask you to advertise the applications in anticipation that we will soon receive this last MOU signature. When it is received, we'll forward a copy of the completed agreement for your files. If for some reason we don't get the signature before the end of the advertising period, the City will protest the applications until the signature is received. We are concerned that if the MOU is not signed, and for some reason the joint irrigation project is not built, the IBG will be left with water rights to the well on our property. I have notified Wayne Meuleman, president of IBG, about our concerns. He has no problems handling the situation as I have described.

Thanks for your help.

Respectfully yours,

Neal S. Oldemeyer, P.E.
Geothermal Coordinator

Encl

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Form 222
1-87

Page 1 of 6

**STATE OF IDAHO**
**DEPARTMENT OF WATER RESOURCES**

Transfer No. _____

# APPLICATION FOR TRANSFER OF WATER RIGHT

## PART 1

Name of applicant City of Boise, Dept. of Parks Phone (208) 384-4240

Post Office address ~~1104 Royal Blvd~~ Boise, ID 83706

### A. PURPOSE OF TRANSFER

1. ☐ Change point of diversion ☒ Add diversion point(s) ☐ Change place of use
   ☐ Change nature of use ☐ Change period of use ☐ Other _____

2. Describe the reason for the proposed changes To provide additional point of diversion of non-geothermal water

Withdrawn, Replaced by Amendment App. 1/9/95. See my letter dated 12/29/94

### 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 |
|---|---|---|---|---|
| 63-10022 | April 20, 1988 | 0.37 cfs | Irrigation | April 1 to October 31 |
| | | | | to |
| | | | | to |
| | | | | to |

2. Total amount of water being transferred 0.37 cubic feet per second and/or 31.5 acre-feet per annum.
3. Source of water Groundwater tributary to _____
4. Point(s) of Diversion:

| Lot | ¼ | ¼ | ¼ | Sec. | Twp. | Rge. | County | Local name for diversion |
|---|---|---|---|---|---|---|---|---|
| | | NE | NW | 13 | 3N | 2E | Ada | |
| | | NE | SW | 13 | 3N | 2E | Ada | |
| | | | | | | | | |
| | | | | | | | | |

5. Lands irrigated or place of use:

| Twp. | Rge. | Sec. | NE ¼ | | | | NW ¼ | | | | SW ¼ | | | | SE ¼ | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | |
| 3N | 2E | 13 | | | | | 7 | | | | | | | | | | | | 7 |
| | | | | | | | | | | | | | | | | | | | |
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DEPARTMENT OF WATER RESOURCES

Total acres 7

## PART 1

6. General Information:

a. Description of diversion system Drilled wells, deep-well pumps, buried pipelines, sprinkler system

b. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts? _____ Yes X No. If yes, provide a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes.

c. Describe the affect on the land now irrigated if the place of use is changed pursuant to this transfer:

No change on land irrigated; one additional point of diversion

d. Remarks:

Additional point of diversion will provide non-geothermal water

## 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____.

FEB 2 3 1996

 Transfer No. _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# APPLICATION FOR TRANSFER OF WATER RIGHT

## PART 2

*(Attach one copy for each right)*

### A. DESCRIPTION OF RIGHT AS RECORDED

1. Right evidenced by:

   a. Decree No. _____ Decreed to _____

   in case of _____ vs. _____

   dated _____ in _____ county of _____

   b. License No. 63-10022 issued by the Idaho Department of Water Resources.

   c. Claim No. _____ on file with the Idaho Department of Water Resources.

   d. Transfer No. _____ which produced this right.

2. Attach a copy of last year's tax notice for the property to which the water right is appurtenant or other documents which show ownership. Label document as attachment A. Check appropriate box below:

   ☐ Tax Notice ☐ Warranty Deed ☐ Other N.S.

3. Source of water Groundwater tributary to _____

4. Date or priority April 20, 1983

5. Water is used for the following purpose:

   amount 0.37 cfs (cfs/ac-ft) for Irrigation purposes from April 1 to October 31
   amount _____ (cfs/ac-ft) for _____ purposes from _____ to _____
   amount _____ (cfs/ac-ft) for _____ purposes from _____ to _____

6. Total amount of water under right 0.37 cubic feet per second and/or 31.5 acre-feet per annum.

7. Point(s) of Diversion:

| Lot | ¼ | ¼ | ¼ | Sec. | Twp. | Rge. | County | Local name for diversion |
|---|---|---|---|---|---|---|---|---|
| | | NE | NW | 13 | 3N | 2E | Ada | |
| | | | | | | | | |
| | | | | | | | | |

8. Lands irrigated or place of use:

| Twp. | Rge. | Sec. | NE ¼ | | | | NW ¼ | | | | SW ¼ | | | | SE ¼ | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | |
| 3N | 2E | 13 | | | | | 7 | | | | | | | | | | | | 7 |
| | | | | | | | | | | | | | | | | | | | |
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Total acres 7

9. Describe any other water rights used for the same purpose as described above None

## PART 2

Transfer No. _____

10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non-use?

No If yes, describe _____

### B. DESCRIPTION OF PORTION OF RIGHT BEING TRANSFERRED

*(If the entire right is to be changed by the applicant, omit part B and C.)*

1. amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)

2. Point(s) of Diversion:

| Lot | ¼ | ¼ | ¼ | Sec. | Twp. | Rge. | County | Local name for diversion |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

3. Lands irrigated or place of use:

| Twp. | Rge. | Sec. | NE ¼ | | | | NW ¼ | | | | SW ¼ | | | | SE ¼ | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

Total acres _____

### C. DESCRIPTION OF UNCHANGED PORTION OF RIGHT *(omit if there is no change)*

1. amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)

2. Point(s) of Diversion:

| Lot | ¼ | ¼ | ¼ | Sec. | Twp. | Rge. | County | Local name for diversion |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

3. Lands irrigated or place of use:

| Twp. | Rge. | Sec. | NE ¼ | | | | NW ¼ | | | | SW ¼ | | | | SE ¼ | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | NE ¼ | NW ¼ | SW ¼ | SE ¼ | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | |

FEB 2 3 1998

Total acres _____

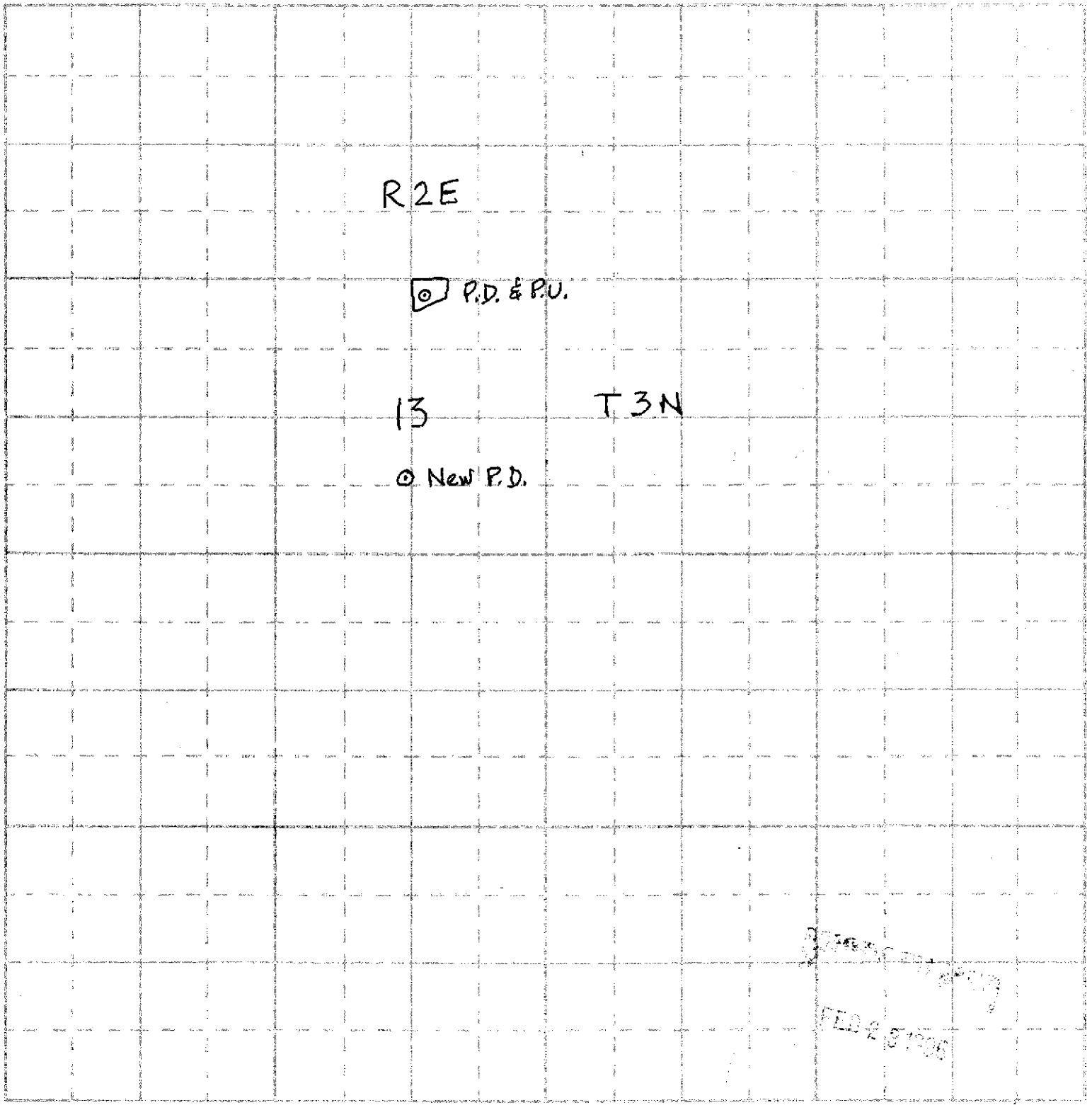
Transfer No. _____

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.**




SCALE: 2 inches equal 1 mile. Draw plan in ink.

Transfer No. _____

## PART 3

### B. CHANGES IN NATURE OF USE

| 1 | New Nature of Use | Amount (cfs/ac-ft) | Hours/days/year | Period of Use |
|---|---|---|---|---|
| | | | | _____ to _____ |
| | | | | _____ to _____ |

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

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

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.

× James R. Hall
(Signature of Applicant)

Subscribed and sworn to before me this 6th day of December, 19 94.

Elizabeth M Matlock
(Notary Public)

My commission expires 3/5/99

## FOR DEPARTMENT USE ONLY

Transfer contains _____ pages and _____ attachments

Received by SL Date 12/21/94 Protest filed by _____

Prelim. check by _____ Fee $10 _____

Receipted by SL Date 12/21/94 W018454 _____

Published in _____ Copies of protest forwarded by _____

Pub. dates _____ Hearing held by _____ Date _____

Watermaster recommendation requested on _____ Recommended for ☐ approval ☐ denial

_____ rec'd. _____ by _____

Copy of transfer sent to lien holder _____

FEB 2 3 1996

10-13-94

Attachment A

RESOLUTION 13126

BY THE COUNCIL: BAKER, FORNEY, HAUSRATH, MAPP, TERTELING AND WETHERELL

**A RESOLUTION APPROVING A MEMORANDUM OF UNDERSTANDING BY AND BETWEEN THE CITY OF BOISE CITY, THE IDAHO BOTANICAL GARDENS AND THE STATE OF IDAHO DEPARTMENT OF LANDS FOR A JOINT IRRIGATION PROJECT TO ADDRESS GEOTHERMAL BENEFICIAL USE CONCERNS; AUTHORIZING THE MAYOR AND CITY CLERK TO EXECUTE AND ATTEST SAID MEMORANDUM OF UNDERSTANDING ON BEHALF OF BOISE CITY; AND PROVIDING AN EFFECTIVE DATE.**

**NOW THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF BOISE CITY, IDAHO:**

Section 1. That the Memorandum of Understanding by and between the City of Boise City, the Idaho Botanical Gardens and the State of Idaho Department of Lands, a copy of said Memorandum of Understanding marked Exhibit "A" attached hereto and incorporated herein by reference, be, and the same is hereby, approved as to both form and content.

Section 2. That the Mayor and City Clerk be, and they hereby are, authorized to respectively execute and attest said Memorandum of Understanding for and on behalf of the City of Boise City.

Section 3. That this Resolution shall be in full force and effect immediately upon its adoption and approval.

ADOPTED by the Council of the City of Boise City, Idaho, this _____ day of _____, 1994.

APPROVED by the Mayor of the City of Boise City, this _____ day of _____, 1994.

FEB 2 3 1996

Completion of MOU in process per Neil Oldemeyer (City of Boise), telecon 1/9/95

R-557-94

**APPROVED:**

_____

**MAYOR**

**ATTEST:**

_____

**CITY CLERK**

RECEIVED
FEB 2 3 1996

# MEMORANDUM OF UNDERSTANDING

This memorandum of understanding dated _____, 1994 by and between the City of Boise City, hereinafter City, and the State of Idaho, Department of Lands, hereinafter State, acting for and on behalf of the Idaho Botanical Gardens, hereinafter IBG, is to set forth the parties agreement regarding a City/State/IBG Joint Irrigation Project.

WHEREAS, State has a permit and pending license for the diversion of water from a well generally referred to as the Old Penitentiary Well No. 1; and

WHEREAS, City has a license for the diversion of water from a well located in Boise City's Quarry View Park; and

WHEREAS, it is City and State's desire to transfer the water rights associated with the above referenced wells to an additional point of diversion generally referred to as Old Penitentiary Well No. 2 and located on City property at the Warm Springs Golf Course; and

WHEREAS, there are no water rights currently associated with Old Penitentiary Well No. 2; and

WHEREAS, it is anticipated by the parties that the granting of the additional points of diversion to Old Penitentiary Well No. 2 will lead to a Joint Irrigation Project between City, State and IBG; and

WHEREAS, such Joint Irrigation Project will involve the design, purchase, installation, testing and operation of an irrigation system leading to a cold water source for the irrigation of City, State and IBG property; and

WHEREAS, at such time as the additional points of diversion are granted and the Joint Irrigation Project is operational the water rights now served from Old Penitentiary Well No. 1 and water rights serving the Quarry View Park will be supplied from Old Penitentiary Well No. 2.

NOW, THEREFORE, in consideration of the foregoing the parties agree as follows:

1. State shall:

   a. File an Application for Transfer of Water Right 63-10241 (license pending) with the Idaho Department of Water Resources requesting an additional point of diversion of non-geothermal water, such additional point to be Old Penitentiary Well No. 2.

   b. File an Application for Amendment of Permit 63-9661 with the Idaho Department of Water Resources requesting an additional point of diversion of non-geothermal water, such additional point to be Old Penitentiary Well No. 2.

FEB 2 3 1996

c. Enter into good faith negotiations with City and IBG with the intent of assigning responsibilities and costs of a Joint Irrigation Project.

d. Agree that once the Joint Irrigation Project is operational, State will use Old Penitentiary Well No. 2 for irrigation or other non-beneficial uses as defined by the Idaho Department of Water Resources in lieu of Old Penitentiary Well No. 1 so long as an adequate supply of water is reasonably available from Old Penitentiary Well No. 2.

e. Agree that if, for any reason, the Joint Irrigation Project does not become operational within eighteen (18) months of either City, State or IBG obtaining an additional point of diversion at the Old Penitentiary Well No. 2, State shall withdraw and cancel its right to use the Old Penitentiary Well No. 2 as an additional point of diversion and shall surrender all rights and claims to such well.

2. The City of Boise shall:

a. File an Application for Transfer of Water Right 63-10022 with the Idaho Department of Water Resources requesting an additional point of diversion of non-geothermal water, such additional point to be Old Penitentiary Well No. 2.

b. File a Notice of Claim to a Water Right 63-10022 in Idaho Fifth Judicial District Civil Case 39576.

c. Enter into good faith negotiations with State and IBG with the intent of assigning responsibilities and costs of a Joint Irrigation Project.

d. Agree that once the Joint Irrigation Project is operational, City will no longer use the Quarry View Well for irrigation or other non-beneficial uses as defined by the Idaho Department of Water Resources.

3. IBG shall:

a. Assist State in filing an Application for Transfer of Water Right 63-10241 (license pending) with the Idaho Department of Water Resources requesting an additional point of diversion of non-geothermal water, such additional point to be Old Penitentiary Well No. 2.



FEB 2 3 1996

b. Assist State in filing an Application for Amendment of Permit 63-9661 with the Idaho Department of Water Resources requesting an additional point of diversion of non-geothermal water, such additional point to be Old Penitentiary Well No. 2.

c. Enter into good faith negotiations with City and State with the intent of assigning responsibilities and costs of a Joint Irrigation Project.

d. Agree that once the Joint Irrigation Project is operational, IBG will use Old Penitentiary Well No. 2 for irrigation or other non-beneficial uses as defined by the Idaho Department of Water Resources in lieu of Old Penitentiary Well No. 1 so long as an adequate supply of water is reasonably available from Old Penitentiary Well No. 2.

4. This Memorandum of Understanding shall remain in effect until such time as the applications described above are denied or until the proposed Joint Irrigation System becomes operational.

5. The rights described under this Memorandum of Understanding may not be assigned or transferred without the written consent of all parties.

Executed the day and year first above written.

| | |
|---|---|
| City of Boise | Attest |
| State of Idaho<br>Department of Lands | Attest |
| Idaho Botanical Gardens | Attest |



FEB 2 3 1996

**MEMORANDUM**

To: Norman C. Young

From: L. Glen Saxton LGS

RE: **RESPONSES TO QUESTIONS OF JOHN BEAL - GRANT AND LOAN REQUEST**

Date: January 14, 1993

You probably know more about this matter since you have recently met with representative of the city and the Botanical Gardens, howver, I will try to respond to the questions in the order asked.

Western Region is not aware of a new application for permit or a transfer which has been filed by the city of Boise or the Botanical Gardens to use an existing well on the Warm Springs Golf course. This is a little difficult to check without a legal description of the well location. If such a filing is made, is not protested and is otherwise approvable, about 6 to 8 weeks are needed before the department could take final action on an application.

The places of use described in Beal's question could be irrigated with several different water rights. It is also possible that a transfer could be filed which would change the point of diversion from the low temp geothermal well in Quarry View park to the golf course well. A transfer filed by the city or by Botanical Gardens, however, could not be change the rights of Boise Water Corp.

The well log of the well on the golf course would need to be reviewed to determine well construction. Bob Fleenor advises that the golf course well is cold water and that he is not sure why someone is not using it. I don't know about connection with the Boise River. The well logs might clarify this matter somewhat.

General comment:

I would guess that the golf course well is hydraulically connected to the Boise River. If so, mitigation of some sort to the river likely would be required before the well could be used.

It also would appear unusual for the Idaho Water Resource Board to act on the described grant and loan request unless the proper transfer(s) have been filed, reviewed and approved by the department.

MEMORANDUM

TO: File 63-10022
FROM: Gary Spackman Gary
DATE: April 2, 1992

RE: Delay in Licensing

Licensing of permit no. 63-10022 has been delayed because of a negotiated moratorium between users of low temperature geothermal water along the Boise Front. It has also been delayed another applicant, Botanical Gardens, alleges that its well is unconnected to some of the other warm water wells closer to Boise City. Bob Fleenor is the hearing officer for the Botanical Gardens matter. The Botanical Gardens' decision may affect the use that can be made of this well.

Presently, Boise City is not using the water from the well, and may not use water for an extended period of time. Boise City may intentionally abandon the use from the well, or may forfeit any water right perfected because of prior years of non-use.

I suggest that we hold this file for one more year, and determine what the status of the Botanical Gardens filing is at that time.

cc: Western Region

4/2/92

Glen YES
Please provide a written response.
NCY

# MEMORANDUM

To: Norm Young NCY

From: John Beal JB

Date: January 13, 1993

Re: Request for a Idaho Water Resource Board Grant and Loan
City of Boise and Idaho Botanical Gardens

---

The City of Boise and the Idaho Botanical Gardens have requested a grant and loan from the Water Board to connect the Botanical Gardens, Old Penitentiary, and Quarry View Park to an existing well on the Warm Springs Golf Course. I have discussed the water rights with Neal Oldemeyer from Boise Public Works.

I have several questions concerning the water rights that the Water Board may ask at the January 29 meeting. You should be prepared to respond to the following:

Has the City and Idaho Botanical Gardens filed a water right application or transfer for the new well and if the filing has been made, how long will it take to approve (assuming no protests)?

Since Quarry View and the Penitentiary grounds have been irrigated with Boise Water Corp water, can these uses be approved.

Do we know enough about the proposed well? Is this well in the cold water aquifer, the warm water aquifer, connected to the Boise River?

Active water rights that may pertain to this use and the new filing include 63-10022, 63-09661 and 63-10241. There may be others that I am not aware of.

BOTANICAL GARDENS

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 -(208) 327-7900

CECIL D. ANDRUS
GOVERNOR
R. KEITH HIGGINSON
DIRECTOR

December 8, 1989

City of Boise,
Department of Parks
Attention: Dave Turner
P.O. Box 500
Boise, ID 83701

RE: Quarry View Park Well, Permit to Appropriate Water No. 63-10022

Dear Mr. Turner:

The Department of Water Resources acknowledges the current status of non-use of the Quarry View Park low temperature geothermal well. The Department will not presently issue a license for irrigation from the well, but will hold the permit without action while exceptions to the moratorium are considered.

The Department is reluctant to issue any license for use of hot water where the heat properties of the water have not been extracted and beneficially used.

Even if the moratorium is recognized, and the City does not divert water from its Quarry View Well during the term of the agreement with the Boise Warm Springs Water District, the City of Boise probably should consider using the water for a purpose that will utilize the heat value of the water.

Respectfully,

Gary Spackman

GARY SPACKMAN, Manager
Water Right Permits Section

GS:js

cc. Western Region

FEB 23 1990

Glen

MEMORANDUM

To: Norman C. Young NCY

From: L. Glen Saxton LGS

RE: PERMIT 63-10022 - BOISE PARK SYSTEM - QUARRY VIEW PARK

Date: November 15, 1989

The well for permit 63-10022 is a low temperature geothermal well. The agreement between the City of Boise (city) and Boise Warm Springs Water District signed in August 1989 provides that the city will not divert and use water from its Quarry View well during the term of the agreement. The agreement is effective until September 30, 1992 but may be extended a year at a time.

I suggest we correspond with the city acknowledging the current stuatus of non-use of the well and advising that the department will not issue a license of water right for the use of low temperature geothermal water which does not utilize the heat in the water. We should also advise that the department will hold the permit without action for a period of up to 5 years from the last use of water from the well to allow the city to amend the use to one which utilizes the heat in the water. If an amendment is not submitted in that time period, the department will take steps to cancel the permit.

While the exceptions to the moratorium are considered.

NCY

RECEIVED
OCT 19 1989
Department of Water Resources

PUBLIC WORKS DEPARTMENT
CITY HALL · 4TH FLOOR
(208) 384-4292

CITY OF TREES — BOISE CITY, IDAHO

DIRK A. KEMPTHORNE
MAYOR

October 17, 1989

COUNCIL MEMBERS
MIKE WETHERELL, COUNCIL PRESIDENT
SARA BAKER, COUNCIL PRO-TEM
DON BRENNAN
H. BRENT COLES
GARY L. SMITH
JAY L. WEBB

Gary L. Spackman, Manager
Water Right Permits Section
Idaho Department of Water Resources
1301 North Orchard Street
Statehouse Mail
Boise, ID 83720

RE: Quarry View Park Well, Permit No. 63-10022

Dear Mr. Spackman:

I am writing in response to your letter dated July 10 regarding the status of the Quarry View Irrigation well. We are responding now because we have recently entered into a three-year agreement with Boise Warm Springs Water District which concerns the use of this well.

All production from the well was terminated in the fall of 1988 when we began negotiations with BWSWD. The pump now has been removed and the well is open for monitoring purposes. The City has ceased production from this well during this period in part because of the Department's moratorium and the City's agreement with BWSWD. The City does not plan to resume any production from this well at least for the period of the City/BWSWD Agreement.

The well is being used for monitoring purposes. Personnel from both Boise State University and IDWR have been monitoring the well for the last six months and have expressed interest in continuing to do so. The City currently is allowing such use.

However, the City does not intend to abandon or forego any of its rights to the production or use of water from this well. Nor does it relinquish its right to place waters to a beneficial use under this permit, either at this point of diversion or at some other. Please let me know if an amendment to the permit is required for the City to retain any water rights it may have.

Sincerely,

Dave Turner

Dave Turner
Geothermal Coordinator

DT/lc

cc: William Ancell
Jack Cooper
Jeffrey Fereday
Charles Mickelson

RECEIVED
FEB 23 1996

2DWT2/63
SF
CF

LAW OFFICES
GIVENS, PURSLEY, WEBB & HUNTLEY
SUITE 200, PARK PLACE
277 NO. 6TH STREET
POST OFFICE BOX 2720
BOISE, IDAHO 83701

TELEPHONE
(208) 342-6571

TELECOPIER
(208) 343-9492
(208) 342-8920

REBECCA W. ARNOLD
ELEANORE S. BAXENDALE*
CHRISTOPHER J. BEESON
JEFFREY C. FEREDAY
RAYMOND D. GIVENS
JAMES D. HANSEN
JUDITH K. HOLCOMBE
ROBERT C. HUNTLEY, JR.
KENNETH R. McCLURE
L. EDWARD MILLER
PATRICK J. MILLER
TERRY L. MYERS
STEVEN L. OLSEN
KENNETH L. PURSLEY
MICHAEL T. SPINK
CONLEY WARD
JAY L. WEBB

LISTED ALPHABETICALLY
*ALSO ADMITTED IN OREGON

RECEIVED
SEP 22 1989
OFFICE OF THE
ATTORNEY GENERAL

September 21, 1989

Peter C. Monson, Esq.
U. S. Department of Justice
Land & Natural Resources Division
Indian Resources Section
P. O. Box 44378
Washington, D.C. 20026-4378

Clive J. Strong, Esq.
Idaho Attorney General
Statehouse, Room 210
Boise, ID 83720

Michael R. Jones, Esq.
Idaho Department of Public Works
502 North 4th Street
Boise, ID 83720

J. L. Terteling
The Terteling Company, Inc.
1755 Westgate Drive
P. O. Box 4127
Boise, ID 83704

Mr. Chris Davidson
Idaho Botanical Garden
E. Old Penitentiary Road
Boise, ID 83712

RE: VA/GSA geothermal

Gentlemen:

As promised, I am enclosing a copy of the Agreement between City of Boise and Boise Warm Springs Water District.

Very truly yours,

jeff fereday

Jeffrey C. Fereday

FEB 3 1996

JCF/jb

# AGREEMENT

THIS AGREEMENT, made and entered into in duplicate originals as of this 1st day of August, 1989, by and between the City of Boise, Idaho, an instrumentality of the State of Idaho (the "City") and Boise Warm Springs Water District, a nonprofit corporation organized and existing under the laws of the State of Idaho ("BWSWD").

## Recitals

1. The City has constructed at its expense an intertie between the low temperature geothermal water delivery systems of the parties pursuant to a letter agreement entered between the City and BWSWD on December 13, 1988;

2. BWSWD has approved the design and installation of the intertie pursuant to the letter agreement; and

3. According to its terms, the letter agreement terminates upon entry of this Agreement, which the parties desire to enter in order to establish the basis for certain cooperative and individual efforts regarding their respective low temperature geothermal pumping and delivery systems.

## Agreement

NOW, THEREFORE, In consideration of the mutual covenants and agreements herein contained, and other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Definitions. In this Agreement, the following terms shall have the meanings specified:

a. "aquifer" means the Boise Front Low Temperature Geothermal Aquifer, as described by the Idaho Department of Water Resource. The use of this definition and the term "aquifer" herein is not an admission that this definition is appropriate or geologically correct; nor does it foreclose any assertion by either party in the future that the low temperature geothermal water supplies of the City and BWSWD are not connected or not related to a common source.

b. "backup water" is water supplied by the City to BWSWD through the intertie when BWSWD is unable to deliver to full production for any reason, other than a shortfall, such as equipment or power failure.

c. "bleeder valve" or "crossover valve" shall mean any valve used in the BWSWD or City systems, or in any place of use supplied by either BWSWD or the City, in such a way as to allow supply water to be discharged without first being used for heating;

c. "BWSWD's customers" or "BWSWD customers" means those customers listed on Exhibit A attached hereto; it does not include any additional customers BWSWD might add, and does not include SAL or any other interruptible customer receiving water pursuant to paragraph 5.

FEB 2 3 1996

e. "conserved water" is that water whose production from the aquifer is avoided by either party as a result of increases in system use efficiency by a party's customers or as a result of increases in the efficiency of the party's system.

f. "Department" or "IDWR" means the Idaho Department of Water Resources.

g. "firm customer" is a customer of either party which is entitled to a full supply, or in times of shortage to a proportionate share of the available supply.

h. "interruptible customer" is one whose contract for water allows it to be cut off from full supply upon short notice in order to supply firm customers.

i. "intertie" is the connection between the City's and BWSWD's geothermal systems.

j. "letter agreement" is that agreement between the parties dated December 13, 1988.

k. "SAL" is the State Agricultural Laboratory. BWSWD has a contract to provide geothermal water on an interruptible basis to the Idaho Department of Health and Welfare ("H&W"), which in turn supplies this water to SAL. For purposes of this Agreement, SAL and H&W both are considered BWSWD's customer, and references to SAL in this Agreement shall mean and include H&W.

l. "shortfall" is that condition existing when the water level in BWSWD's wells is insufficient to allow BWSWD to produce, with current pump settings and pump systems, enough water to supply the BWSWD customers described in section 1.c, above, then needing such supply.

m. "shortfall water" is water supplied by the City through the intertie to BWSWD in order to cover a shortfall pursuant to paragraph 3 of this Agreement.

n. "system" means the low temperature geothermal water pumping and supply facilities owned by each party or used by a party to deliver or make use of water.

o. "water" means low temperature geothermal water diverted by either party from wells considered by the Department to be producing from the aquifer.

p. "year" shall be the year from October 1 to September 30.

2. Intertie. Pursuant to the Letter Agreement between the City and BWSWD dated December 13, 1988, the City has constructed, at its expense, an intertie to connect the parties' water delivery systems. The intertie consists of supply piping extending from the City's system to the four-inch valve near BWSWD's ten-inch delivery pipe. BWSWD has approved the design and installation of the intertie.

a. The intertie shall remain the property of the City, which shall have sole authority to operate it. The City shall operate and maintain the intertie in such a manner as to fulfill the purposes of this Agreement.



FEB 2 8 1996

b. During the term of this Agreement, the City shall allow authorized representatives of BWSWD to have access to the intertie at all reasonable times for purposes incident to fulfilling BWSWD's rights under this Agreement.

c. The City may lock or otherwise render the intertie inoperable during any period when this Agreement is not in force or the City otherwise has no obligation to supply water to BWSWD through the facility.

3. Supply of shortfall water. During any shortfall and upon request from BWSWD, the City shall supply to BWSWD's system through the intertie that amount of water which, when added to that which BWSWD remains capable of producing, provides that amount of water reasonably necessary to serve BWSWD's customers as defined above.

4. Supply of back-up water. If BWSWD is unable to deliver water to BWSWD's customers for any reason (such as equipment or power failure) other than a shortfall, or if BWSWD needs additional water to supply new users not within the groups defined above as "BWSWD customers," the City shall supply backup water to BWSWD for distribution to such customers or users upon request from BWSWD.

5. Supply to BWSWD's interruptible customers. The parties agree that SAL should become a firm customer of BWSWD during the term of this Agreement. Accordingly, BWSWD shall proceed diligently in good faith to renegotiate its contract with SAL to provide for a firm supply during this term at a higher price than that SAL pays to BWSWD as an interruptible customer. Any increase in price BWSWD might negotiate with SAL for a firm supply still should be attractive to SAL, taking into consideration both the price it had been paying for interruptible supply and the price of natural gas it would have to purchase in the event of interruptions. All amounts SAL takes in excess of 6 million gallons per year ("mg/yr") shall be deemed to have been supplied by the City. At BWSWD's request, and provided the City has sufficient water supply available, the City shall supply any other interruptible BWSWD customer according to mutually agreeable terms.

6. Supply of water in event of litigation. If within one year after the termination of this Agreement BWSWD institutes litigation against the City concerning any injury alleged to have been caused BWSWD due to the City's production from the aquifer, during the pendency of the litigation, the City shall remain obligated to supply BWSWD as specified in paragraph 3, except that the price for such water shall be as described in paragraph 8. Such obligation shall cease upon the entry of a final and appealable order from the court or agency before whom the litigation was brought. The supply of water, or the cessation of the City's obligation to supply water, under this Agreement shall not constitute admissions of fact by either party and shall have no effect on any judicial or administrative order obligating the City to supply water, and neither party shall assert waiver, estoppel or admission of fact due to such supply or cessation.



FEB 9 1996

7. General supply conditions and requirements. The following requirements and conditions on the parties' respective obligations shall apply:

a. The water temperature, measured at the point the intertie connects to BWSWD's system, shall not vary significantly from the temperature of water being supplied to the City's customers at the time of delivery.

b. The City shall not be obligated to supply BWSWD more than a combined total of 300 mg/yr pursuant to paragraphs 3 and 4 of this Agreement.

c. The City shall not be obligated to supply BWSWD or BWSWD customers during any period when the City is unable to deliver such supply due to equipment or power failure, lack of water availability, act of God or similar circumstance, and shall not be obligated to interrupt any City customer in order to supply BWSWD or any of BWSWD's customers.

d. In order for BWSWD to receive shortfall or backup water under this Agreement at the rates specified in paragraph 8, at the end of each month BWSWD shall substantiate by written report the circumstances giving rise to the need for the supply of water delivered through the intertie to BWSWD's customers during that month. If BWSWD is unable to substantiate each delivery on the basis of actual need as specified in paragraphs 3 and/or 4, BWSWD shall pay for such volume at the City's then-prevailing retail rate.

e. The parties shall mutually agree on written guidelines specifying, at a minimum, how it will be determined that a shortfall or backup situation exists, the requirements of the written notice announcing each of these situations, how each of these situations will be deemed to have ceased, how the intertie will be operated, and how water will be delivered and measured under this Agreement.

f. BWSWD shall subject each meter which measures flows and/or volumes of water in BWSWD's system and which is necessary to determine amounts of revenue due the City under this Agreement to a meter test at the City's meter testing station in the City's Pumphouse No. 2, and shall pay the City for the cost of conducting the tests. This provision shall not be construed to require testing of any meter in this manner where such testing would not be practical and a more appropriate method, acceptable to the City, is used to conduct such test. BWSWD may test any other flow meter at the City's meter test station and shall pay the City for conducting such tests. Notwithstanding this provision, BWSWD's primary delivery meter (currently a Sparling meter) shall be tested in the following manner: BWSWD shall install an appropriate meter downstream from the primary delivery meter access ports to allow measurements to be taken of the discharge flow into BWSWD's system; periodic measurements shall be made by BWSWD and a City representative or by IDWR.

8. Prices for water supplied to BWSWD. BWSWD shall pay the City for all water supplied



FEB 23 1996

according to the following schedule:

a. For all water supplied pursuant to paragraph 3, BWSWD shall pay the City $0.12 per thousand gallons.

b. For all water supplied to BWSWD pursuant to either paragraph 4 or paragraph 5, BWSWD shall pay the City at a rate which is 15 percent less than the City's then-prevailing retail rate for the appropriate type of use.

c. For all water supplied pursuant to paragraph 6, BWSWD shall pay the City's full retail rate for the appropriate type of use, as such rate may be adjusted from time to time.

d. The City shall bill BWSWD on a monthly basis for all water supplied pursuant to this Agreement, and BWSWD shall pay each bill within thirty days of its receipt.

9. Supply price remedy if a party prevails in litigation. The parties have entered this Agreement in part to avoid judicial or administrative litigation in which they maintain adverse positions concerning their respective rights in the aquifer and the question of injury of each party's rights by the other. However, if, within five years after the termination of this Agreement, litigation arises between the parties concerning these subjects, the following terms shall apply:

a. If a final, non-appealable order resulting from such litigation determines that the City's past pumping has not injured BWSWD's rights, the City shall be entitled to recover from BWSWD, in addition to any other relief granted by such order, additional payment (excluding interest) for all amounts of water supplied pursuant to paragraphs 3 and 4 of this Agreement sufficient to bring the total amount paid up to an amount that would have been paid had a rate equal to the City's retail rate or rates prevailed during the periods when such water was supplied.

b. If a final, non-appealable order resulting from such litigation determines that the City's past pumping has injured BWSWD's rights, BWSWD shall be entitled to recover from the City, in addition to any other relief granted by such order, a reimbursement of payments (excluding interest) BWSWD made for water supplied pursuant to paragraphs 3 and 6 of this Agreement.

10. Term of Agreement. This Agreement shall have an initial term expiring at noon on September 30, 1992. Such initial term shall be extended automatically for successive one-year terms unless:

a. a party exercises its right to terminate pursuant to paragraph 12;

b. at least 60 days prior to the end of any term, a party provides written notice to the other that it wishes the Agreement to terminate at the end of such term; or

c. the parties negotiate some other term or term extension.

11. Price renegotiation. After September 30, 1992, either party may require, by providing written notice to the other, that the rates listed in paragraph 8.a be renegotiated in order to establish a new rate. Any such new rate upon which the parties agree after good faith negotiations shall be



FEB 2 8 1996

effective as of a date which is 60 days after the date the written request for the rate renegotiation is transmitted and shall remain in effect for a minimum of 1 year before any additional renegotiation can take place pursuant to this paragraph.

12. Termination. The occurrence of any of the following events shall entitle either party to terminate the Agreement :

a. The City supplies more than 50 million gallons of water to BWSWD during any year pursuant to paragraph 3 of this Agreement.

b. The City is unable to serve both its customers and BWSWD under this Agreement or the City declines to interrupt a City customer in order to supply BWSWD or any of BWSWD's customers pursuant to paragraph 7(c).

c. Either party's expert determines and specifies in writing that there is no feasible means, including the use of conservation and injection, to supply the water needs of both parties from the aquifer on a sustained yield basis.

A party may invoke this termination provision only after first providing the other party with 60 days' written notice of its intent to terminate. Termination shall not become final until the parties first have negotiated in good faith on at least one occasion in an effort to avoid termination, and this Agreement shall remain in effect throughout such negotiations.

13. Dismissal of district court actions; waiver of certain actions or defenses. The parties acknowledge that the purpose of this Agreement is to acquire information necessary to determine whether a long term cooperative relationship is possible between the parties. However, by entering this Agreement, neither party is asserting, confirming or denying any fact respecting the nature of the aquifer, either party's rights, either party's pumping, either party's use or conservation of water, or the effects any of these activities may have on the aquifer or on the parties or their rights. Neither party waives the right to raise any claim or defense except as specifically stated in paragraph 13.d, below. BWSWD and the City agree to execute all necessary documentation to protect each party's legal rights or remedies during the term of the Agreement. Within thirty days after the date of this Agreement, the parties shall take the following actions:

a. The City shall file formal entries of appearance in Ada County Case No. 91336, Boise Warm Springs Water District v. Idaho Department of Water Resources, et al.; and Twin County Case No. 39576, In Re: the General Adjudication of Rights to the Use of Water from the Snake River Basin Water System (collectively, the "lawsuits").

b. The City and BWSWD shall file identical motions in the lawsuits requesting the respective courts to enter orders dismissing each lawsuit without prejudice and entering an order declaring that the matters raised in the lawsuits are not yet ripe for judicial determination because of the proceeding concerning the same issues which is pending before the Idaho Department of Water



FEB 2 3 1996

Resources, designated "In the Matter of the Boise Front Low Temperature Geothermal Resource Ground Water Management Area" (the "administrative action").

c. BWSWD shall withdraw the tort claim it filed with the City. If BWSWD files a tort claim against the City in the future pursuant to the terms of paragraph 13 or otherwise, BWSWD shall be entitled to seek any relief appropriate to such a claim, but any monetary damages sought shall be measured from the date of this Agreement, and BWSWD hereby waives any and all claims for monetary damages occurring prior to such date, whether such claims arise in tort or otherwise.

d. If, during the term of this Agreement (or any extension thereof) or within five years after such term or extended term, either of the parties files a lawsuit against the other in district court (including any appeal arising from the administrative action) which asserts any injury of rights in the aquifer and seeks the curtailment or cessation of pumping by the other ("future litigation"), the following conditions shall apply to the parties' pleadings and legal positions in such future litigation:

i. Neither party shall raise, and each party hereby waives and is estopped from raising, any defense or claim that the party seeking curtailment or cessation at the district court effectively elected remedies in the administrative action and/or failed to toll any applicable statute of limitations concerning the question of cessation or curtailment during the pendency of the administrative action.

ii. The action of either party pursuant to this Agreement -- such as the supply of water, the use of conserved water or the addition of new customers -- shall not give rise to any claim or defense, on behalf of either party, of estoppel, laches or waiver.

iii. These conditions shall not prevent either party from asserting, in the administrative action or in any other forum or proceeding (including any future litigation), that the Department lacks authority to order cessation or curtailment in any administrative action.

iv. The parties' implementation of any efficiency and/or conservation measures during the pendency of this Agreement shall not constitute an admission of fact by either party concerning the efficiency of its system or the cost-effectiveness of such measures.

14. Refrain from litigating. While this Agreement is in force, neither party shall commence, pursue or encourage litigation against the other or actions outside of the administrative action, concerning the aquifer or either party's production of water from it. Before either party shall actively pursue a position in the administration action which is adverse to the other, it shall inform the other party of such position and attempt in good faith to negotiate its resolution. In the event of the expiration, termination or breach of this Agreement, either party may, subject to the waivers and conditions of paragraph 13, bring suit in any forum of competent jurisdiction in pursuit of any of the following forms of relief:



FEB 2 3 1996

a. Relief from or modifications to IDWR's June 10, 1988 Moratorium Order and/or any succeeding orders.

b. A damages recovery and/or injunction as relief for injury arising out of the manner or extent of extraction and/or use of waters from the aquifer by any party to this Agreement or by third parties.

c. Other relief consistent with this Agreement which either party deems appropriate.

15. Pleadings to IDWR. Within ninety days after the date of this Agreement, the parties each shall file with IDWR a pleading which reflects the Agreement and which seeks to amend the IDWR's June 10, 1988, Moratorium Order to make it consistent with the Agreement and to fulfill additional goals concerning the low temperature geothermal resource that are of common interest. The parties shall exchange drafts of these pleadings before they are filed, and if requested by either party, shall negotiate as to their contents.

16. Access to data. The parties shall allow each other full access to all information available to them concerning their low temperature geothermal water systems, customers, system efficiencies, disposal of wastewater, place-of-use heating practices, plans for expansion of water extraction or use, and related subjects. The commitment to share information shall be ongoing during the term of this Agreement and any extension thereof.

17. Efficiency and conservation. The parties acknowledge that it is important to this Agreement that both parties study and analyze their respective water systems with the goal of reducing each party's per customer production from the aquifer. To accomplish this goal, both parties have agreed to proceed in good faith to study, analyze, and take certain specific actions to increase the efficiency of their respective systems.

The study and analysis undertaken by both parties will have as one of its goals the generation of cost effective recommendations, where "cost effective" means having a calculated principal payback period, based on natural gas prices, of ten years or less where: a) the price of natural gas is Intermountain Gas Company's applicable rate schedule, depending on the type of customer; b) the low temperature geothermal water in the parties' systems is assumed to be 100 percent efficient and natural gas is presumed to be 75 percent efficient; and c) each 100 gallons of water is presumed to contain 0.250 usable therms, when supply water temperature in the main supply system during the heating season is at least 155 degrees Fahrenheit. For purposes of this paragraph, each decrease of 3 degrees Fahrenheit in the temperature of the water below 155 degrees Fahrenheit shall proportionally lower the calculated usable therms by 6.7 percent.

a. BWSWD conservation plan. BWSWD agrees to conduct a study which will evaluate its water system. The study will evaluate each unit and BWSWD's distribution system.



FEB 2 3 1996

i. Unit study questionnaire. BWSWD will prepare a questionnaire which will be mailed to every patron within 90 days after the date of this Agreement. The questionnaire will seek information regarding the following areas:

A. estimation of the total square footage of heated area;

B. estimation of the length and type of service pipe;

C. description of the type of heat exchanger, i.e., cast iron radiator, thin tube, baseboard coil with fan, radiant heat device, etc.;

D. the existence or nonexistence of a thermostatically controlled valve;

E. the location and type of discharge from the premises to which water is supplied, i.e., sewer, canal, drainfield;

F. whether any bleeder valves exist in the system and the location and type of bleeder valves;

G. the type of structure heated and insulation value of the structure;

H. the size of the orifice serving the customer; and

I. the types of use, i.e., domestic, heat, etc.

ii. Site inspections. BWSWD will conduct site inspections of its customers' heated buildings, premises, facilities or structures ("units") beginning in December 1989. BWSWD will in good faith attempt to accomplish the unit inspections on or before August 30, 1990. There are approximately 265 units to inspect. BWSWD will attempt to inspect each unit. The inspection will be conducted by qualified individuals or entities hired by BWSWD. These inspections will, at a minimum:

A. estimate or confirm total square footage of heated area;

B. measure the length of service pipe and obtain available data on the insulation type of service pipe;

C. measure the inlet temperature if possible;

D. measure the outlet temperature if possible;

E. determine whether the orifice is thermostatically controlled;

F. determine the size of the orifice;

G. determine the type of use, i.e., domestic, heat, etc.

H. document the type of heat exchanger;

I. determine by questions or personal observations the type of structure and insulation value associated with the structure. This inspection will include but is not limited to the following: (1) stick construction, cinder block, etc.; (2) insulation in walls or ceilings; (3) type of windows, i.e., single, double or triple pane; (4) estimated R value ratings for walls and ceilings;



FEB 2 8 1990

J. determine the existence, location and operation of any bleeder valves (such valves being defined in section 1.c, above; and

K. document the location and type of discharge from the system, i.e. sewer, canal, or other.

iii. Distribution system study. BWSWD will prepare a map of BWSWD's system. This map will catalog the pipe types, sizes, and their respective insulation values.

iv. System efficiency analysis. BWSWD will utilize a registered engineer to perform a system analysis by analyzing the data assembled from the above studies.

v. Unit efficiency analysis. BWSWD will proceed in good faith to conduct a unit efficiency analysis. The analysis shall:

A. determine unit heat load or demand;

B. evaluate the potential for demand decrease from heat load reduction. This will evaluate what changes can be made in each unit to decrease water demand;

C. evaluate the benefits and costs for each proposed change;

D. evaluate service pipe heat loss and possible savings and costs for conversion;

E. evaluate recycling alternatives and costs; and

F. include recommendations for improving unit efficiency.

vi. Distribution system efficiency analysis. This analysis from the study shall:

A. evaluate potential demand decrease from installation, upgrading or pipe conversion in distribution system;

B. determine alternatives and costs for efficient collection and recycling within specific service blocks or areas; and

C. include recommendations for improving system efficiency.

vii. Measures to implement at a minimum. BWSWD, in conjunction with the above study and analysis of their water system, shall, at a minimum, implement the following items:

A. BWSWD shall evaluate its current pricing structures and shall devise and implement those new structures which encourage water conservation and efficiency;

B. BWSWD shall evaluate the use of financing packages, including but not limited to homeowners' low interest loans for energy conservation, and shall use best efforts to implement those packages which are available to BWSWD and/or its customers.

C. BWSWD shall inspect on or before March 1, 1990, and make a record of the water supply orifice at each BWSWD customer's supply site, enforce reductions in size for each orifice that fails to comply with current BWSWD rules, and evaluate whether changes in the rules regulating orifice size would promote or result in water or energy savings;



FEB 2 3 1996

D. BWSWD shall replace on or before September 30, 1992 all uninsulated transmission pipelines and pipeline segments within the BWSWD system with insulated pipelines or pipeline segments. This requirement shall not require BWSWD to replace customer service lines, but BWSWD shall: (1) obtain and keep in stock approved insulated pipe for use in BWSWD customer service lines, and shall make it available to such customers at a price that is no greater than BWSWD's cost for such pipe; and (2) adopt regulations requiring each BWSWD customer to install insulated service lines whenever such lines are exposed for repair, construction or other purposes;

E. On or before December 1, 1989, BWSWD shall take such actions as are necessary to eliminate all bleeder valves in its customers' places of use which are not thermostatically controlled; and

F. BWSWD shall, on or before September 30, 1991, install, or cause to be installed, a thermostatically controlled orifice valve into the space heating systems of each of its customers. The valves shall function as to allow water flow only when necessary to supply actual space heating demand in the building. The thermostat shall be located so as to monitor the actual temperature of the building's heated space.

G. BWSWD shall take such further measures to conserve water or to increase efficiency which are recommended in its unit and distribution efficiency analyses and which are "cost-effective" as defined above.

b. City's conservation plan.

i. The City shall maintain and continue to operate its injection system at the City's production wells and modified production pump #2 so as to eliminate waste in maintaining acceptable pump manifold pressures, and shall install, during the 1989-1990 heating season, the necessary piping and valves at the City's No. 4 production well as to allow water from the No. 4 pump that is not demanded by the City's system to be recirculated within the well casing.

ii. The City shall refrain from any pumping from its low temperature geothermal well in Quarry View Park during the term of this Agreement.

iii. City has installed temperature control valves on the cross-over valves that are being used to maintain satisfactory mainline water temperatures. The City shall evaluate the performance of the cross-over valves used within the delivery system. The evaluation shall include:

A. The feasibility of eliminating the use of some or all of the cross-over valves.

B. Ways to reduce the amount of water passed through cross-over valves.

C. Changing price rate and/or price structure for customers at or near the ends of the pipe line as to conserve water.



FEB 2 8 1996

iv. The City shall:

A. measure the volume of all the individual uses of the water.

B. advise customers as to proper mechanical installation.

C. test its customers' flow meters to ensure that actual consumption is measured.

v. The City shall evaluate the current pricing structure and study possible alternative pricing structures that may better promote conservation.

vi. The City shall analyze each customer's yearly consumption compared to square feet of the building and identify inefficient customers. In determining a customer's efficiency, the City shall consider, at a minimum, the following items: the customer's actual water consumption for the month in question, heating degree days for the month, the square footage of the customer's heated area, the customer's previous consumption records, and a comparison of consumption by similar customers. If it appears from the analysis that a customer is using the resource inefficiently, the City shall:

A. notify the customer in writing of the inefficiency; and

B. recommend that the customer hire a qualified heating, ventilation and air conditioning expert or firm to improve the system's efficiency.

C. The City shall investigate, and implement where appropriate, any further measures that would induce an inefficient customer to conserve water or to render his system more efficient through the adoption of cost-effective improvements or techniques.

vii. The City shall conduct a study which will evaluate the efficiency of its system. As a part of this study, the City will prepare a map of the City's system which will catalog valving, pipe sizes and types, and their respective insulation values. The City shall undertake those improvements to its system which will increase efficiency or will conserve water and which are cost-effective.

c. General provisions -- conservation.

i. Each party shall be entitled to tour the other's system and to obtain copies of all information it has which is pertinent to conservation and efficiency of water use.

ii. The Conservation Plans shall not be interpreted so as to require either party to: (A) implement any such measure which, despite the "study and analysis" findings, are economically impractical or technically infeasible; (B) implement within the time specified those recommendations which reasonably require more time, provided that the party continues in good faith to pursue the implementation of such measures as they become feasible or within a more appropriate time frame; or (C) implement those recommendations that the party would be legally prohibited from implementing.



FEB 8 1996

18. Conserved water.

a. As soon as practical under the circumstances, each party's energy conservation expert shall produce and provide to the other party for comment a written estimate of the quantity of water conserved by the implementation of each conservation measure undertaken by such party pursuant to this Agreement.

b. During the term of this Agreement, that party who conserves water shall have the right to such conserved water, subject to the terms of this Agreement.

c. By entering into this provision regarding conserved water, the parties do not waive, and are not estopped from raising, any claim or defense except as specifically stated in paragraph 13.

19. Water rights issues. The parties recognize that the City's supplying water to BWSWD customers may raise issues concerning place of use or other matters which may need to be resolved by means of appropriate documentation with IDWR. The parties shall cooperate in and support any such documentation or other filing with the IDWR that may be necessary to address these issues. The parties shall follow the same rule with respect to any filing in the Snake River Basin Adjudication.

20. Discharges to Boise City sewer. The parties acknowledge that there is an unresolved issue concerning the use of the Boise City sewer system by certain patrons or customers of BWSWD. This Agreement does not address or attempt to resolve this issue.

21. Future capital investment. The parties recognize that each may need additional or improved low temperature geothermal delivery or collection facilities, and each party agrees to develop a reasonable method to evaluate need, financing and construction of such facilities. The parties agree to negotiate in good faith the equitable distribution of costs on systems that are utilized by both parties.

22. Supply of water by City. During the term of this Agreement, the City shall limit its deliveries and/or utilization of water for heating purposes to a maximum of 150 mg/yr of water (in addition to any water supplied to BWSWD pursuant to this Agreement), which amount has been calculated in light of the City's current requirements in an average heating year in Boise, Idaho of 5809 heating degree days. However, in colder-than-normal years, the City shall be entitled to deliver or utilize more water than this in proportion to the number of heating degree days exceeding 5809, up to a total of an additional 10.5 percent. Nothing in this Agreement shall limit the City's right to determine how to use or with whom to contract for the volume of water described in this paragraph. The conditions of this paragraph shall not apply to the City's supply, delivery or contracting concerning water in the City's water collection system, which consists of those pipes and valves in the City's system which transport spent water to the City's water disposal point.

23. Further studies and use of experts. The parties shall cooperate in designing, funding (or



FEB 8 1996

securing funding for), and carrying out those studies the parties deem necessary to formulate additional resource-conserving programs that would be mutually beneficial to the parties. At a minimum, the parties shall jointly conduct, and equally share the costs of, a study program which will determine the feasibility of a spent water injection system for the parties' mutual benefit. During the term of this Agreement, representatives from both parties shall meet on a regular basis to discuss coordination of operations, further studies and other subjects of mutual interest.

24. Binding effect. The terms of this Agreement shall bind the parties, their successors, agents and assigns.

CITY OF BOISE

Date: August 4, 1989

Dirk Kempthorne, Mayor

ATTEST: Annette P. Mooney
Annette Mooney, City Clerk

BOISE WARM SPRINGS WATER DISTRICT

Date: 21 JULY 1989

Terence O'Rouark
Terence O'Rouark, Chairman

Date: 21 July 1989

Robert H. Griffiths
Robert H. Griffiths, Secretary



FEB 2 3 1996

STATE OF IDAHO )
) ss.
County of Ada )

On this 21 day of July, 1989, before me, the undersigned, a Notary Public in and for said State, personally appeared Terence O'Rouark, known or identified to me to be the Chairman of Boise Warms Springs Water District, the nonprofit corporation that executed the instrument or the person who executed the instrument on behalf of said nonprofit corporation, and acknowledged to me that such nonprofit corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

ROBERT H. GRIFFITHS NOTARY PUBLIC STATE OF IDAHO

Robert H. Griffiths
Notary Public for Idaho
Residing at Boise, Idaho
My commission expires: 1992

STATE OF IDAHO )
) ss.
County of Ada )

On this 20th day of July, 1989, before me, the undersigned, a Notary Public in and for said State, personally appeared Robert H. Griffiths, known or identified to me to be the Secretary of Boise Warms Springs Water District, the nonprofit corporation that executed the instrument or the person who executed the instrument on behalf of said nonprofit corporation, and acknowledged to me that such nonprofit corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

PAULA JOYCE NOTARY PUBLIC STATE OF IDAHO

Paula Joyce
Notary Public for Idaho
Residing at Emmett
My commission expires: 4-26-95



FEB 2 8 '95

PAGE 1 ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST. DATE 04/30/89

| SLSMN CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S C | -INT. RATE- MTHLY | ANN. |
|---|---|---|---|---|---|---|---|---|---|
| 0020HD | CHILDRENS FAMILY CENTER OF IDAHO | 101 WARM SPRINGS AVE BOISE ID | 83702 | 101 WARM SPRINGS AVE | 01 014 | | | | |
| 0030HD | MOTT, R A | 103 WARM SPRINGS AVE BOISE ID | 83702 | 103 WARM SPRINGS AVE | 01 732 | | | | |
| 0070H | SKOV, CAROLLE A | 131 WARM SPRINGS AVE BOISE ID | 83702 | 133 WARM SPRINGS AVE | 00 018 | | | | |
| 0071H | SKOV, CAROLLE A | 131 WARM SPRINGS AVE BOISE ID | 83702 | 131 WARM SPRINGS AVE | 00 018 | | | | |
| 0090H | WARM SPRINGS DEVELOPMENT CO C/O DON REED | 4935 BITTERBRUSH DR BOISE ID | 83703 | 141 WARM SPRINGS AVE | 00 PET | | | | |
| 0110HD | GIFFORD, H EDDY | 6107 ROBERTSON DRIVE BOISE ID | 83709 | 215 WARM SPRINGS AVE | 01 316 | | | | |
| 0120H | REMPRO INVESTMENTS | 3602 HILLCREST DRIVE BOISE ID | 83705 | 306 WARM SPRINGS AVE | 00 316 | | | | |
| 0130HD | SIMISON BERBERICH & DOWNS | 1810 W STATE ST SUITE 226 BOISE ID | 83702 | 310 WARM SPRINGS AVE | 01 316 | | | | |
| 0140HD | GOSSI, LORETTA L DANIEL L GOSSI | 9051 WALLOWA COURT BOISE ID | 83709 | 314 WARM SPRINGS AVE | 03 532 | | | | |
| 0141H | BOISE PUBLIC SCHOOLS | 1207 FORT ST BOISE ID | 83702 | 415 WARM SPRINGS AVE | 00 018 | | | | |
| 0142H | BOISE PUBLIC SCHOOLS | 1207 FORT ST BOISE ID | 83702 | 415 WARM SPRINGS AVE | 00 018 | | | | |
| 0150HD | CAMPBELL, ALLEN | 511 WARM SPRINGS AVE BOISE ID | 83712 | 511 WARM SPRINGS AVE | 01 316 | | | | |
| 0160HD | LYSHAUG, ELIZABETH A C/O ELIZABETH A LYSHAUG | 7910 FAIRWAY DRIVE WILSONVILLE OR | 97070 | 512-518 WARM SPRINGS AVE | 04 014 | | | | |
| 0170HD | JOHNSON, ANDREW E | ROUTE 1 STAR ID | 83669 | 520 WARM SPRINGS AVE | 01 018 | | | | |
| 0180HD | HAAG, CHARLES J | 525 WARM SPRINGS BOISE ID | 83712 | 525 WARM SPRINGS | 01 316 | | | | |
| 0190HD | ALICE, ALICE O BAYARD O GREGORY | 532 WARM SPRINGS AVE BOISE ID | 83712 | 530-532 WARM SPRINGS AVE | 02 316 | | | | |
| 0200HD | COSHO, LOUIS H | 531 WARM SPRINGS AVE BOISE ID | 83712 | 531 WARM SPRINGS AVE | 01 316 | | | | |
| 0210HD | JEFFRIES, JOSEPH A | 605 WARM SPRINGS AVE BOISE ID | 83712 | 605 WARM SPRINGS AVE | 01 316 | | | | |

RECEIVED
MAY 11 1989
Givens, McDevitt, Pursley, Webb & Buser
JCA

| SLSAN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S - INT. C | RATE- MTHLY ANN. |
|---|---|---|---|---|---|---|---|---|---|
| | 0220HD | HAMERSLEY, ROBERT L | 615 WARM SPRINGS AVE BOISE ID | 83712 | 615 WARM SPRINGS AVE | | 01 732 | | |
| | 0221HD | PROTIGAL, STANLEY N | 635 WARM SPRINGS AVE BOISE ID | 83712 | 635 WARM SPRINGS AVE | | 01 532 | | |
| | 0230HD | MILLER, NICHOLAS G | 920 WARM SPRINGS AVE BOISE ID | 83712 | 709 WARM SPRINGS AVE | | 01 532 | | |
| | 0240HD | SHIEPE, REGINA | 715 WARM SPRINGS AVE BOISE ID | 83712 | 715 WARM SPRINGS AVE | | 01 532 | | |
| | 0250HD | M G M PROPERTIES C/O GEORGE MENDIOLA | 8030 MCMULLEN ST BOISE ID | 83709 | 729-731 WARM SPRINGS AVE | | 02 018 | | |
| | 0251HD | M G M PROPERTIES C/O GEORGE MENDIOLA | 8030 MCMULLEN ST BOISE ID | 83709 | 733-735 WARM SPRINGS AVE | | 02 018 | | |
| | 0252M | M G M PROPERTIES C/O GEORGE MENDIOLA | 8030 MCMULLEN ST BOISE ID | 83709 | 745 WARM SPRINGS AVE | | 00 MET | | |
| | 0254M | WARM SPRGS CENTER | 740 WARM SPRINGS AVE BOISE ID | 83712 | 740 WARM SPRINGS AVE | | 00 MET | | |
| | 0257 D | MESO, LORRAINE | 807 WARM SPRINGS AVE BOISE ID | 83712 | 807 WARM SPRINGS AVE | | 01 | | |
| | 0260HD | BALLARD, MARJORIE | 2100 N CURTIS ROAD BOISE ID | 83706 | 809 WARM SPRINGS AVE | | 04 732 | | |
| | 0270HD | ISON, GAIL | 815 WARM SPRINGS AVE BOISE ID | 83712 | 815 WARM SPRINGS AVE | | 01 316 | | |
| | 0280HD | BURPEE, DAVID W CAROLYN K BURPEE | 825 WARM SPRINGS AVE BOISE ID | 83712 | 825 WARM SPRINGS AVE | | 01 316 | | |
| | 0290HD | SKILLERN, WILLIAM G | 829 WARM SPRINGS AVE BOISE ID | 83712 | 829 WARM SPRINGS AVE | | 01 014 | | |
| | 0300HD | HARTHORN, ROGER | 836 WARM SPRINGS AVE BOISE ID | 83712 | 836 WARM SPRINGS AVE | | 01 018 | | |
| | 0310HD | REDFORD, HUGH | 1515 N 16TH ST BOISE ID | 83702 | 838 WARM SPRINGS AVE | | 01 316 | | |
| | 0320HD | WARD, CHARLES C/O HAHN & WARD | 6945 EMERALD ST BOISE ID | 83704 | 840 WARM SPRINGS AVE | | 03 532 | | |
| | 0330HD | ANTRIM, RON KIM M NEICE | 848 WARM SPRINGS AVE BOISE ID | 83712 | 848 WARM SPRINGS AVE | | 01 018 | | |
| | 0340HD | YRIBAR, DANIEL P | 904 WARM SPRINGS AVE BOISE ID | 83712 | 110 ELM STREET | | 01 018 | | |

| SLSHN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S -INT. RATE- C MTHLY ANN. |
|---|---|---|---|---|---|---|---|
| | 0350HD | YRIBAR, DANIEL P | 904 WARM SPRINGS AVE BOISE ID 83712 | 904 WARM SPRINGS AVE | 01 316 | | |
| | 0360HD | SMITH, WILLIAM | 905 WARM SPRINGS AVE BOISE ID 83712 | 905 WARM SPRINGS AVE | 01 316 | | |
| | 0370HD | MCMAECHEA, MARY E | 910 WARM SPRINGS AVE BOISE ID 83712 | 910 WARM SPRINGS AVE | 01 018 | | |
| | 0330HD | ANGLETON, HUGH | PO BOX 1558 BOISE ID 83701 | 915 WARM SPRINGS AVE | 02 014 | | |
| | 0390HD | MINSKOFF, MARJORIE C/O ALAN MINSKOFF | 916 WARM SPRINGS AVE BOISE ID 83712 | 916 WARM SPRINGS AVE | 01 316 | | |
| | 0400HD | MILLER, NICHOLAS G | 920 WARM SPRINGS AVE BOISE ID 83712 | 920 WARM SPRINGS AVE | 01 014 | | |
| | 0420HD | LANGROISE, GLADYS E | 929 WARM SPRINGS AVE BOISE ID 83712 | 929 WARM SPRINGS AVE | 01 014 | | |
| | 0430HD | JOHNSTON, ALBERT | 945 WARM SPRINGS AVE BOISE ID 83712 | 945 WARM SPRINGS AVE | 01 014 | | |
| | 0440HD | MARTIN, CAROL A | 1002 WARM SPRINGS AVE BOISE ID 83712 | 1002 WARM SPRINGS AVE | 01 316 | | |
| | 0450HD | GLENN, ROYCE | 1010 WARM SPRINGS AVE BOISE ID 83712 | 1010 WARM SPRINGS AVE | 01 316 | | |
| | 0460HD | CLARK, RUTH H | 1005 WARM SPRINGS AVE BOISE ID 83712 | 1005 WARM SPRINGS AVE | 01 532 | | |
| | 0470HD | OPPENHEIMER JR, ARTHUR | 877 W MAIN ST #703 BOISE ID 83702 | 1009 WARM SPRINGS AVE | 01 014 | | |
| | 0480HD | WARBERG, WILLIAM | 1020 WARM SPRINGS AVE BOISE ID 83712 | 1020 WARM SPRINGS AVE | 01 732 | | |
| | 0490HD | KIESEL, ROBERT A | 1022 WARM SPRINGS AVE BOISE ID 83712 | 1022 WARM SPRINGS AVE | 01 316 | | |
| | 0500HD | BRUNNER, J DAVID | 1035 WARM SPRINGS AVE BOISE ID 83712 | 1035 WARM SPRINGS AVE | 01 014 | | |
| | 0510HD | MUNSON, DONALYN V | 1037 WARM SPRINGS AVE BOISE ID 83712 | 1037 WARM SPRINGS AVE | 01 014 | | |
| | 0530HD | RAMEY, IVAR | 1104 WARM SPRINGS AVE BOISE ID 83712 | 1104 WARM SPRINGS AVE | 01 014 | | |
| | 0540HD | MCGREGOR, CAROL LYNN | 1107 WARM SPRINGS AVE BOISE ID 83712 | 1109 WARM SPRINGS AVE | 01 014 | | |

ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST.

DATE 04/30/89

| SLSMN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | | CUL/RTG | YEAREND/ CUTOFF | S - INT. RATE- C PTHLY ANN. |
|---|---|---|---|---|---|---|---|---|---|
| | 0550HD | MCCOLLUM, JOSEPH | 1110 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1110 WARM SPRINGS AVE | | 01 | 316 | |
| | 0555H | STEUART, CHARLES | 1114 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1114 WARM SPRINGS AVE | | 00 | 316 | |
| | 0560HD | GREENFIELD, JOHN F | 1119 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1119 WARM SPRINGS AVE | | 01 | 932 | |
| | 0565HD | HANSON, BRIAN R<br>ELAINE D HANSON | 1120 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1120 WARM SPRINGS AVE | | 01 | 316 | |
| | 0570HD | GRANT, STEPHEN R | 1127 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1127 WARM SPRINGS AVE | | 01 | 316 | |
| | 0580HD | CRIST, HOWARD | PO BOX 2722<br>BOISE ID | 83701 | 1204 WARM SPRINGS | | 01 | 316 | |
| | 0590HD | BEESON, JEROME E | 1205 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1205 WARM SPRINGS AVE | | 01 | 014 | |
| | 0595HD | ALLEN, GALE | 1215 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1215 WARM SPRINGS AVE | | 01 | 316 | |
| | 0610HD | DAY, JASON | 1225 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1225 WARM SPRINGS AVE | | 01 | 014 | |
| | 0620HD | HIGER, DALE | 1302 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1302 WARM SPRINGS AVE | | 01 | 014 | |
| | 0630H | WEITENIER, KENNETH H | 1305 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1305 WARM SPRINGS AVE | | 00 | 316 | |
| | 0640HD | ASHER, STEPHEN W | 1308 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1308 WARM SPRINGS AVE | | 01 | 014 | |
| | 0650HD | KRUEGER, PHILLIP | 1311 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1321 WARM SPRINGS AVE | | 01 | 316 | |
| | 0660HD | TELL, ALAN | 1312 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1312 WARM SPRINGS AVE | | 01 | 014 | |
| | 0670HD | OPPENHEIMER SR, ARTHUR | 1320 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1320 WARM SPRINGS AVE | | 01 | 014 | |
| | 0675H | KRUEGER, PHILLIP | 1311 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1311 WARM SPRINGS AVE | | 00 | 316 | |
| | 0680HD | KIRK, MURIEL HARRIS | 1415 WARM SPRINGS<br>BOISE ID | 83712 | 1403 WARM SPRINGS AVE | | 01 | 316 | |
| | 0690HD | FRASER, T J | 1400 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1400 WARM SPRINGS AVE | | 01 | 014 | |

| SLSMN # CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S C | INT. RATE- MTHLY ANN. |
|---|---|---|---|---|---|---|---|
| 0700HD | TALBOY, GLENN | 1414 WARM SPRINGS AVE BOISE ID 83712 | 1414 WARM SPRINGS AVE | 01 316 | | | |
| 071CH | KIRK, MURIEL HARRIS | 1415 WARM SPRINGS AVE BOISE ID 83712 | 1415 WARM SPRINGS AVE | 00 316 | | | |
| 0720HD | HAYES, DONNA MARIE | 1418 WARM SPRINGS AVE BOISE ID 83712 | 1418 WARM SPRINGS AVE | 01 316 | | | |
| 073CH | STEELE, JON | 1419 WARM SPRINGS AVE BOISE ID 83712 | 1419 WARM SPRINGS AVE | 00 316 | | | |
| 0740HD | ALEGRIA, HENRY | 1421 WARM SPRINGS AVE BOISE ID 83712 | 1421 WARM SPRINGS AVE | 01 316 | | | |
| 075CHD | MILLER, THOMAS | 1424 WARM SPRINGS AVE BOISE ID 83712 | 1424 WARM SPRINGS AVE | 01 732 | | | |
| 0760HD | BURROUGHS, CAROL M | 1433 WARM SPRINGS AVE BOISE ID 83712 | 1433 WARM SPRINGS AVE | 01 316 | | | |
| 0770HD | SMITH, WALLACE B | 1503 WARM SPRINGS AVE BOISE ID 83712 | 1503 WARM SPRINGS AVE | 01 316 | | | |
| 0780HD | COOK, CLIFTON | 1504 WARM SPRINGS AVE BOISE ID 83712 | 1504 WARM SPRINGS AVE | 01 316 | | | |
| 0790HD | CLARK, RICHARD | 1505 WARM SPRINGS AVE BOISE ID 83712 | 1505 WARM SPRINGS AVE | 01 018 | | | |
| 0800HD | GREENER, RICHARD H SHANNON H COOPER | 1510 WARM SPRINGS AVE BOISE ID 83712 | 1510 WARM SPRINGS AVE | 01 014 | | | |
| 081CHD | PETERSON, J REED | 1514 WARM SPRINGS AVE BOISE ID 83712 | 1514 WARM SPRINGS AVE | 01 316 | | | |
| 0811H | RIPPLE JR, RICHARD C | 1515 WARM SPRINGS AVE BOISE ID 83712 | 1515 WARM SPRINGS AVE | 00 532 | | | |
| 0820HD | JOHNSON, SIDNEY | 1165 KIMBERLY LANE BOISE ID 83712 | 1516 WARM SPRINGS AVE | 01 018 | | | |
| 083CH | HALL, RICHARD E | 1522 WARM SPRINGS AVE BOISE ID 83712 | 1522 WARM SPRINGS AVE | 00 014 | | | |
| 0840HD | RIPPLE JR, RICHARD C | 1515 WARM SPRINGS AVE BOISE ID 83712 | 1525 WARM SPRINGS AVE | 01 018 | | | |
| 0845HD | ORME, S KIRBY | 1602 WARM SPRINGS AVE BOISE ID 83712 | 1602 WARM SPRINGS AVE | 01 316 | | | |
| 0850HD | DAVIDSON, GEORGIA N | 1609 WARM SPRINGS AVE BOISE ID 83712 | 1609 WARM SPRINGS AVE | 01 932 | | | |

| SLSMN C | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CLC/HTG | YEAREND/ CUTOFF | S - INT. RATE - C MTHLY ANN. |
|---|---|---|---|---|---|---|---|---|
| | 0860HD | FORNEY, RICHARD | 1615 WARM SPRINGS AVE BOISE ID | 83712 | 1615 WARM SPRINGS AVE | 01 316 | | |
| | 0870HD | HEFFERT, JOHN | 111 JANTONI BOISE ID | 83712 | 111 JANTONI | 01 316 | | |
| | 0880HD | DWYER, REBECCA COPPLE | 1621 WARM SPRINGS AVE BOISE ID | 83712 | 1621 WARM SPRINGS AVE | 01 732 | | |
| | 0890HD | LOWE, BETTY | 1622 WARM SPRINGS AVE BOISE ID | 83712 | 1622 WARM SPRINGS AVE | 01 316 | | |
| | 0900HD | NISHIOKA, ANITA JO | 1703 WARM SPRINGS AVE BOISE ID | 83712 | 1703 WARM SPRINGS AVE | 01 014 | | |
| | 0910HD | CLIFFORD, BETTY T | 1707 WARM SPRINGS AVE BOISE ID | 83712 | 1707 WARM SPRINGS AVE | 01 732 | | |
| | 0911HD | FISHER, HELEN | 1610 WARM SPRINGS AVE BOISE ID | 83712 | 1610 WARM SPRINGS AVE | 01 316 | | |
| | 0912H | ARTIS, VIOLA | 123 JANTONI DRIVE BOISE ID | 83712 | 123 JANTONI DRIVE | 00 532 | | |
| | 0913HD | ORDUARK, TERENCE | 1710 WARM SPRINGS AVE BOISE ID | 83712 | 1710 WARM SPRINGS AVE | 01 316 | | |
| | 0921HD | DODSON, CHARLES | 1728 WARM SPRINGS AVE BOISE ID | 83712 | 1728 WARM SPRINGS AVE | 01 316 | | |
| | 0922HD | KLEIN, EDITH MILLER | PO BOX 475 BOISE ID | 83701 | 1732 WARM SPRINGS AVE | 01 316 | | |
| | 0929H | JAYO, CECIL | 120 LOCUST ST BOISE ID | 83712 | 111 LOUISA ST | 00 532 | | |
| | 0930HD | BOISE VALLEY OB GYN PA | 999 W CURTIS ROAD #117 BOISE ID | 83706 | 104 E IDAHO | 01 316 | | |
| | 0960HD | DWYER, REBECCA COPPLE | 1621 WARM SPRINGS AVE BOISE ID | 83712 | 107 E IDAHO | 01 316 | | |
| | 0970HD | WILDIG APARTMENTS | PO BOX 7921 BOISE ID | 83707 | 110 E IDAHO ST | 05 014 | | |
| | 0990HD | WILDIG APARTMENTS | PO BOX 7921 BOISE ID | 83707 | 114 E IDAHO ST | 03 316 | | |
| | 1000HD | WILDIG APARTMENTS | PO BOX 7921 BOISE ID | 83707 | 116 E IDAHO | 04 316 | | |
| | 1100HD | SHELLWORTH, EUGENE W | 300 E BANNOCK ST BOISE ID | 83712 | 300 E BANNOCK ST | 01 532 | | |

ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST.



| SLSMN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S -INT. RATE- C MTHLY ANN. |
|---|---|---|---|---|---|---|---|---|
| | 1110HD | LA BRIE, REX<br>BEVERLY LA BRIE | 3255 HOLL DRIVE<br>EAGLE ID | 83616 | 307 E BANNOCK ST | 02 316 | | |
| | 1112H | FEDDE, FERRIL<br>C/O ROXANNE BLACKWOOD | ROUTE 1<br>KUNA ID | 83634 | 305 E BANNOCK ST | 00 MET | | |
| | 1114H | FEDDE, FERRIL<br>C/O ROXANNE BLACKWOOD | ROUTE 1<br>KUNA ID | 83634 | 311 E BANNOCK ST | 00 MET | | |
| | 1116H | FEDDE, FERRIL<br>C/O ROXANNE BLACKWOOD | ROUTE 1<br>KUNA ID | 83634 | 317 E BANNOCK ST | 00 MET | | |
| | 1120HD | PLUMB, H T | 120 MOBLEY DRIVE<br>BOISE ID | 83712 | 323 E BANNOCK ST | 03 316 | | |
| | 1130HD | HOLBROOK, MRS CARL | 338 E BANNOCK<br>BOISE ID | 83712 | 338 E BANNOCK | 02 532 | | |
| | 1140HD | SCHOOLER ESTATE, C J<br>C/O ADELAIDE MCLECD | 1301 E HAYES WAY<br>BOISE ID | 83712 | 817-819 EAST BANNOCK ST | 02 316 | | |
| | 1150HD | SUTTER, ROBERT | 824 E BANNOCK<br>BOISE ID | 83712 | 824 E BANNOCK | 01 532 | | |
| | 1160HD | RUHMEL, J R | 823 E BANNOCK<br>BOISE ID | 83712 | 823 E BANNOCK | 01 532 | | |
| | 1161HD | JASTREMSKY, WALTER | 906 E BANNOCK<br>BOISE ID | 83712 | 906 E BANNOCK | 01 532 | | |
| | 1170H | WILLIAMSON, WARD | 822 BRAEMERE ROAD<br>BOISE ID | 83703 | 908 E BANNOCK ST | 00 316 | | |
| | 1180HD | DUGGAN/MILLER | 4023 WHITEHEAD<br>BOISE ID | 83703 | 909-911 E BANNOCK | 02 316 | | |
| | 1190HD | REID, TERREL R | 912 E BANNOCK<br>BOISE ID | 83712 | 912 E BANNOCK | 01 532 | | |
| | 1200HD | O LEARY, DENNIS | 921 E BANNOCK ST<br>BOISE ID | 83712 | 921 E BANNOCK ST | 01 316 | | |
| | 1210HD | BOREN, ROBERT R | 1002 E BANNOCK ST<br>BOISE ID | 83712 | 1002 E BANNOCK ST | 01 316 | | |
| | 1220HD | LEWIS, JULIA I<br>C/O LELAND TRUE | 1007 E BANNOCK<br>BOISE ID | 83712 | 1007 E BANNOCK | 01 018 | | |
| | 1230HD | JOHNSON, ANSGAR | 1016 E BANNOCK<br>BOISE ID | 83712 | 1016 E BANNOCK | 01 316 | | |
| | 1240HD | LARRINAGA, JULIAN | 1020 E BANNOCK<br>BOISE ID | 83712 | 1020 E BANNOCK | 01 018 | | |

| SLSMN # CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | COL/HTG | YEAREND/ CUTOFF | S C | INT. RATE- MTHLY | ANN. |
|---|---|---|---|---|---|---|---|---|---|
| 1250HD | HANFORD, DAVID W | 1111 E BANNOCK BOISE ID | 83712 | 1111 E BANNOCK | 01 | 316 | | | |
| 1260HD | BROWN, ROBERT E | 1115 E BANNOCK BOISE ID | 83712 | 1115 E BANNOCK | 01 | 532 | | | |
| 1270HD | GIBB, JEANETTE A | 1310 E BANNOCK BOISE ID | 83712 | 1310 E BANNOCK | 01 | 316 | | | |
| 1280H | BARCHAS, RUDY | PO BOX 7744 BOISE ID | 83707 | 1320-1322 E BANNOCK ST | 00 | 316 | | | |
| 1320HD | FARBER, NACHI | 1403 W FRANKLIN ST BOISE ID | 83702 | 210-212 ELM ST | 02 | 316 | | | |
| 1330HD | POWELL, ERIC A | 925 E JEFFERSON ST BOISE ID | 83712 | 925 E JEFFERSON ST | 01 | 316 | | | |
| 1340H | RANOS, L DAVID | 1014 E JEFFERSON ST BOISE ID | 83712 | 1014 E JEFFERSON ST | 00 | 316 | | | |
| 1350HD | JOHNSON, DON | 1022 E JEFFERSON BOISE ID | 83712 | 1022 E JEFFERSON | 01 | 316 | | | |
| 1359H | TYLER, NANCY | 1100 E JEFFERSON ST BOISE ID | 83712 | 1100 E JEFFERSON ST | 00 | 532 | | | |
| 1360HD | ROTHCHILD, OLGA | 1112 E JEFFERSON BOISE ID | 83712 | 1112 E JEFFERSON | 01 | 316 | | | |
| 1380HD | WOODBURY, SCOTT D MICHELE TAE | 1105 E STATE ST BOISE ID | 83712 | 1105 E STATE ST | 01 | 018 | | | |
| 1390HD | PARRISH, SUSAN S | 100 MAIN STREET BOISE ID | 83702 | 100 MAIN STREET | 01 | 014 | | | |
| 1410H | BUSHNELL JR, ROBERT | 110 MAIN ST BOISE ID | 83712 | 110 MAIN ST | 00 | 014 | | | |
| 1430H | MCASSEY, JOHN W | 121 MAIN ST BOISE ID | 83702 | 119 MAIN | 00 | 316 | | | |
| 1440HD | MCASSEY, JOHN W | 121 MAIN BOISE ID | 83702 | 121 MAIN | 01 | 316 | | | |
| 1450HD | GRAEBER AND COMPANY | 203 MAIN ST BOISE ID | 83702 | 203 MAIN ST | 01 | 316 | | | |
| 1460H | ALL KITCHENS INC C/O HARRY A REIFSCHNEIDER | 209 MAIN BOISE ID | 83702 | 209 MAIN | 00 | 316 | | | |
| 1470HD | STATE OF IDAHO BUILDING SERVICES | 550 WEST STATE ST BOISE ID | 83703 | 210 MAIN ST HISTORICAL | 01 | 014 | | | |

| SLSMN # CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | SERVICE ADDRESS/PHONE | CYL/RTG | YEAREND/ CUTOFF | S - INT. RATE - C MTHLY ANN. |
|---|---|---|---|---|---|---|
| 1570HD | LUPHER, THOMAS C | 109 W IDAHO STREET BOISE ID 83702 | 109 W IDAHO STREET | 01 | 732 | |
| 1615M | BEER & CAIN | 302 W IDAHO BOISE ID 83702 | 302 W IDAHO | 00 | MET | |
| 1620HD | ACCOUNTING ASSOC BLDG INC | 408 W IDAHO BOISE ID 83702 | 408 W IDAHO | 03 | 316 | |
| 1652M | GIBSON FUNERAL HOME | 1200 NE CLOVERDALE ROAD BOISE ID 83704 | 507 W IDAHO ST | 00 | MET | |
| 1660HD | BURROUGHS III, A M | PO BOX 1676 BOISE ID 83701 | 515 W IDAHO ST | 02 | 532 | |
| 1790HD | ALBERTSON, DORIS | 4747 ALBION RD BOISE ID 83705 | 208 W BANNOCK | 01 | 732 | |
| 1795M | F & K PROPERTIES C/O FRANK NASSC | 4420 UTE PLACE BOISE ID 83704 | 214 W BANNOCK | 00 | MET | |
| 1800M | SMITH, DR JAMES W | 287 W JEFFERSON ST BOISE ID 83702 | 222 W BANNOCK ST | 00 | 732 | |
| 1810M | REIFSCHNEIDER, HARRY A | 209 MAIN ST BOISE ID 83702 | 303 W BANNOCK ST | 00 | 732 | |
| 1820HD | JANNS CORPORATION | 305 W BANNOCK ST BOISE ID 83702 | 305 W BANNOCK ST | 01 | 532 | |
| 1825M | BAKER, GEORGE R | 316 W BANNOCK BOISE ID 83702 | 316 W BANNOCK | 00 | MET | |
| 1920HD | LARSEN, DORRELL C | 201 WEST JEFFERSON ST BOISE ID 83712 | 201 WEST JEFFERSON ST | 01 | 014 | |
| 1930HD | HEISER, WINIFRED ROSS | 4060-212TH WAY SE ISSAQUAH WA 98072 | 206 W JEFFERSON | 01 | 316 | |
| 1931HD | PIERSON, FREDERICK | 216 W JEFFERSON ST BOISE ID 83702 | 216 W JEFFERSON ST | 01 | 316 | |
| 1940HD | NEWELL, THOMAS TRUST OFFICER | FIRST SECURITY BANK BOISE ID 83702 | 220 W JEFFERSON ST | 01 | 316 | |
| 1960HD | JEFFERSON DEVELOPMENT CO C/O ROBERT A TINSTMAN | 2300 SWALLOWTAIL LANE BOISE ID 83706 | 323 W JEFFERSON ST | 01 | 532 | |
| 1965M | VYCITAL, RICHARD C | 925 PARKHILL COURT BOISE ID 83702 | 409 W JEFFERSON | 00 | MET | |
| 1967M | LONG, ARLETTA E | 2017 CANAL ST BOISE ID 83705 | 203 W WASHINGTON ST | 00 | 316 | |

| LSHN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S - INT. RATE- C MTHLY ANN. |
|---|---|---|---|---|---|---|---|---|
| | 2030HD | ANTRIM, RON<br>KIM R NEILL | 848 WARM SPRINGS AVE<br>BOISE ID | 83712 | 120 LOCUST STREET | 01 532 | | |
| | 2040HD | SHYLIE, ROBERT E | 117 LOCUST<br>BOISE ID | 83712 | 117 LOCUST | 01 932 | | |
| | 2050HD | BRIDENBAUGH, WILLIAM | 117 N WALNUT ST<br>BOISE ID | 83712 | 117 N WALNUT ST | 01 732 | | |
| | 2060HD | SULLIVAN III, WILLIS | 118 WALNUT<br>BOISE ID. | 83712 | 118 WALNUT | 01 316 | | |
| | 2070HD | ALBANESE, ARTHUR | 203 NO WALNUT<br>BOISE ID | 83712 | 203 NO WALNUT | 01 316 | | |
| | 2080HD | LINDLEY, DOUGLAS D | 217 N WALNUT<br>BOISE ID. | 83712 | 217 N WALNUT | 01 532 | | |
| | 2085HD | DILLE, J CARL | 118 MAPLE<br>BOISE ID | 83712 | 118 MAPLE | 01 316 | | |
| | 2090HD | JONES, H T -BUCK- | 201 MAPLE ST<br>BOISE ID | 83712 | 201 MAPLE ST | 01 532 | | |
| | 2100HD | GROVES, BRUCE | 6908 ASHLAND DRIVE<br>BOISE ID | 83705 | 202 ELM | 02 316 | | |
| | 2120HD | PERKINS, ALICE<br>C/O GARY IKBS PROPERTY MGMNT | 3341 MOUNTAIN VIEW DRIVE<br>BOISE ID | 83704 | 203 NO FOURTH ST | 04 316 | | |
| | 2140HD | NIXON, C H<br>C/O CATHY N DALY | 5100 BEL AIR DRIVE<br>BOISE ID | 83705 | 112 N 6TH | 01 316 | | |
| | 3000 D | HOWELL, KEN | 680 NO NINTH ST<br>BOISE ID | 83702 | 247 WARM SPRINGS AVE | 08 | | |
| | 3030 D | TRIPP, AL | 805 WARM SPRINGS AVE<br>BOISE ID | 83712 | 805 WARM SPRINGS AVE | 01 | | |
| | 3190 D | BUCKLEY, MARY | 919 E BANNOCK<br>BOISE ID | 83712 | 919 E BANNOCK | 01 | | |
| | 3220 D | CRIM, JOHN H | 3514 MOUNTAIN VIEW DRIVE<br>BOISE ID | 83704 | 304 WARM SPRINGS AVE | 04 | | |
| | 3270 D | BAKER, BARBARA A | 915 E BANNOCK ST<br>BOISE ID | 83712 | 915-917 E BANNOCK ST | 02 | | |
| | 3340H | IDA DEPARTMENT OF CORRECTION<br>STATEHOUSE MAIL | STATEHOUSE MAIL<br>BOISE ID | 83720 | 2366 OLD PENITENTIARY ROAD | 00 MET | | |
| | 3350H | NONDIN, DR FREDERICK | 220 W STATE STREET<br>BOISE ID | 83702 | 220 W STATE STREET | 00 316 | | |

ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST.

DATE 04/30/89

| SLSMN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | SERVICE ADDRESS/PHONE | COL/HTG | YEAREND/ CUTOFF | S C | -INT. RATE- MTHLY | ANN. |
|---|---|---|---|---|---|---|---|---|---|
| | 3360H | BROWN & ASSOCIATES, DAVID R | 6508 RANDOLPH DRIVE BOISE ID 83709 | 210 W STATE ST | 00 316 | | | | |
| | 3364H | OVERSTREET, ROBERT O | 216 W STATE BOISE ID 83702 | 216 W STATE | 00 316 | | | | |
| | 3400H | ID ST HEALTH & AG LAB | 2220 OLD PEN ROAD BOISE ID 83712 | 2220 OLD PEN ROAD | 00 PET | | | | |
| | 3410H | FRIENDS OF THE BISHOPS HOUSE C/O IDAHO HISTORICAL SOCIETY | 2420 OLD PENITENTIARY ROAD BOISE ID 83712 | 2420 OLD PENITENTIARY ROAD | 00 PET | | | | |
| | 3510H | BOLLMAN, VERNON | 115 MOBLEY DRIVE BOISE ID 83712 | 115 MOBLEY DRIVE | 00 532 | | | | |
| | 3520HD | PLUMB, H T | 120 MOBLEY BOISE ID 83712 | 120 MOBLEY | 01 316 | | | | |
| | 3530H | SCHIEPAN, ALLEN P | 202 MOBLEY DRIVE BOISE ID 83712 | 202 MOBLEY DRIVE | 00 018 | | | | |
| | 3540HD | COUGHLAN, GLENN A | 212 MOBLEY DRIVE BOISE ID 83712 | 212 MOBLEY DRIVE | 01 316 | | | | |
| | 3550H | BYRNE, MAURICE E | 213 MOBLEY DRIVE BOISE ID 83712 | 213 MOBLEY DRIVE | 00 532 | | | | |
| | 3560HD | MALCOTEL, JOSEPH | 216 MOBLEY BOISE ID 83712 | 216 MOBLEY | 01 018 | | | | |
| | 3566H | YOUNG, VIRGIL M | 300 MOBLEY BOISE ID 83712 | 300 MOBLEY | 00 316 | | | | |
| | 3570H | HUHMEL, CHARLES S | 305 MOBLEY BOISE ID 83712 | 305 MOBLEY | 00 316 | | | | |
| | 3580HD | SMITH, & MARK | 306 MOBLEY BOISE ID 83712 | 306 MOBLEY | 01 316 | | | | |
| | 3590HD | SIRHALL, L G | 317 MOBLEY BOISE ID 83712 | 317 MOBLEY | 01 316 | | | | |
| | 3600H | BARRETT, KATHLEEN | 324 MOBLEY DRIVE BOISE ID 83712 | 324 MOBLEY DRIVE | 00 018 | | | | |
| | 3610HD | HORSLEY, A M | 325 MOBLEY DRIVE BOISE ID 83712 | 325 MOBLEY DRIVE | 01 018 | | | | |
| | 3620HD | C & G CORPORATION | 402 MOBLEY DRIVE BOISE ID 83712 | 402 MOBLEY DRIVE | 01 018 | | | | |
| | 3630HD | SHEPHERD, JAMES O | 431 MOBLEY BOISE ID 83712 | 431 MOBLEY | 01 018 | | | | |

ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST.

DATE 04/30/89

| SLSMN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CCC/HTG | YEAREND/ CUTOFF | S - INT. RATE - C PTHLY ANN. |
|---|---|---|---|---|---|---|---|---|
| | 3640HD | JOHNSON, CLAIR<br>C/O SAM TAYLOR | 418 MOBLEY DRIVE<br>BOISE ID | 83712 | 418 MOBLEY DRIVE | | 01 316 | |
| | 3650H | SORENSEN, MARK | 424 MOBLEY DRIVE<br>BOISE ID | 83712 | 424 MOBLEY DRIVE | | 00 018 | |
| | 3660H | LAWRENCE, O F | 430 MOBLEY<br>BOISE ID | 83712 | 430 MOBLEY | | 00 316 | |
| | 3667H | SWINEHART, LOY T | 108 JANTONI<br>BOISE ID | 83712 | 108 JANTONI | | 00 316 | |
| | 3670H | ZIMMERMAN, JOAN S | 200 JANTONI DRIVE<br>BOISE ID | 83712 | 200 JANTONI DRIVE | | 00 316 | |
| | 3680HD | LENZI, WILLIAM D | 203 JANTONI DRIVE<br>BOISE ID | 83712 | 203 JANTONI DRIVE | | 01 316 | |
| | 3690HD | BASTIDA-HICKS, TONI F | 1602 E JEFFERSON ST<br>BOISE ID | 83712 | 1602 E JEFFERSON ST | | 01 316 | |
| | 3700H | MYERS, HELEN A | 408 MOBLEY DRIVE<br>BOISE ID | 83712 | 408 MOBLEY DRIVE | | 00 316 | |
| | 38104 | WARM SPRINGS HOLLOW HC ASSN<br>C/O WILLIAM P HECH | 325 MCGUFFIN LANE<br>BOISE ID | 83712 | 211 SO MOBLEY LANE | | 00 PET | |
| | 3820H | WARNER, GLENDA F | 259 SO COSTON LANE<br>BOISE ID | 83712 | 259 SO COSTON LANE | | 00 018 | |
| | 3830H | HENSON, THOMAS | 999 N CURTIS ROAD #506<br>BOISE ID | 83706 | 269 S COSTON | | 00 316 | |
| | 3840H | GRANT, A RICHARD | 265 SO COSTON LANE<br>BOISE ID | 83712 | 265 SO COSTON LANE | | 00 532 | |
| | 3850H | LITZ, KEN | 277 SO COSTON LANE<br>BOISE ID | 83712 | 277 SO COSTON LANE | | 00 532 | |
| | 3860H | TWILEGAR, RON | 1205 NO 11TH ST<br>BOISE ID | 83702 | 273 SO COSTON LANE | | CO 316 | |
| | 3870H | MITCHELL, DONALD | 1552 LENZ LANE<br>BOISE ID | 83712 | 281 S COSTON LANE | | 00 018 | |
| | 3880H | ZIMMERMAN, JOAN S<br>C/O SUZEE ZIMMERMAN | 1433 WARM SPRINGS AVE<br>BOISE ID | 83712 | 1548 LENZ LANE | | 00 532 | |
| | 3890H | SHORE, GORDON | 1549 LENZ LN<br>BOISE ID | 83712 | 1549 LENZ LN | | 00 018 | |
| | 3900H | MITCHELL, DONALD | 1552 LENZ LN<br>BOISE ID | 83712 | 1552 LENZ LN | | 00 018 | |

| SLSHN # CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S - INT. RATE - C MTHLY ANN. |
|---|---|---|---|---|---|---|---|
| 3910H | SORENSEN, DEAN E | 5197 RED BRIDGE AVE<br>BOISE ID | 83703 | 1553 LENZ LANE | | 00 018 | |
| 3920H | KLEIN, EDITH MILLER | PO BOX 475<br>BOISE ID | 83701 | 1556 LENZ LANE | | 00 532 | |
| 3930H | ADAMS, CHARLEY O | 1557 LENZ LN<br>BOISE ID | 83712 | 1557 LENZ LN | | 00 018 | |
| 3940H | HAYES, THOMAS | 1560 LENZ LANE<br>BOISE ID | 83712 | 1560 LENZ LANE | | 00 532 | |
| 3950H | WITTERS, DONNA A | 1561 LENZ LANE<br>BOISE ID | 83712 | 1561 LENZ LANE | | 00 018 | |
| 3960H | BAUER, RICHARD K<br>C/O ASCL-CONSTRUCTION DEPT | PO BOX 10011<br>JUBAIL SAUDI ARABIA | 31961 | 1564 LENZ LANE | | 00 018 | |
| 3970H | HOSHAN, WILLIAM J | 1565 LENZ LN<br>BOISE ID | 83712 | 1565 LENZ LN | | 00 018 | |
| 3980H | TWILEGAR, RON<br>C/O CAPITAL ESCROW CO | PO BOX 1739<br>BOISE ID | 83701 | 1568 LENZ LANE | | 00 018 | |
| 3990H | WITMER, DOROTHY M | 5541 SO 38TH ST<br>LINCOLN NE | 68516 | 1569 LENZ LANE | | 00 018 | |
| 4000H | STROMBERG, MARY R | 1587 LENZ LANE<br>BOISE ID | 83712 | 1587 LENZ LANE | | 00 018 | |
| 4010H | KLEIN, EDITH MILLER | PO BOX 475<br>BOISE ID | 83701 | 1588 LENZ LANE | | 00 018 | |
| 4020H | SMITH, CARLIE W<br>GLOBEX DEVELOPERS INC | PO BOX 4010<br>HORSESHOE BEND AR | 72512 | 1591 LENZ LANE | | 00 018 | |
| 4030H | SANDERS, MALRICE H | 1594 LENZ LN<br>BOISE ID | 83712 | 1594 LENZ LN | | 00 018 | |
| 4040H | SABATE, HENRY<br>JEAN HESTON | 1597 LENZ LANE<br>BOISE ID | 83712 | 1597 LENZ LANE | | 00 532 | |
| 4050H | SCHAFFNER, DENNIS F | 1605 LENZ LANE<br>BOISE ID | 83705 | 1605 LENZ LANE | | 00 532 | |
| 4060H | GARLAND, DOROTHY A | 1611 LENZ LANE<br>BOISE ID | 83712 | 1611 LENZ LANE | | 00 532 | |
| 4070H | DICKEY, DR HARD E | 1515 E JEFFERSON<br>BOISE ID | 83712 | 1617 LENZ LANE | | 00 018 | |
| 4090H | KLEIN, EDITH MILLER | PO BOX 475<br>BOISE ID | 83701 | 1618 LENZ LANE | | 00 532 | |

ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST.

DATE 04/30/89

| SLSMN # | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CUL/HTG | YEAREND/ CUTOFF | S C | UNIT. RATE- MTHLY | ANN. |
|---|---|---|---|---|---|---|---|---|---|---|
| | 4090H | LEPPALUOTO, CAPTAIN A | 7821 MAPLE AVE<br>VANCOUVER WA | 98664 | 1624 LENZ LANE | 00 | 532 | | | |
| | 4100H | SMITH, ROBERT C | 3016 PACCCCK #211<br>OMAHA NE | 68124 | 1626 LENZ LANE | 00 | 018 | | | |
| | 4110H | JOHNSON, JOSEPH A | 1628 LENZ LANE<br>BOISE ID | 83712 | 1628 LENZ LANE | 00 | 532 | | | |
| | 4120H | GUDMUNDSEN, MAX | 258 S MOBLEY LN<br>BOISE ID | 83712 | 258 S MOBLEY LN | 00 | 018 | | | |
| | 4130H | BARBER, PHILLIP M | 262 SO MOBLEY LANE<br>BOISE ID | 83712 | 262 SO MOBLEY LANE | 00 | 532 | | | |
| | 4140H | SCUDDER III, BRAD C<br>BONNIE JEAN SCUDDER | 266 SC MOBLEY LANE<br>BOISE ID | 83712 | 266 SO MOBLEY LANE | 00 | 316 | | | |
| | 4150H | CLIFFORD, BETTY T | 1707 WARM SPRINGS AVE<br>BOISE ID | 83712 | 270 S MOBLEY LANE | 00 | 316 | | | |
| | 4160H | BURROUGHS, CAROL M | 1433 WARM SPRINGS AVE<br>BOISE ID | 83712 | 274 S MOBLEY LN | 00 | 018 | | | |
| | 4170H | SORENSEN, DEAN E | 5197 REC BRIDGE LANE<br>BOISE ID | 83703 | 270 SO MOBLEY LANE | 00 | 532 | | | |
| | 4180H | OLSON, CRAIG | 282 SC MOBLEY LANE<br>BOISE ID | 83712 | 282 SO MOBLEY LANE | 00 | 018 | | | |
| | 4190H | BUHLER, CLARA THIEL | 313 S MOBLEY LANE<br>BOISE ID | 83712 | 313 S MOBLEY LANE | 00 | 018 | | | |
| | 4200H | CABALLERO, LINDA | 314 SC MOBLEY LANE<br>BOISE ID | 83712 | 314 SO MOBLEY LANE | 00 | 018 | | | |
| | 4210H | TREMEWAN, LAWRENCE | 320 SO MOBLEY LANE<br>BOISE ID | 83712 | 320 SO MOBLEY LANE | 00 | 018 | | | |
| | 4220H | BOURKE, LAWRENCE D | 321 SO MOBLEY LANE<br>BOISE ID | 83712 | 321 SO MOBLEY LANE | 00 | 018 | | | |
| | 4230H | NIHTZ, DAVID A | 332 SO MOBLEY LANE<br>BOISE ID | 83712 | 322 SO MOBLEY LANE | 00 | 018 | | | |
| | 4240H | CROMWELL, APRIL | 335 SO MOBLEY LANE<br>BOISE ID | 83712 | 335 SO MOBLEY LANE | 00 | 018 | | | |
| | 4250HD | KORTHALS, KEITH | 1491 LEWIS LANE<br>BOISE ID | 83712 | 1491 LEWIS LANE | 01 | 018 | | | |
| | 4260H | KOCH, DARYL F<br>MARY E KOCH | 1493 LEWIS LANE<br>BOISE ID | 83712 | 1493 LEWIS LANE | 00 | 018 | | | |

ACCOUNTS RECEIVABLE NAME AND ADDRESS LIST - WARM SPRINGS WATER DIST.

DATE 04/30/89

| SESSION | CUST. # | CUSTOMER NAME | CUSTOMER ADDRESS | | SERVICE ADDRESS/PHONE | CYC/RTG | YEAREND/ CUTOFF | S C | INT. RATE- MTHLY ANN. |
|---|---|---|---|---|---|---|---|---|---|
| | 4270H | ELLIS, DOUGLAS L | 1495 LEWIS LANE<br>BOISE ID | 83712 | 1495 LEWIS LANE L284 | | 00 018 | | |
| | 4290H | CATTI, PAUL | 1521 LEWIS LANE<br>BOISE ID | 83712 | 1521 LEWIS LANE | | 00 018 | | |
| | 4290H | NORMAN, FREDERICK J | 1673 LEWIS LANE<br>BOISE ID | 83712 | 1673 LEWIS LANE | | 00 316 | | |
| | 4300H | FORD, HUGH F<br>JULIA H FORD | 1677 LEWIS LANE<br>BOISE ID | 83712 | 1677 LEWIS LANE | | 00 018 | | |
| | 4310H | ZIMMERMAN, JOAN S | 200 JANTONI DRIVE<br>BOISE ID | 83712 | 1685 LEWIS LANE | | 00 532 | | |
| | 4320H | TALBOY, GLENN E | 1414 WARM SPRINGS AVE<br>BOISE ID | 83712 | 315 MCGUFFIN LANE | | 00 018 | | |
| | 4330H | HELLER TRUST, MYRRL<br>C/O CAROL H BURROUGHS | 1433 WARM SPRINGS AVE<br>BOISE ID | 83712 | 319 MCGUFFIN LANE | | 00 018 | | |
| | 4340H | MECH, WILLIAM P | 325 MCGUFFIN LANE<br>BOISE ID | 83712 | 325 MCGUFFIN LANE | | 00 018 | | |
| | 4360H | SERVATIUS, EUGENE F | 329 MC GUFFIN LANE<br>BOISE ID | 83712 | 329 MC GUFFIN LANE | | 00 018 | | |
| | 4380H | FOWLER, GERALD R | 333 MCGUFFIN LANE<br>BOISE ID | 83712 | 333 MCGUFFIN LANE | | 00 018 | | |
| | 4400H | REED, MM W | 7850 CRESTWOOD DRIVE<br>BOISE ID | 83704 | 337 MCGUFFIN LANE | | 00 018 | | |
| | 4410H | BARTON, LORETTA J | 338 MCGUFFIN LANE<br>BOISE ID | 83712 | 338 MCGUFFIN LANE | | 00 018 | | |
| | 4420H | EDSON, DAVID M | 341 MCGUFFIN LANE<br>BOISE ID | 83712 | 341 MCGUFFIN LANE | | 00 018 | | |
| | 9999H | CRAWFORDS HYDE PARK | 6139 CORPORAL ST<br>BOISE ID | 83704 | 904 WARM SPRINGS AVE YRIBAR | | | | |

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 - (208) 327-7900

CECIL D. ANDRUS
GOVERNOR
R. KEITH HIGGINSON
DIRECTOR

July 10, 1989

Chuck Mickelsen, Boise City Engineer
P.O. Box 500 01
Boise, Idaho 83701

RE: Permit To Appropriate Water No. 63-10022: Quarry View Park

Dear Mr. Mickelsen:

Permit to appropriate water no. 63-10022 was developed using geothermal water to irrigate Quarry View Park. Recent controversy over the use of geothermal water along the Boise Front has resulted in close scrutiny of water uses which do not extract heat from the water.

In December, 1988, I wrote to Jack Cooper of Boise Parks Department inquiring about the present use of geothermal well used under permit no. 63-10022. A copy of the letter is enclosed. I did not receive a response from Mr. Cooper.

The department has been informed that the water is presently being used for some other purpose than irrigation. Could you please write a letter clarifying the use of the water? If it is being used for some purpose other than irrigation, perhaps the license should be issued for that purpose. An amendment may be required.

Sincerely,

Gary Spackman

GARY SPACKMAN, Manager
Water Right Permits Section

GS:js

Enclosure

FEB 2 3 1996

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 - (208) 334-7900

CECIL D. ANDRUS
GOVENOR
R. KEITH HIGGINSON
DIRECTOR

December 30, 1988

Jack Cooper
Boise Parks Dept. Director
1104 Royal Boulevard
Boise, ID 83706

RE: Permit to appropriate water no. 63-10022: Quarry View Park

Dear Mr. Cooper:

The Department of Water Resources has reviewed the proposed use of a low temperature geothermal well for irrigation of Quarry View Park. An examiner from the department examined the use in 1988, and determined that you were irrigating from the well.

Recent contention over the cause of declining hot water pressures and water elevations along the Boise front raises concern about a low temperature geothermal well being used strictly for irrigation purposes rather than for the heat content of the water. The department has received information that the hot water well may now not be used for irrigation and, that the City of Boise has entered into some agreement with Boise Water Corporation.

Will you please clarify the present use of the well, and also state the intentions of Boise City regarding the use of the well in the future.

Sincerely,

Gary Spackman

Gary Spackman
Water Allocation Section

FEB 8 1989

**MEMORANDUM**

**TO:** GARY SPACKMAN

**FROM:** JIM JOHNSON

**RE:** TEMPERATURE OF CITY WELL

**DATE:** 15-DEC-1988

==========

Gary, attached is Paul Castelin's response to my query of 13-DEC-1988.

It appears that Norm's concern has been taken care of without any prompting from the Dept.

We can, if requested, hold this file for a while and follow up by contacting someone listed in Paul's memo to see if the connection has been implemented.

By postponing license issuance we keep out of the picture and avoid the appearance of supporting existing hot water use, which is a concern expressed by Norm.

**MEMORANDUM**

**TO:** PAUL CASTELIN

**FROM:** JIM JOHNSON

**RE:** TEMPERATURE OF WELL WATER

**DATE:** 13-DEC-1988

==========

Paul, your response to my previous query was so prompt and useful I thought I would push my luck and ask another question on an unrelated matter.

You will find in the attached file memos from Gary S. and Norm Y. concerning the water temperature from the well used by the city park dept. to irrigate the Quarry View Park.

Rather than preparing out of dept. correspondance I thought I would first check in house to see what could be gathered.

Specficially, do you have any information on water temperatures in the area of the permit and/or what information is available on the well in question.

Also, I would appreciate any or all comments you may have addressing the potential of hot water being used for irrigation or nonheating purposes. We have a number of permits that will be processed for licenses in the future in the general area and I am sure the hot water question will be raised again.

I performed the acceptance well test of the Quarry View Park well while employed by Anderson & Kelly. The temperature of the discharge stabilized at or near 130°F., as I recall, so it is a thermal well. The City of Boise has received a lot of flak from Boise Warm Springs about using the well for irrigation, not for the heat content. The City has also had some yield and sand problems; as a result they have decided to cease using the well. It is my understanding that a connection with Boise Water Corporation was authorized at the Boise City Council meeting Tuesday, December 13, 1988. You can contact either Chuck Mickelsen, City Engineer, at 384-4292, or Jack Cooper, Parks Dept director at 384-4242 to verify this.

PAUL CASTELIN
12/15/88

63-10022

June 21, 1988

CERTIFIED MAIL

Boise Parks Dept.
1104 Royal Blvd.
Boise, ID 83706

Gentlemen:

RE: BOISE FRONT - ORDER ESTABLISHING A MORATORIUM

Enclosed is an order establishing a moratorium in connection with further development of the warm water aquifer in the Boise Front Low Temperature Geothermal Ground Water Management Area.

The moratorium has been ordered pursuant to the authority of Section 42-1805(7), Idaho Code, and Rule 7 of the Department's Water Appropriation Rules and Regulations.

Objections to entry of the order shall be considered by the department under the provisions of the department's adopted Rules of Practice and Procedure and applicable law. Objections must be filed within fifteen (15) days of the date of this letter.

Sincerely,

NORMAN C. YOUNG
Administrator

Encl: 1

FEB 2 3 1996

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

| | |
|---|---|
| IN THE MATTER OF THE BOISE FRONT LOW TEMPERATURE GEOTHERMAL RESOURCE GROUND WATER MANAGEMENT AREA | ORDER ESTABLISHING A MORATORIUM |

On June 15, 1987, the Director of the Idaho Department of Water Resources (IDWR) designated the Boise Front Low Temperature Geothermal Resource Ground Water Management Area (Boise Front) in Ada County due to reported declines in aquifer water levels and pressure. On January 22, 1988, Boise Warm Springs Water District (BWSWD) petitioned IDWR to:

1) Establish a moratorium on further development pursuant to Section 42-1805(7), Idaho Code, and Rule 7 of the Department's Water Appropriation Rules and Regulations,

2) Designate the Boise Front as a critical ground water area pursuant to Section 42-233(a), Idaho Code, and

3) To stop further development in the Boise Front pursuant to management authority provided by Sections 42-233(b) and 42-237(b), Idaho Code.

The IDWR staff has reviewed the present status of use and development of the low temperature geothermal resource in the Boise Front area and based upon this staff review, the Director has determined that:

1) Water levels or pressures in the Boise Front continue to decline at an estimated rate of six (6) to seven (7) feet per year in all or part of the Boise Front.

2) Pending applications and undeveloped permits could increase the annual withdrawal from the aquifer several fold if developed.

3) Protection of existing rights require additional management of the resource.

4) A moratorium on further development which will increase the rate of depletion from the Boise Front is required to insure compliance with the provisions of Chapter 2, Title 42, Idaho Code.

5) Additional hydrogeologic data is needed to adequately

evaluate the characteristics of the aquifer to prevent over appropriation of the resource, to stabilize depletions and to adequately assess the potential of long term declines.

6) By maintaining a ground water management area designation, the Director is authorized to require right holders to report withdrawals of ground water and other information to determine the ground water supply and its usage.

7) The Director is charged with the protection of existing water rights while allowing reasonable use of the resource.

8) Section 42-1805(7), Idaho Code, and Rule 7 of the Water Appropriation Rules and Regulations provide for the establishment of a moratorium on further development.

NOW, THEREFORE, pursuant to Section 42-1805(7), Idaho Code, and Rule 7 of the Water Appropriation Rules and Regulations, it is hereby ORDERED in connection with the Boise Front Low Temperature Geothermal Resource Ground Water Management Area designed on June 15, 1987 that:

1. Effective with the date of entry of this order, further development or additional use pursuant to undeveloped or partially developed permits is prohibited until the permit holder shows to the satisfaction of the Director that further development or additional use: a) will not increase depletions from the aquifer; b) will not increase pumping lift or decrease pressure to existing prior users; and c) will not reduce temperature to existing users causing systems operating at reasonable efficiency to no longer operate.

2. Pending and future applications will be rejected unless information is provided to demonstrate the use: a) will not cause additional depletion of the aquifer; b) will not increase pumping lift or pressure reduction to existing users or undeveloped permit holders; and c) will not reduce the temperature of the resource to existing users or undeveloped permit holders below the temperature necessary for a system operating at reasonable efficiency to operate.

3. The Director retains the designation of the Boise Front as a Ground Water Management Area and DENIES the petition of the Boise Warm Springs Water District to designate the Boise Front a Critical Ground Water Area.

4. The provisions of this order are effective upon issuance and remain effective for a period of five (5) years unless rescinded, modified or extended by subsequent order of the Director.

5. Service and publication of this order shall be made in accordance with the provisions of Rule 7 of the Water



FEB 23 1996

Appropriation Rules and Regulations.

6. Any person aggrieved by this order shall be entitled to a hearing before the Director for the purpose of contesting the order. A request for hearing must be filed with the Director within fifteen (15) days after receipt of a copy of the order by certified mail, or within fifteen (15) days after completion of the publication of the order for three (3) consecutive weeks in a newspaper of general circulation, whichever is earlier. The hearing shall be conducted in accordance with the provisions of Chapter 52, Title 67, Idaho Code, and the rules of Practice and Procedure of the Department of Water Resources.

Dated this 10TH day of JUNE, 1988.

R. KEITH HIGGINSON
Director

RECEIVED
FEB 28 1995

April 15, 1988

CITY OF BOISE
DEPT. OF PARKS
1104 ROYAL BLVD.
BOISE, ID 83706

RE: Permit No. 63-10022

Dear Permit Holder(s):

Enclosed is a draft copy of the license proposed to be issued on the above referenced water right.

This right is currently being reviewed by this office for licensing. The enclosed preliminary copy is subject to change upon further administrative review.

We ask that you review the proposed license and if you do not concur with the information, please let us know within 10 days.

Sincerely,

JIM JOHNSON
Water Rights Supervisor

JJ:sc

Enclosure

RECEIVED
FEB 2 3 1995

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region

Cecil D. Andrus
Governor

2735 Airport Way
Boise, Idaho 83705
(208) 334-2190

May 8, 1987

63-10022
CITY OF BOISE
DEPT. OF PARKS
1104 ROYAL BLVD.
BOISE, ID 83706

Dear Applicant(s):

We acknowledge receipt of your statement of proof of beneficial use for the above-referenced permit.

Before a license can be issued, a field examination must be made by a representative of this Department. A field examiner will contact you to arrange to examine your system.

If you have any questions regarding the field examination, please contact this office.

Sincerely,

Judy Pense
Secretary

/jp

RECEIVED
FEB 2 3 1996

Sherl L. Chapman

CONSULTANT

410 S. ORCHARD / SUITE 144 / BOISE, IDAHO 83705 / PHONE 344-6690

RECEIVED

JAN 08 1987

Department of Water Reso...

January 6, 1987

Mr. Dave Tuthill
Western Division
Department of Water Resources
Statehouse
Boise, Idaho 83720

Dear Dave:

Enclosed you will find six water right exams for the Boise City Department of Parks. These exams were difficult to make because of the lack of data and access but I believe everything the Department needs is included. If you do need any additional information, however, or clarification, please don't hesitate to give me a call.

Sincerely yours,

Sherl L. Chapman
Consultant

SLC:kje
enclosures

RECEIVED

FEB 23 1996

Idaho Department of Water Resources
Western Region Rec'd 1-9-87
Statehouse
Boise, Idaho 83720

Should questions arise during the processing of this application please contact:

SHERL L. CHAPMAN
410 S. Orchard, Suite 144
Boise, ID 83705
344-6690

Form 219
6/86

Resources
Rec'd 1-9-87

RECEIVED
JAN 08 1987
Department of Water Resources

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

# BENEFICIAL USE FIELD REPORT

## A. GENERAL INFORMATION

Permit No. 63-10022

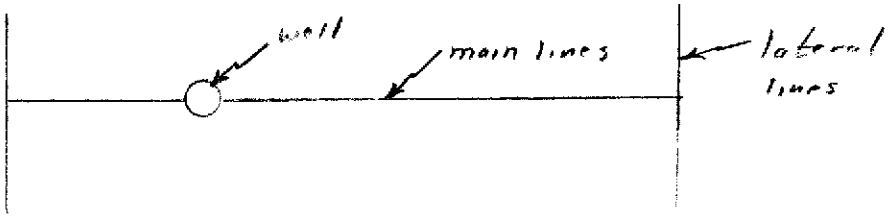
1. Owner: Dept. of Parks - Quarry View Phone No. 384-4240
   Current Address: 1104 Royal Blvd., Boise, ID 83706
2. Accompanied by: Skip Gates EXAM. DATE: 11-12-86
   Address: Same as above Phone No. 384-4240
   Relationship to Permit Holder: Employee
3. Source: Ground Water tributary to ------

## B. OVERLAP REVIEW

1. Other water rights with same place of use: None recorded
   ☐ Copies Attached
2. Other water rights with same point of diversion: None recorded
   ☐ 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




Received
FEB 18 1987

Exam

*Scale: 1" =* Not to scale

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.)

System is used to irrigate the Quary View Park lawn and related greenery. Well is used in conjunction with a buried sprinkler system operated by timer. Pump is a small vertical turbine unit in a vault.

☐ 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 |
|---|---|---|---|---|---|
| 1 | US Electric | 30 | R7183-03-884 | Peerless | 6x6x12 "4" |
| | | | | | |
| | | | | | |
| | | | | | |

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

5. **Point(s) of Diversion:**

| Ident. No. | Gov't. Lot | ¼ | ¼ | ¼ | Sec. | Twp. | Rge. | County | Method of Determination/Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | -- | NW | NE | NW | 13 | 3N | 2E | Ada | Field/Map |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

6. **Place(s) of Use:** Indicate Method of Determination _____

| Twp. | Rge. | Sec. | NE¼ | | | | NW¼ | | | | SW¼ | | | | SE¼ | | | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | NE¼ | NW¼ | SW¼ | SE¼ | |
| 3N | 2E | 13 | | | | | 7.0 | | | | | | | | | | | | 7.0 |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

FEB 2 3 1996

***Do not use this space***

COLLINS TUBE [redacted]SUREMENT

DATE: 11/12/86

OWNER: Boise Parks Dept - Quarry View

CIRCUMFERENCE: _____ OUTSIDE R: 4.10"

PIPE THICKNESS: _____ INSIDE R: 4.0"

| FACTOR | Mr (IR Factor) | Mp | Velocity |
|---|---|---|---|
| 0.949 Y | | | 4.10 |
| 0.837 | | | |
| 0.707 X | | | 4.46 |
| 0.547 | | | |
| 0.316 Y | | | 4.65 |
| 0.316 | | | 4.80 |
| 0.547 | | | |
| 0.707 X | | | 4.50 |
| 0.837 | | | |
| 0.949 Y | | | 4.15 |

$\bar{V}$ = 4.44

Mp = P + Mr - O.R. where P is chosen reference point on collins tube

$Q = \bar{V} \pi (IR)^2$ = .37 cfs = 18.5" = 16.7 gpm

Pumping level Not Available Pump Type USE1

Time Operating _____ RPM _____

Pressure at discharge 50psi Rated Flow

Pump motor type US GPM _____

Serial No. _____ Head _____

Horsepower _____ Access Port

RPM _____ Yes _____

Meter Constants No _____

K = _____ Location _____

Kh = _____

Revolutions _____

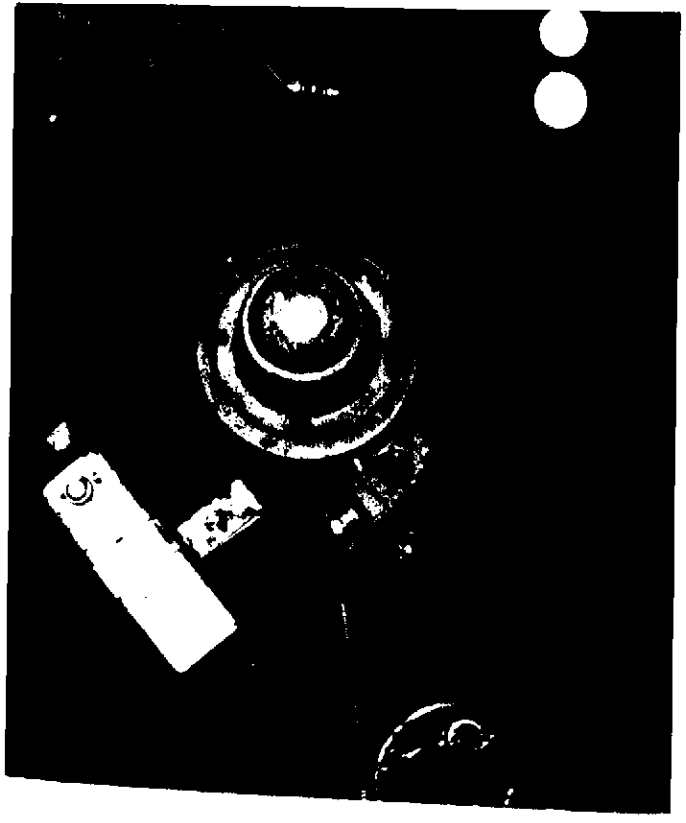
Time (seconds) _____

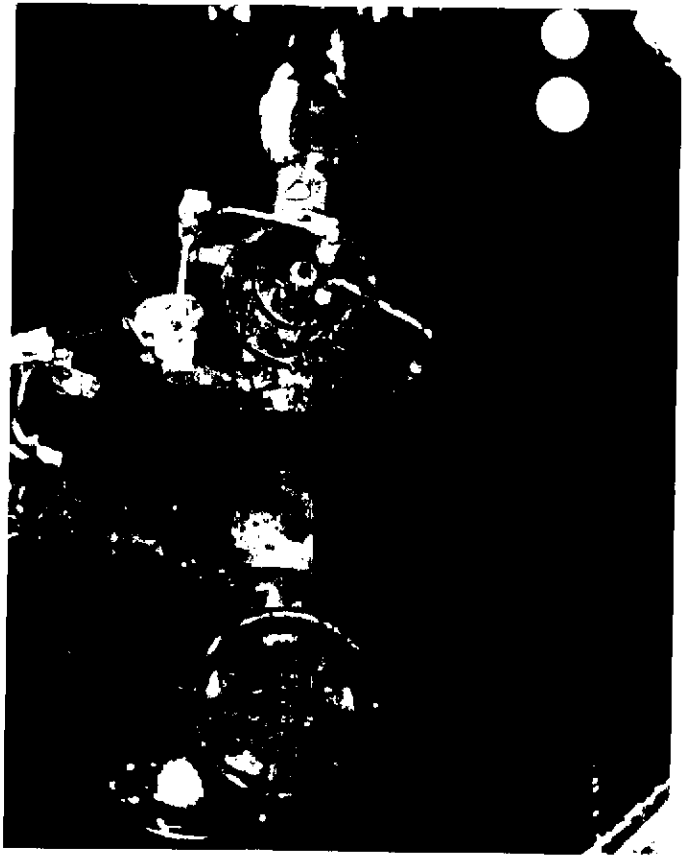
Voltage _____

Amperage

L1 _____ L2 _____ L3 _____

FEB 23 1996





*Do not use this space*

## D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

| Measurement Equipment | Type | Make | Model No. | Serial No. | Size | Calib. Date |
|---|---|---|---|---|---|---|
| Manometer | Air/water | Collins | 36" | --- | --- | --- |
| | | | | | | |
| | | | | | | |
| | | | | | | |

2. **Measurements:**

Flow measured at 50 psi Q = .37 cfs

## E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method:

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 Ampsx .001732 = _____ (6)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

## G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 7 x 4.5 - 31.5

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = 67.7

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = 3.15

2. Volume Calculations for Other Uses:



## H. REMARKS AND OVERLAP REVIEW ANALYSIS

## I. RECOMMENDATIONS

1. **Recommended Amounts**

| Beneficial Use | Period of Use From | Period of Use To | Rate of Diversion Q (cfs) | Annual Volume V (afa) |
|---|---|---|---|---|
| Irrigation | March 15 | Nov. 15 | .14 cfs | 31.5 |
| | | | | |
| | | | | |
| | | | | |
| | | Totals: | .14 | 31.5 |

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 Sheryl L. Chapman

Signature Sheryl L Chapman

Certification Date June 5 1986

Field Report Preparation Date 12/26/86

REGISTERED PROFESSIONAL GEOLOGIST SHERYL L. CHAPMAN NO. 21 CONSULTANT STATE OF IDAHO

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

Sherl L. Chapman

CONSULTANT
410 S. ORCHARD / SUITE 144 / BOISE, IDAHO 83705 / PHONE 344-6690

BDF

RECEIVED
JUL 1 1986
Department of Water Resources

Mr. A. Kenneth Dunn, Director
Idaho Department of Water Resources
Statehouse
Boise, Idaho 83720

Dear Mr. Dunn:

I hereby verify that I have been retained to conduct the water right examination for water right permit # 63-10022 in accordance with the laws and regulations of the State of Idaho.

Sherl L. Chapman

Sherl L. Chapman

Dated: 6-30-86

RECEIVED
JUL 3 1986
Department of Water Resources
Western Regional Office

RECEIVED
JUL 9 1986
Department of Water Resources
Western Regional Office

FEB 23 1996

4/86

Shirl Chapman is conducting exam. BD.

For Office Use Only
Fee Received none
Date 7/1/86
Receipt #
Receipt by
Sent to S.O. 9-11-86

RECEIVED
JUL 1 1986
Department of Water Resources
Western Regional Office

STATE OF IDAHO DEPARTMENT OF WATER RESOURCES

EXAMINATION FEE INFORMATION

RECEIVED
JUL 1 1986
moved. ds
Department of Water Resources

1. Permit No. 63-10022 Quarry View Park

ONE OF THE FOLLOWING BOXES SHOULD BE MARKED TO DESIGNATE YOUR CHOICE:

☐ I choose to have the department make the field examination of this permit; attached is the examination fee. (If this box is marked, complete items 1 thru 8.)

2. Permit Holder: BOISE PARK SYSTEM

3. Post Office Address: 1104 Royal Blvd.

Boise, Idaho 83706 Telephone No. 384-4240

4. Source of Water: Ground Water

5. Extent of Use:

Domestic _____ (No. of households) Stockwater _____ (No. and type of stock)

Irrigation 8 (acres) Other/Remark _____

6. Total rate &/or volume for which proof is submitted 0.6 cfs _____ acre-feet

7. Show the date water was first diverted and beneficially used under this permit:

Fall of 1984

8. Person to contact to accompany the department representative during the field examination:

N/A (Name)

FEB 23 1996
(Address) (Telephone Number)

☒ I choose to have the field examination conducted by a certified water right examiner. Attached is a statement from the certified examiner I have selected verifying that he has been retained to conduct the examination. (If this box is marked, complete items 1 thru 7.)

June 30, 1986 Paul Phillpott Park Designer
Date Signature of Permit Holder (and title, if appropriate)

State of Idaho

Department of Water Resources

LICENSE EXAMINATION FEE SCHEDULE

(c.f.s. = cubic feet per second
AF = acre feet)

| cfs | AF | Fee |
|---|---|---|
| 0 - 0.04 | 0 - 4 | $ 0 |
| .05 - 0.20 | 5 - 20 | 50.00 |
| .21 - 1.0 | 21 - 100 | 100.00 |
| 1.01 - 2.0 | 101 - 200 | 125.00 |
| 2.01 - 3.0 | 201 - 300 | 150.00 |
| 3.01 - 4.0 | 301 - 400 | 175.00 |
| 4.01 - 5.0 | 401 - 500 | 200.00 |
| 5.01 - 6.0 | 501 - 600 | 225.00 |
| 6.01 - 7.0 | 601 - 700 | 250.00 |
| 7.01 - 8.0 | 701 - 800 | 275.00 |
| 8.01 - 9.0 | 801 - 900 | 300.00 |
| 9.01 - 10.0 | 901 - 1000 | 325.00 |
| 10.01 - 11.0 | 1001 - 1100 | 350.00 |
| 11.01 - 12.0 | 1101 - 1200 | 375.00 |
| 12.01 - 13.0 | 1201 - 1300 | 400.00 |
| 13.01 - 14.0 | 1301 - 1400 | 425.00 |
| 14.01 - 15.0 | 1401 - 1500 | 450.00 |
| 15.01 - 16.0 | 1501 - 1600 | 475.00 |
| 16.01 - 17.0 | 1601 - 1700 | 500.00 |
| 17.01 - 18.0 | 1701 - 1800 | 525.00 |
| 18.01 - 19.0 | 1801 - 1900 | 550.00 |
| 19.01 - 20.0 | 1901 - 2000 | 575.00 |
| 20.01 & over | 2001 & over | 600.00 |

Checks should be made payable to the
Department of Water Resources

No fee is required for single family
domestic use or stockwater use.

BOISE CITY PARKS DEPT.
JUN 23 1986

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES
Western Region

Statehouse
Boise, Idaho 83720
(208) 334-2190

JULY 28, 1986

BOISE PARK SYSTEM QUARRY VIEW PARK
1104 ROYAL BLVD.
BOISE ID 83706

RE: Permit No. 63-10022

Dear Permit Holder:

We acknowledge receipt of your statement submitted as proof of beneficial use for the above referenced permit.

Before a license can be issued, a field examination must be made by a representative of this department.

A field examiner will contact you to arrange to examine your system.

If you have any questions regarding the field examination, please contact this office by phone at 334-2190 or in person in the third floor State Towers Building, 450 West State Street, Boise.

Sincerely,
s/Judy Pense
Secretary

RECEIVED
FEB 2 3 1986

State of Idaho

# DEPARTMENT OF WATER RESOURCES

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Boise Park System
1104 Royal Blvd.
Boise, ID 83706

63-10022

138815

June 19, 1986

CERTIFIED MAIL

EXAMINATION FEE NOTICE

Dear Permit Holder:

Department records show that proof of beneficial use has been submitted for the above-referenced permit, but that a field examination has not yet been conducted to determine the extent of beneficial use of the water for licensing purposes.

House Bill 671 (effective April 4, 1986) enacted by the 1986 Idaho Legislature requires the payment of a fee before this department can conduct the field examination needed to issue a license confirming use of water under the permit. This letter is notification that the license examination fee is due within sixty (60) days of the date of this letter. The examination fee information sheet (enclosed) must be returned with the fee.

As an alternative to submitting the fee, the department will accept a field examination report completed by a certified water right examiner from the private sector. If you choose to have the examination done by a certified water right examiner, you need not submit the license examination fee to the department, but you must within sixty (60) days of the date of this letter return to the department, the examination fee information sheet showing appropriate information together with a statement from the certified examiner to verify that you have retained a certified examiner to conduct the field examination. If you choose this alternative, a completed field examination report must be submitted within one year of the date of this letter. You cannot later change your decision to use this alternative and submit the fee needed for the department to conduct the field examination, but you may change to another certified examiner.

Certified water right examiners are licensed engineers or geologists certified by the department to conduct water right examinations. The procedure for certifying examiners results from the recently enacted HB 671 and is being developed at this time. A listing of certified water

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right examiners will be available from this department when examiners have been certified.

If your permitted use, in fact, has already been examined by the department and you have not asked to have the examination repeated, the fee requirement is not applicable to your permit. If you believe this is the case, please contact the department.

The license examination fee is to be based on the amount of water you indicate you have developed, as listed in item 6 on the examination fee information sheet. The amount of water on which the examination fee is based can be less than the permitted amount, if less water has been diverted and beneficially used. The licensed amount of water, however, will not exceed the amount you claim on the examination fee information sheet. The enclosed license examination fee schedule shows a listing of applicable fees.

FAILURE TO SUBMIT WITHIN THE SIXTY (60) DAY PERIOD, THE FEE OR THE STATEMENT THAT A CERTIFIED EXAMINER HAS BEEN RETAINED TO MAKE THE FIELD EXAMINATION, WILL BE CAUSE TO ADVANCE THE PRIORITY OF THE PERMIT ONE DAY FOR EACH DAY THAT THE FEE SUBMITTAL IS LATE.

FAILURE TO SUBMIT THE FEE OR THE COMPLETED FIELD EXAMINATION REPORT WITHIN A YEAR WILL BE CAUSE TO CONSIDER THE PROOF OF BENEFICIAL USE TO BE INCOMPLETE AND TO LAPSE THE PERMIT.

The attached examination fee information sheet and the fee may be submitted to the following department offices.

Northern Region
Idaho Dept. of Water Resources
4055 Government Way
Coeur d'Alene, ID 83814
Phone: 765-4639

Eastern Region
Idaho Dept. of Water Resources
150 Shoup Ave., Suite 15
Idaho Falls, ID 83401
Phone: 525-7161

Southern Region
Idaho Dept. of Water Resources
1041 Blue Lakes Blvd. North
Twin Falls, ID 83301
Phone: 734-3578

Western Region
Idaho Dept. of Water Resources
450 W. State St., (Third Floor)
Boise, ID 83720
Phone: 334-2190

Sincerely,

L. Glen Saxton

L. GLEN SAXTON
Chief, Operations Bureau

Enclosures

MICROFILMED

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

STATEHOUSE
BOISE, IDAHO 83720
(208) 334-4440
CERTIFIED MAIL
MARCH 31, 1986

138083

BOISE PARK SYSTEM
1104 ROYAL BLVD.
BOISE, ID 83706

PROOF DUE NOTICE

RE: PERMIT NO. 63-10022

DEAR PERMIT HOLDER:

ONE OF THE CONDITIONS OF APPROVAL OF THE ABOVE REFERENCED WATER PERMIT WAS THAT PROOF OF THE EXTENT OF YOUR BENEFICIAL USE MUST BE SUBMITTED TO THIS OFFICE ON OR BEFORE JUNE 1, 1986. (SEE LAST PAGE OF YOUR APPROVED PERMIT OR YOUR LAST APPROVED EXTENSION REQUEST.) ENCLOSED IS A FORM WHICH MAY BE USED TO SUBMIT THE REQUIRED PROOF.

IF YOU HAVE NOT FULLY COMPLETED YOUR PROJECT, AND YOU OR A PREVIOUS OWNER OF THIS PERMIT HAVE NOT RECEIVED A PRIOR EXTENSION OF TIME, YOU MAY REQUEST AN EXTENSION OF TIME IF THE DELAY IS FOR REASONABLE CAUSE AS PROVIDED IN SECTION 42-204, IDAHO CODE. IF YOU HAVE BEEN PREVENTED FROM PROCEEDING BY A GOVERNMENTAL AGENCY OR BY LITIGATION WHICH MIGHT BRING TITLE TO THE WATER IN QUESTION, MORE THAN ONE EXTENSION OF TIME CAN BE GRANTED. AN EXTENSION OF TIME REQUEST FORM IS ENCLOSED FOR YOUR CONVENIENCE.

EITHER A COMPLETED PROOF OF BENEFICIAL USE FORM OR A REQUEST FOR AN EXTENSION OF TIME MUST BE RECEIVED BY THIS DEPARTMENT ON OR BEFORE THE ABOVE DESCRIBED PROOF DUE DATE. IF NEITHER IS RECEIVED, THE DEPARTMENT WILL SEND YOU A LAPSE NOTICE. WITHIN SIXTY (60) DAYS OF THE MAILING OF THE LAPSE NOTICE, THE PERMIT WILL NO LONGER BE OF ANY FORCE NOR EFFECT.

SINCERELY,

RITA FLECK
SECRETARY/RECORDS MANAGER

ENCLOSURES

MICROFILMED

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

STATEHOUSE
BOISE, IDAHO 83720
(208) 334-4440

BOISE PARK SYSTEM
1104 ROYAL BLVD.
BOISE, ID 83706

JUNE 21, 1983

RE: PERMIT NO. 63-10022

DEAR PERMIT HOLDER:

ENCLOSED IS A COPY OF YOUR APPROVED APPLICATION FOR PERMIT. WE DIRECT YOUR ATTENTION TO THE CONDITIONS OF APPROVAL ON THE FOURTH PAGE.

THE 1982 IDAHO LEGISLATURE ADDED A REQUIREMENT THAT AS A PERMIT HOLDER YOU MUST COMMENCE THE EXCAVATION OR CONSTRUCTION OF DIVERTING WORKS WITHIN ONE YEAR OF THE DATE THE PERMIT WAS ISSUED, AND YOU MUST PROCEED DILIGENTLY UNTIL THE PROJECT IS COMPLETED. THE ENCLOSED BLUE CARD MUST BE COMPLETED AND RETURNED TO THIS OFFICE AS SOON AS YOU COMMENCE CONSTRUCTION, NO LATER THAN ONE YEAR FROM THE DATE THE PERMIT WAS APPROVED.

WE HAVE ENCLOSED INSTRUCTIONS ENTITLED "MAKING PROOF OF BENEFICIAL USE". PLEASE READ THE INSTRUCTIONS CAREFULLY SINCE YOU MUST TAKE FURTHER ACTION TO DEVELOP THIS PERMIT INTO A LICENSE.

SINCERELY,

DAVID R. TUTHILL, JR., P.E.
SUPERVISOR, WATER ALLOCATION SECTION

ENCLOSURE

MICROFILMED

State of Idaho
DEPARTMENT OF WATER RESOURCES
WESTERN REGION, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-2190

April 28, 1983

William A. Scribner
Bureau of Navigable Waters
IDAHO DEPARTMENT OF LANDS
Statehouse
Boise, ID 83720

Re: No. 63-10022

Dear Mr. Scribner:

Enclosed is a copy of the above referenced application for permit which may be of interest to your agency. Please review the application and submit any comments you may have.

This office normally completes the processing of an application within a six-week period and is required to take final action shortly thereafter, however, if your agency desires to file a formal protest against the approval of this application, your written protest must be received in this office by May 23, 1983.

If you have any questions regarding the application, please contact this office.

Sincerely,

DAVID B. SHAW
Western Regional Supervisor

DBS:jp

Enclosure

MICROFILMED

63-10022

BOISE PARK SYSTEM
QUARRY VIEW PARK

1104 ROYAL BLVD., BOISE, ID 83706

Source: GROUNDWATER

Date Filed: 04/20/1983

Diversion Pt: NENW Sec 13 T 03N R 02E

Use: IRRIGATION (0.60 CFS)

In: NENW Sec 13 T 03N R 02E FOR 8 ACRES