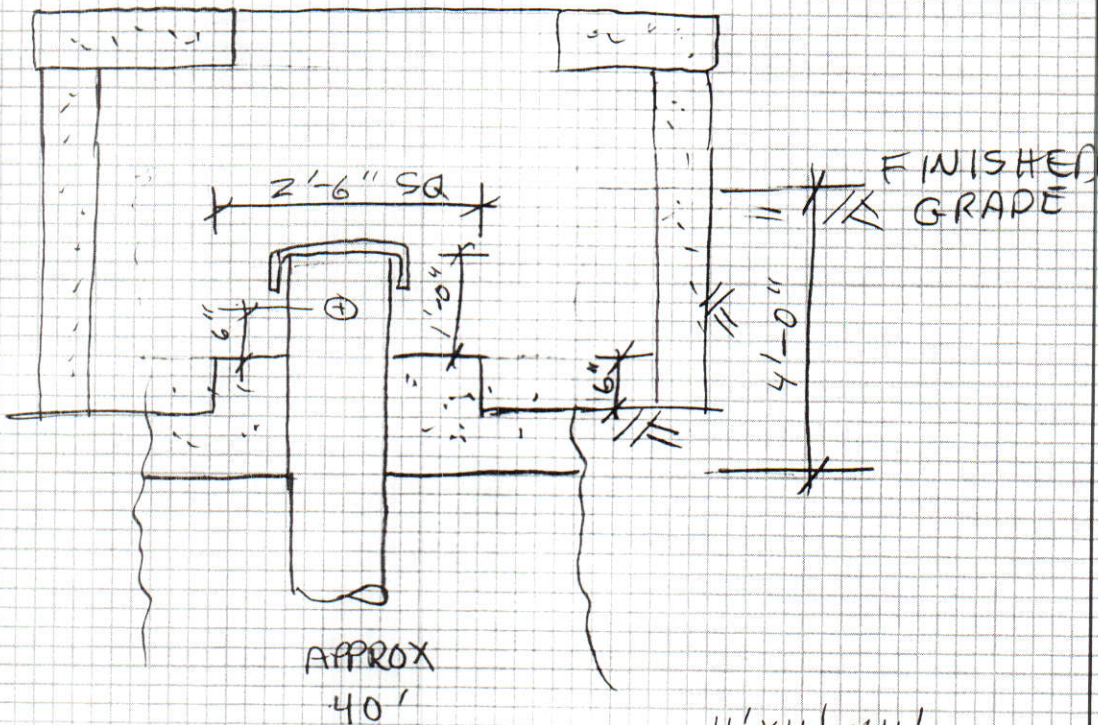


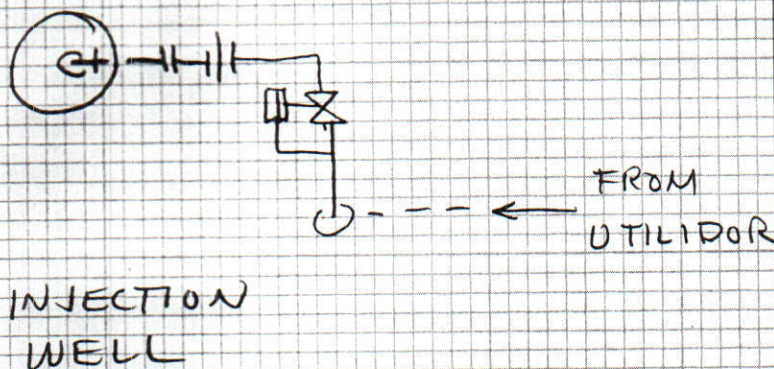
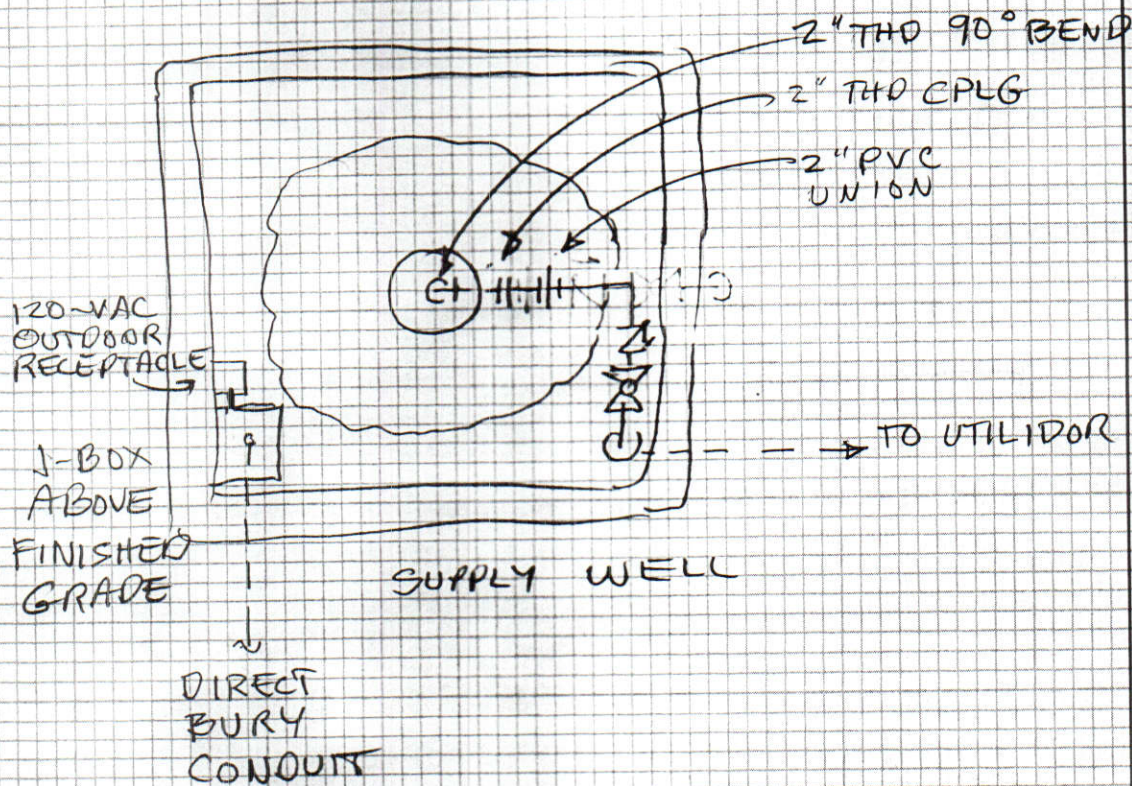


4'x4'x4'
PRECAST VAULT
NO BOTTOM
METAL COVER

WELL HEAD PROTECTION VAULT
SECTION

MICROFILMED
L-23 1996

DATE CHECKED	CHECKED BY	JOB NUMBER	BY	DATE	CALC. NO.	SHEET NO. 2/3
PROJECT		SUBJECT				



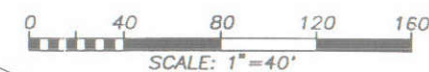
WELL HEAD PROTECTION VAULT
PLAN

MICROFILMED
DEC 23 1995

DATE CHECKED	CHECKED BY	JOB NUMBER	BY	DATE	CALC. NO.	SHEET NO. 3/4
PROJECT		SUBJECT				

NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING MONUMENTS AND CONTROL POINTS.
2. CONTRACTOR WILL BE REQUIRED TO PULL EXISTING SPRINKLER HEADS PRIOR TO STAGING EQUIPMENT.



SEE NOTE 1

FOR FUEL OIL PIPING
SEE PARTIAL PLAN
SHEET L-OPR-ME-0133

EXISTING DIESEL FUEL TANK.
FOR DETAILS IN THIS AREA
SEE OPR-ME-0133

CONTRACTOR STAGING AREA

SEE "AER"
DRAWINGS

SEE "OPR"
DRAWINGS

SEE NOTE 1

SEE NOTE 1

8" DI
DEWATERING

SEE "PCL"
DRAWINGS

INTERMEDIATE
PUMP STATION
SEE "AER"
DRAWINGS

FOR ODOR SCRUBBER, SEE
DRAWING L-PCL-ME-0100

FOR PIPING MODIFICATIONS
IN THIS AREA SEE "SCL"
DRAWINGS

FOR ODOR SCRUBBER, SEE
DRAWING L-SDR-ME-0061

FOR SECONDARY DIGESTER
MODIFICATIONS, SEE "SDR"
DRAWINGS

LOCATION OF EXISTING
BOILER REFER TO "EL",
PID DRAWINGS &
SPECIFICATIONS, SEE
"PDR" DRAWINGS

SEE NOTE 1

CONTROL POINT
SEE NOTE 1

SEE NOTE 2

CONTRACTOR
STAGING AREA

EXISTING
CONTRACTOR
LAYDOWN AREA

SCALE
AS SHOWN
DATE
NOV 1995
DRAWN
L-YRD



700 CLEARWATER LANE
P.O. BOX 8748
BOISE, IDAHO 83707
(208) 345-5310

PROJECT NO.
113318.Z1

SHEET
OF 157

VERIFY SCALES

(LINE IS 2-INCHES AT FULL SIZE
(IF NOT 2" - SCALE ACCORDINGLY))

DRAWN: B.W. CLEGG
DESIGNED: S.F. CLARK
CHECKED: K. ERICKSON
PCP FILE: TMSFULL.PCP



150 N. CAPITOL BLVD.
BOISE, IDAHO 83702
(208) 384-3900

ZONE	REV.	DESCRIPTION	REVISIONS	BY	DATE	APP.

CITY OF BOISE, IDAHO
LANDER STREET WWTF
AERATION BASIN AND
BLOWER MODIFICATIONS

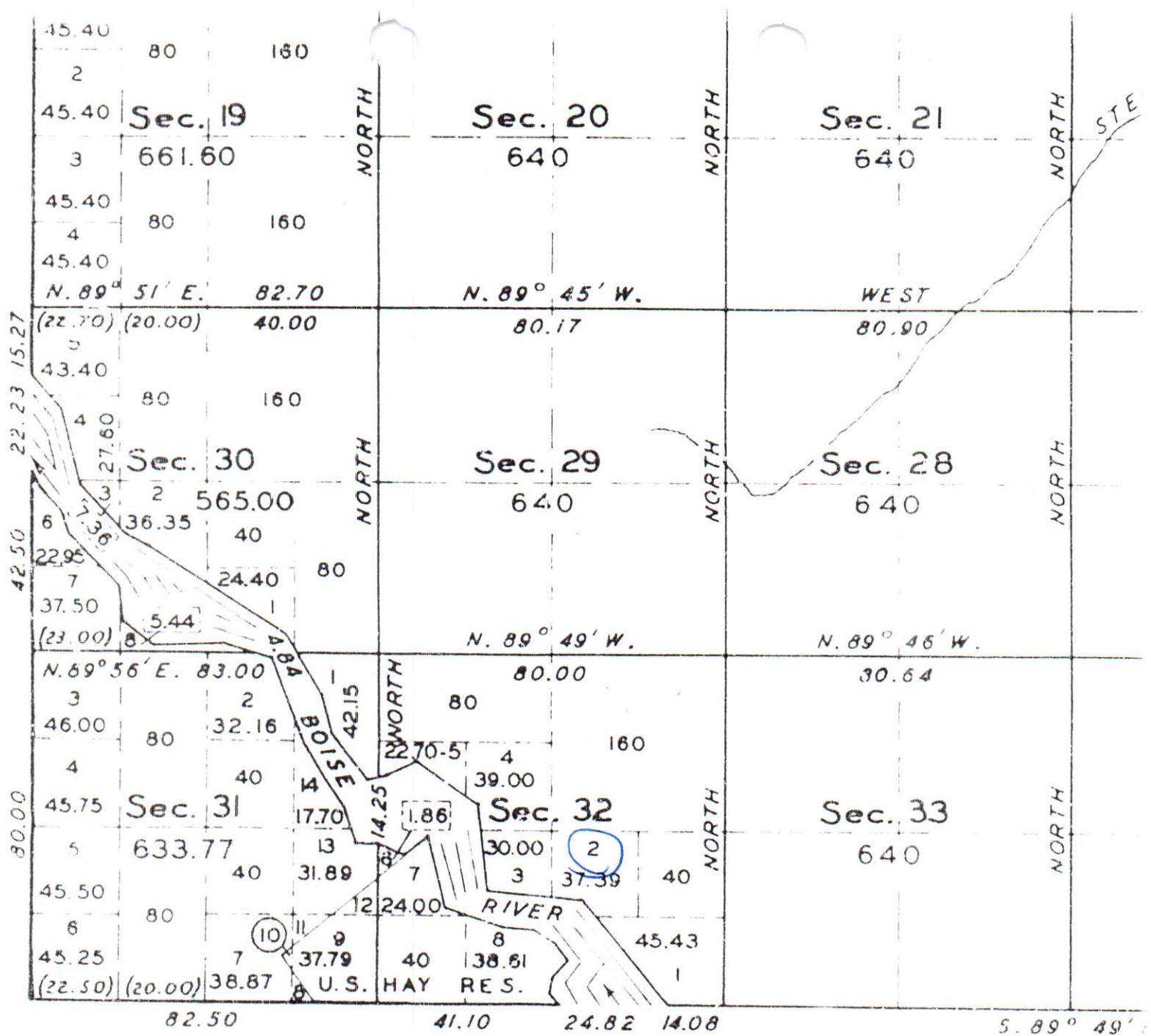
MECHANICAL YARD PIPING PLAN

SCALE
AS SHOWN
DATE
NOV 1995
DRAWING NUMBER
L-YRD-ME-0124

CAD FILE NO.
LYRME124.DWG
PROJECT NO.
CSP 705



1 Mile Radios Around
Lander St. W.W.T.P

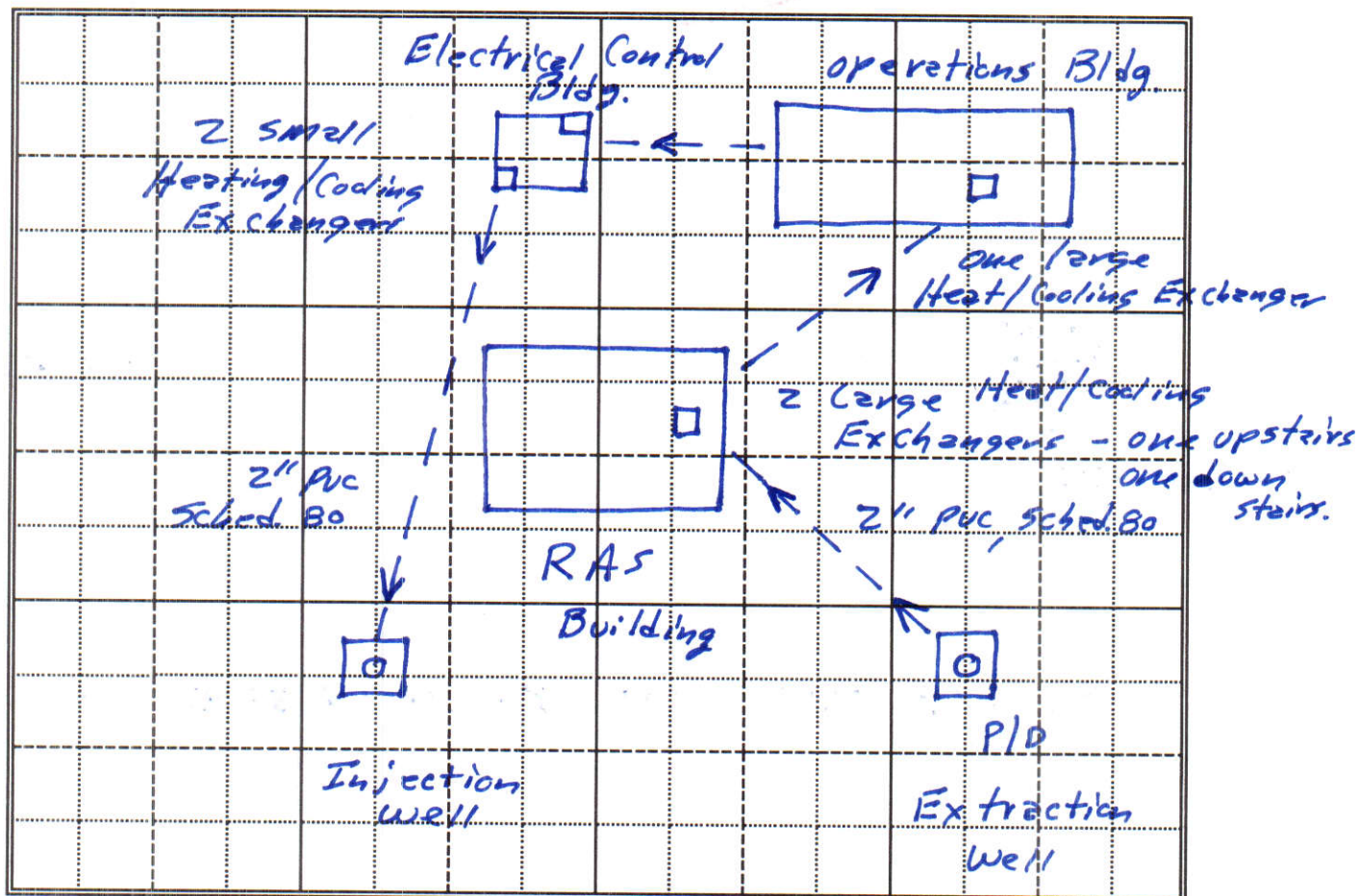


MADE FROM THE OFFICIAL RECORD

63-12351

MICROFILMED
DEC 23 1996

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = NONE

☒ Copy of USGS 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)

☒ 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
Extraction	Franklin	5	Model 2343278304	F.E. Myers	Cat. # J5080B

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

D. FLOW MEASUREMENTS

1.

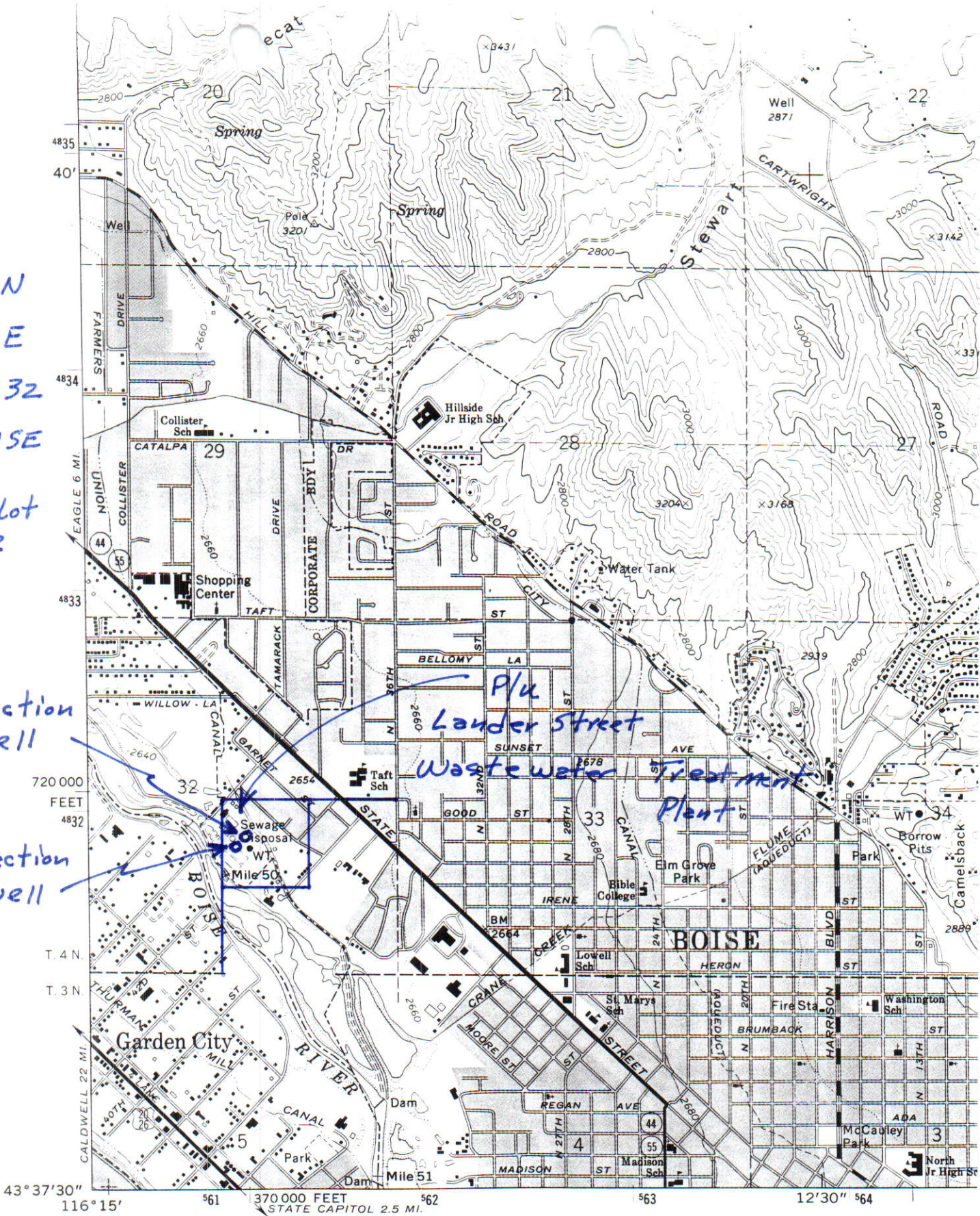
Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: None, closed loop system operates at 40 psi.

T4N
R2E
Sec. 32
NWSE
Gov. Lot
2

P/D
Production
well

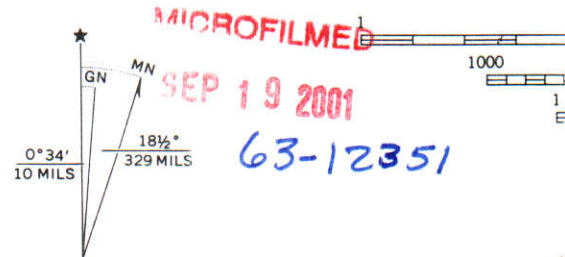
Injection
well



(CLOVERDALE)
2771 III SE

Mapped, edited, and published by the Geological Survey
Control by USGS and NOS/NOAA
Topography by photogrammetric methods from aerial
photographs taken 1971. Field checked 1972
Supersedes map dated 1954

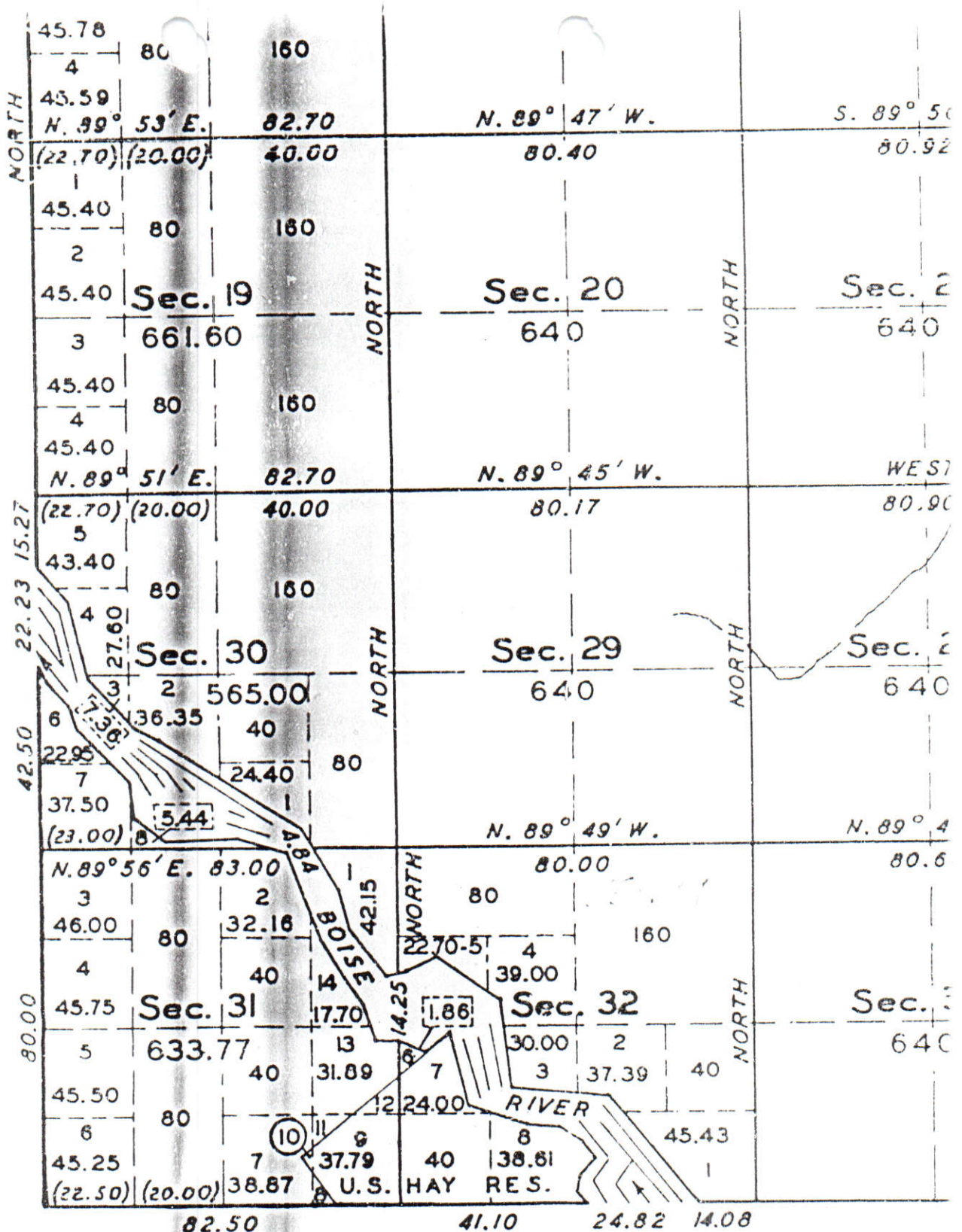
Projection and 10,000-foot grid ticks: Idaho coordinate
system, west zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue. 1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 15 meters north and



UTM GRID AND 1972 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

FOR SALE BY U. S. G

T4N
R2E
Sec. 32
NW SE
Lot 2



80
0 AN INCH
ATION 18° 45' E.

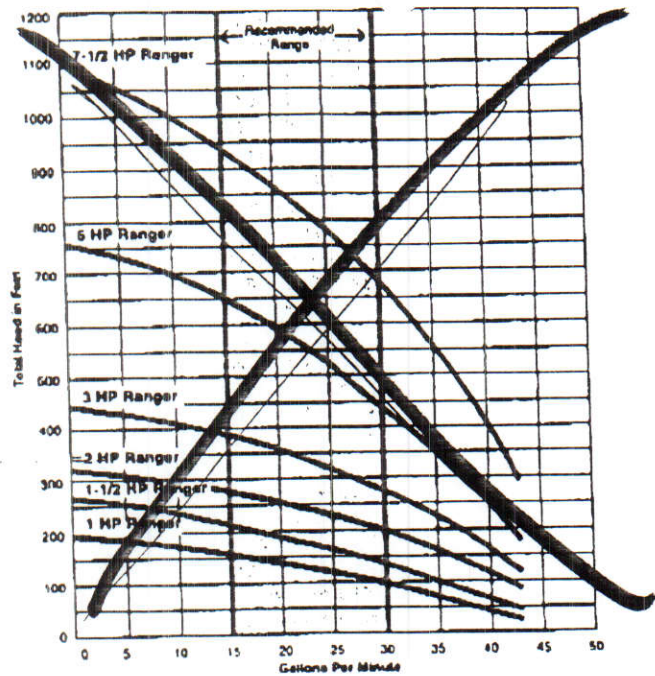
LOT 8 1.26
LOT 10 1.13
LOT 11 0.95
LOT 12 7.37

MADE FROM THE OF

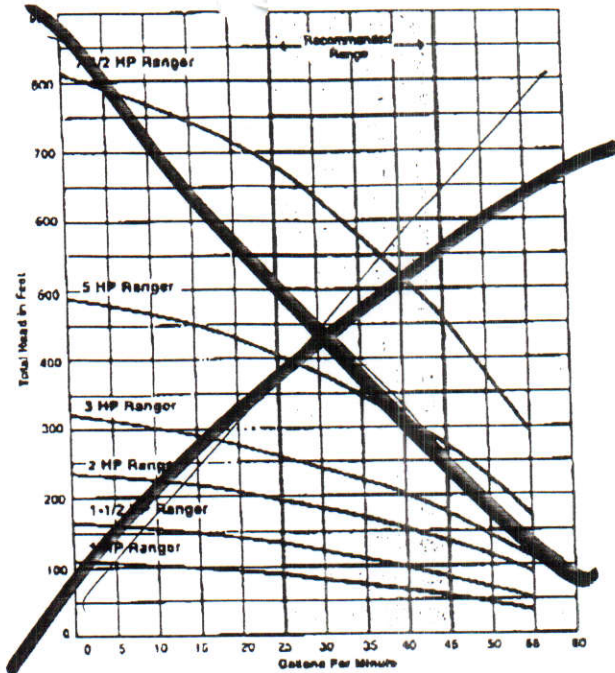
MICROFILMED
SEP 19 2001

63-12351

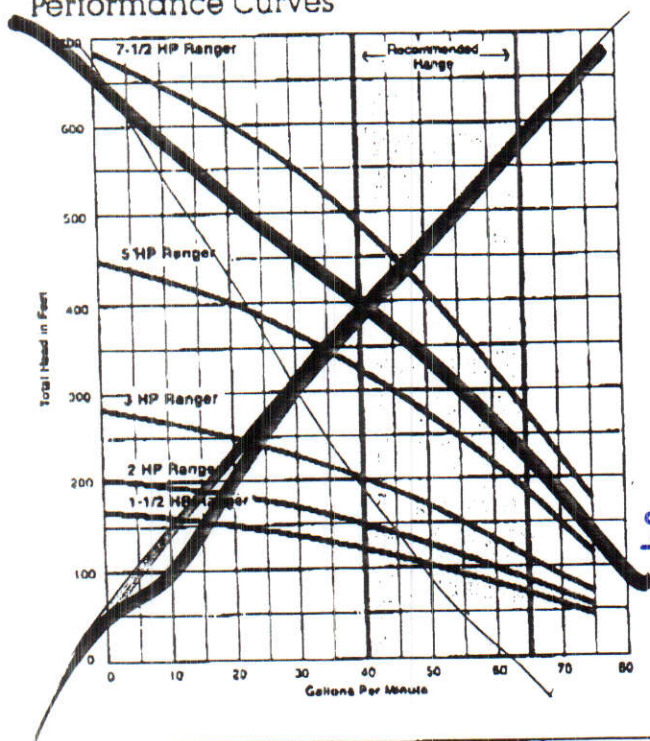
25 GPM Ranger Series Performance Curves



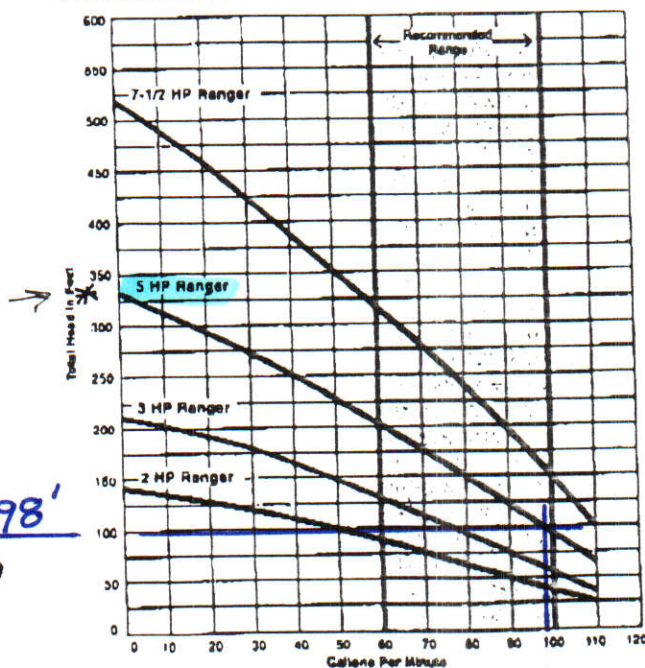
35 GPM Ranger Series Performance Curves



50 GPM Ranger Series Performance Curves



80 GPM Ranger Series Performance Curves



Production (Extraction)
Well Pump.

80 GPM Ranger Series
5 HP J5080B
F.E. Myers Co.

MICROFILMED

63-12351

SEP 19 2001

98 GPM

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

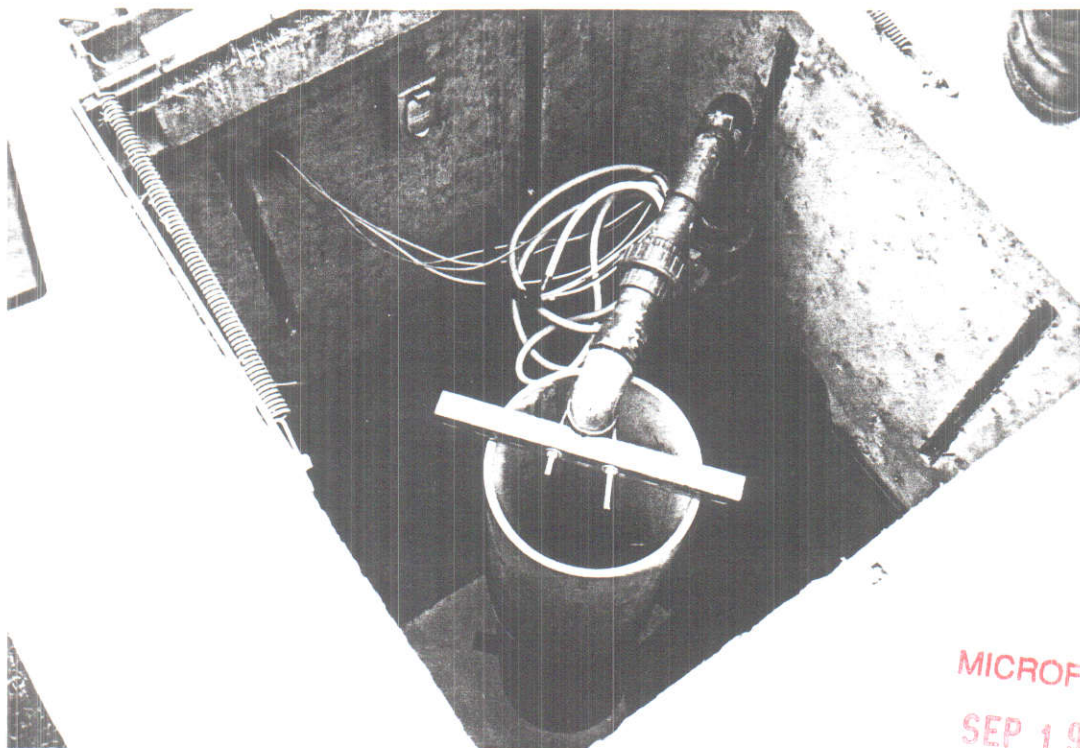
9. REMARKS:

This well is a production well for Heating and Cooling of buildings at the Lander Street Wastewater Treatment Plant. The well was used for de-watering during construction and then modified for use as a production well.

Wan Zomick Water Rights Examiner
Signature of Dept. Representative & Title

6-16-98
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:



MICROFILMED
SEP 19 2001

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

9. REMARKS:

This well is an injection well for Heating and Cooling of buildings at the Lander Street Wastewater Treatment Plant. The well was used for de-watering during construction and then modified for use as an injection well.

Don Tomich Water Right Examiner
Signature of Dept. Representative & Title

6-16-98
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:



MICROFILMED

SEP 19 2001

1 of 4

P/D

Extraction
well
in Concrete
Box in
foreground.

RAS

Building
in
background
(Plu)



P/D

Extraction
well



MICROFILMED
SEP 19 2001

63-12351

2 of 4
P/u
RAS
Building

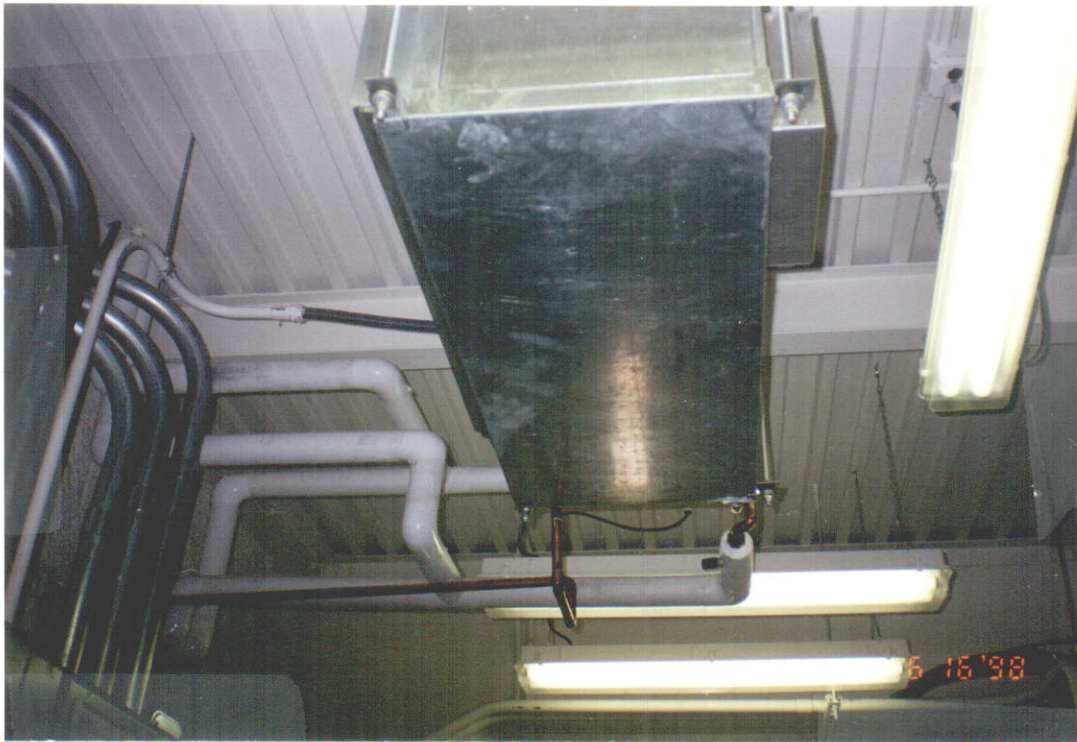


P/u
Operations
Building



MICROFILMED
SEP 19 2001
63-12351

3 of 4



P/u
one of
Large
H/c
Exchangers
in
RAS
Bldg.



P/u
one of
Small
H/c
Exchangers
in
Electrical
Control
Bldg.

4 of 4

Injection
Well
in
Concrete
Box



Injection
Well



MICROFILMED

SEP 19 2001

63-12351

State of Idaho
Department of Water Resources
Water Right License

WATER RIGHT NO. 63-12351

Priority: July 01, 1996

Maximum Diversion Rate: 0.10 CFS
Maximum Diversion Volume: 72.4 AF

It is hereby certified that CITY OF BOISE
PUBLIC WORKS DEPT
PO BOX 500
BOISE ID 83701-0500 has complied with the terms and
conditions of the permit, issued pursuant to Application for Permit dated July 01, 1996; and has
submitted Proof of Beneficial Use on November 06, 1997. An examination indicates that the works have
a diversion capacity of 0.32 cfs of water from:

SOURCE

GROUND WATER

and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL DIVERSION VOLUME</u>
COOLING	01/01 to 12/31	0.10 CFS	72.4 AF
HEATING	01/01 to 12/31	0.10 CFS	72.4 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER L2 NW¼SE¼ Sec. 32, Twp 04N, Rge 02E, B.M., ADA County

GROUND WATER L2 NW¼SE¼ Sec. 32, Twp 04N, Rge 02E, B.M., ADA County (Injection)

PLACE OF USE: COOLING

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
04N 02E 32														X			
														L 2			

PLACE OF USE: HEATING

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
04N 02E 32														X			
														L 2			

CONDITIONS OF APPROVAL

1. Return flow discharged to a subsurface system must be authorized by a separate injection well permit.

MICROFILMED

SEP 19 2001

MICROFILMED

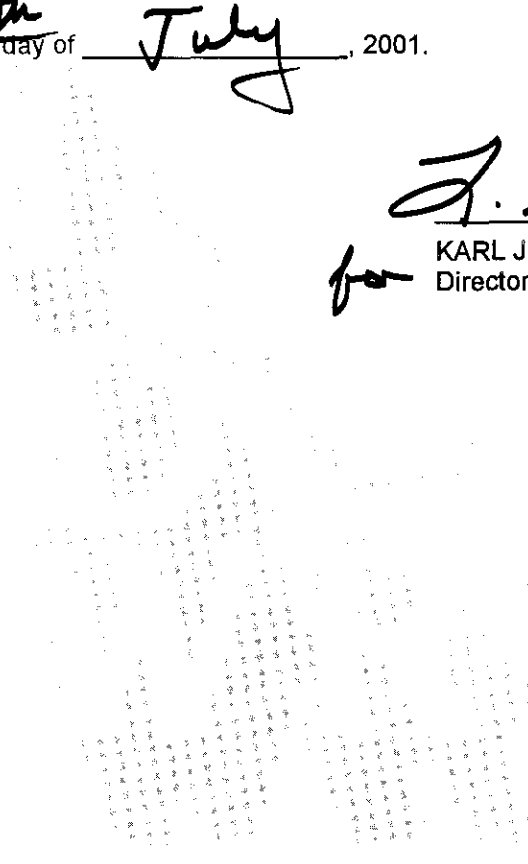
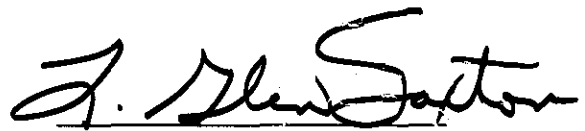
State of Idaho
Department of Water Resources
Water Right License

WATER RIGHT NO. 63-12351

2. Heating and cooling uses are for an electrical room, a control room, and a two story building at Lander Street Waste Water Treatment Facility.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed and sealed this 9th day of July, 2001.



for **KARL J. DREHER**
Director

SEP 19 2001

STATE OF IDAHO
IDAHO DEPARTMENT OF WATER RESOURCES
NOTICE OF CHANGE OF WATER RIGHT OWNERSHIP

RECEIVED

Please print or type. Attach pages with additional information. Instructions are on the back of this page.
Incomplete forms will be returned.

MAR 25 1999

**WATER RESOURCES
WESTERN REGION**

Water Right or Adjudication Claim No(s): See Attached Sheet

The following **REQUIRED** information must be submitted with this form:

A. A copy of the most recent **DEED, TITLE POLICY, CONTRACT OF SALE** or other legal document indicating your ownership of the property and water rights or claims in question, **WITH ATTACHED LEGAL DESCRIPTION.**

AND

B. **PLAT OF PROPERTY** or **SURVEY MAP** for parcel of ten acres or less. (These are usually attached to your deed or on file with the county.)

OR

C. For water rights or adjudication claims involving ten or more irrigated acres, a USDA Farm Service Agency **AERIAL PHOTO** with irrigated acres outlined and point(s) of diversion clearly marked.

3. Name and Address of Former Owner/Claimant See Attached Sheet

4. New Owner/Claimant(s) City of Boise

New Mailing Address Public Works Dept.

City, State and ZIP Code P.O. Box 500
Boise, ID 83701-0500

New Telephone Number (208) 384-3901

5. Date you acquired the property ---

6. If you have acquired only a portion of the former owner's property, IDWR may need to split the water right(s) or adjudication claim(s). If this applies, describe in detail your portion of each water right or adjudication claim in the spaces below. If necessary, attach additional pages.

Number of acres you irrigate _____ Number and type of stock _____

Diversion rate in CFS _____ Number of homes _____ Other uses _____

If a water right or adjudication claim is being split and you are not sure how to identify your portion of the original right or claim, please contact the nearest IDWR office for assistance.

7. Signature of New Owner or Claimant(s) 

Corporations or other organizations must submit a list of directors and/or officers demonstrating authority to sign this form.

8. For Snake River Basin Adjudication Claims: Please attach a Notice of Appearance completed by your attorney, if you wish IDWR to correspond with him or her for all matters related to your claims.

MICROFILMED

SEP 19 2001

Handwritten notes:
Name change only
ADDRESS change

City of Boise
Public Works Department
Water Rights/Adjudication Claims

✓ 63-09139 ✓	City of Boise P.O. Box 500 Boise, ID 83701	A63-07078B ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550
✓ 63-12351 ✓	City of Boise	A63-07755 ✓	City of Boise PO Box 500 Boise, ID 837010500
✓ 63-12312 ✓	City of Boise Public Works Dept PO Box 500 Boise, ID 83701-0550	A63-08130B ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550
A63-08125 ✓	City of Boise Wastewater Treatment Plant 11818 Joplin Rd. Boise, ID 83704	A63-09243 ✓	City of Boise PO Box 500 Boise, ID 837010500
A63-07005B ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550	A63-09359 ✓	City of Boise PO Box 500 Boise, ID 837010500
A63-07042B ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837-10500	A63-15489	City of Boise PO Box 500 Boise, ID 837010500
A63-07053 ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550	A63-15491	City of Boise PO Box 500 Boise, ID 837010500
A63-07055C ✓	City of Boise PO Box 500 Boise, ID 837010500	A63-15492	City of Boise PO Box 500 Boise, ID 837010500
A63-07055D ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550	A63-18683	City of Boise PO Box 500 Boise, ID 837010500
A63-07064A ✓	City of Boise PO Box 500 Boise, ID 837010500	A63-30137B	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550
A63-07064B ✓	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550	A63-30138	City of Boise Attn: D. Strickling/B. Ancell PO Box 500 Boise, ID 837010550

FOR OFFICE USE ONLY
Amt. of Fee \$: 50.00
Receipt No. W023220
Receipt By: —
Date Received: 11-6-97

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

NO ✓
RECEIVED

DEC 05 1997

PROOF OF BENEFICIAL USE

The Idaho Department of Water Resources considers this form a statement that the permit holder(s) has/have completed all development that will occur under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below. This form must be accompanied by a license examination fee, when necessary, or be accompanied by a completed field examination report prepared by a certified water right examiner who has been appointed by the department.

1. Permit No. 63-12351 Telephone No. (208) 384-4262

2. Name(s) of Permit Holder(s): City of Boise

3. Mailing Address: 790 Lander Street, Boise, Idaho 83703

4. Source of Water: Groundwater If **GROUNDWATER** (well), Date Drilled: mo. 09 / yr. 95

a. Well Driller: Donald Murphy Contractor's Inc Drilling Permit Number: 63 . W . 0138

b. **OPTIONAL:**
Pump Horsepower: _____ Pressure (psi): _____ Dynamic pumping level (ft): _____

5. Use(s) (as authorized by the water right permit):

Domestic (No. of households): n/a Stockwater (No. and type of stock): n/a

Irrigation (No. of acres): n/a Other: Injection well closed loop heat pump return

6. Total rate of diversion and/or volume for which proof is submitted: .1 cfs OR _____ acre feet

7. Measuring Device Requirement: (refer to the approval conditions on your permit and respond accordingly)
(This question is not optional. Please check either yes or no. Proofs returned not checked accordingly, will be considered incomplete)

Measuring Device: Is a measuring device required? Yes _____ or No x
Has the measuring device been installed? Yes _____ or No x

Flow Measurement Port: Is a flow measurement port required? Yes _____ or No x
Has the measurement port been installed? Yes _____ or No x

8. Fee Enclosed: \$ 50.00 (See Fee Schedule on back of the instructions for filing proof of beneficial use)

9. Person to contact to accompany the Department representative during field examination of the water system.

Name: William E. Duncan Telephone Number: (208) 384-4335

Address: 790 Lander St. Boise, Idaho 83703

10. The information given on this form is my true statement of the extent to which the above numbered permit has been developed and I relinquish any undeveloped portion of the permit to the State of Idaho.

Signature of permit holder: William E. Duncan Date: 10-17-97
(include your title, if on behalf of company of organization)

FEB 26 1998

State of Idaho
Department of Water Resources
Permit To Appropriate Water

NO. 63-12351

Proposed Priority: July 1, 1996

Maximum Diversion Rate:

0.10 CFS

This is to certify, that **CITY OF BOISE**
790 LANDER ST
BOISE ID 83703

has applied for a permit to appropriate water from: **GROUNDWATER**

and a permit is **APPROVED** for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
HEATING	01/01 to 12/31	0.10 CFS
COOLING	01/01 to 12/31	0.10 CFS
	Totals	0.10 CFS

LOCATION OF POINT(S) OF DIVERSION: Lot 2(NWSE), Sec. 32, Township 04N, Range 02E
ADA County

PLACE OF USE: HEATING

TWN RGE SEC

04N 02E 32 Lot 2(NWSE)

PLACE OF USE: COOLING, same as HEATING use

CONDITIONS OF APPROVAL AND REMARKS

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before **December 1, 1997**.
2. Subject to all prior water rights.
3. The point of diversion identified in this right is located within the boundaries of the Boise Front Low Temperature Geothermal Resource Groundwater Management Area. The well driller shall monitor water temperatures while drilling the well. If water with a temperature greater than 85 degrees Fahrenheit is encountered by the driller, drilling must immediately cease, and the Department must be notified. Drilling shall not resume until the Department has reviewed the drilling conditions, and established standards for construction with the driller.
4. Water bearing zone to be appropriated is 20 to 40 feet; all flows to be reinjected into same zone.
5. Heating and cooling uses are for an electrical room, a control room, and a two story building at Lander Steet Waste Water Treatment Facility.
6. Return flow discharged to a subsurface system must be authorized by a separate injection well permit.

MICROFILMED

DEC 23 1986

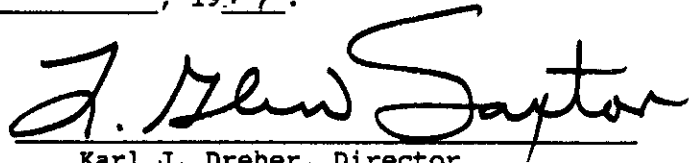
State of Idaho
Department of Water Resources

Permit To Appropriate Water

NO. 63-12351

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.
Witness the signature of the Director, affixed at Boise, this

12 th day of December, 1996.



Karl J. Dreher, Director

for

MICROFILMED

DEC 23 1996

RECEIVED

SEP 30 1996

Ident. No. 63-12351

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: CITY OF BOISE
Address: 790 LANDER ST
BOISE ID 83703
208-384-4261
2. Source: GROUNDWATER Trib. to:
3. Location of Point of Diversion: Lot 2(NWSE), Sec. 32, Township 04N, Range 02E
ADA County
4. Water will be used for the following purposes:
- | Purpose | From | To | CFS | (or) | AF |
|---------|-------|-------|-------|------|----|
| HEATING | 01/01 | 12/31 | 0.100 | | |
| COOLING | 01/01 | 12/31 | 0.100 | | |
5. Total quantity to be appropriated is:
0.100 CFS (and/or) AF
6. Proposed diverting works:
- Description of ditches, flumes, pumps, headgates, etc.
WELL AND PUMP.
 - Height of storage dam feet; active reservoir capacity
acre-feet; total reservoir capacity acre-feet; period of
year when water will be diverted to storage: to inclusive.
 - Proposed well diameter is inches; proposed depth of well is
feet.
 - Is groundwater with a temperature greater than 85F being sought? NO
 - If well is already drilled, when? 09/30/1995
Drilling Firm DONALD MURPHY CONTRACTOR'S INC.
Well was drilled for CITY OF BOISE
7. Time required for the completion of the works and application of
the water to the proposed beneficial use is 1 year(s).
8. Place of Use: HEATING
- TWN RGE SEC
04N 02E 32 Lot 2(NWSE)
- Place of Use: COOLING, same as HEATING use

MICROFILMED
DEC 23 1996

9. a. Who owns the property at the point of diversion?
APPLICANT
b. Who owns the land to be irrigated or place of use?
APPLICANT
c. If the property is owned by a person other than the applicant,
describe the arrangement enabling the applicant to make this filing.

10. Remarks:

Water bearing zone to be appropriated is 20 to 40 feet; all flows
to be reinjected into same zone.

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

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

Received by _____ Date _____ Time _____ Preliminary check by _____
Fee \$ 100.00 Receipted by _____ #W020866 Date 5/16/1996
Publication prepared by _____ Date _____ Published in _____
Publication approved _____ Date _____

MICROFILMED

DEC 23 1996

Ident. No. 63-12351

Comments: Date: 8/ 2/1996 User-ID: CHODGES

Subject: APPLICATION AND MITIGATION INFO

Use to be non consumptive for closed loop heating and cooling at Lander Street Wastewater Treatment facility.
Mitigation provided in association with injection application 63-W-0138.

Comments: Date: 8/ 2/1996 User-ID: CHODGES

Subject: WELL SPECIFICATIONS

Shallow wells were constructed under non-permitted status as dewatering wells. As such, GW protection will not require retroactive drilling permits, but has required repair of the wellheads to attain adequate constructions standards. Both wells (production and injection) are approx. 40 feet deep with slotted casing at 20 to 40 feet depth. See Rob Whitney's letter with file for more information.

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DEC 23 1996

December 4, 1995

Attachment for CPR _____

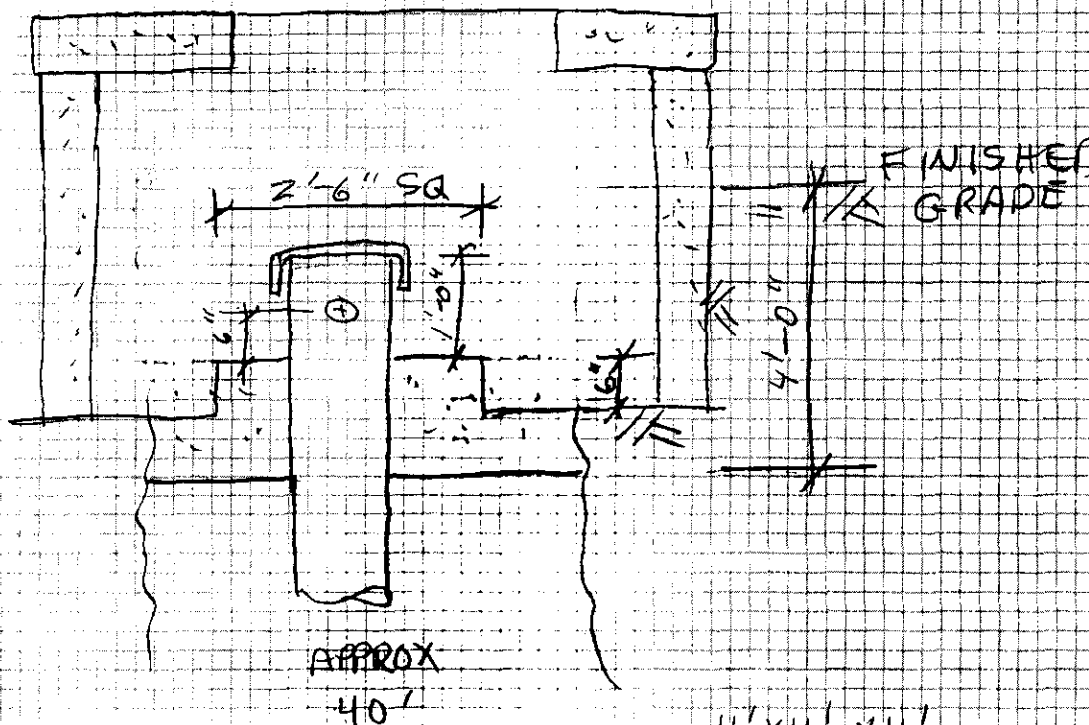
Well water loop for water source heat pumps.

175 feet

1. Provide a submersible **well pump** and **install** in the dewatering well next to the steps to Clarifier 1. Pump rating **to be 45 gpm** at ~~165~~ *175* feet. Provide discharge check valve and ball valve as shown on well head protection sketch.
2. Provide a return **pipe to the bottom** of the dewatering well next to Clarifier 3. Provide a backpressure regulating valve rated for 45 gpm at 10 psi of backpressure as shown the well head protection sketch.
3. Provide well head **protection** for the supply well and return well as shown on the well head protection sketch.
4. Route the 2-inch 2W **supply and return** pipes into the utilidor. Use 2-inch schedule 80 PVC for the portion **in the well and** for the direct-bury portion. Transition to System 7 with insulation at the riser **into the utilidor**.
5. Provide **System 7 piping valves and fittings** with insulation for all of the 2W piping shown on the **attached drawings**. Provide fittings and connect to the four water source heat pumps. Provide **vent and drain valves** as required for System 7.
6. Leave 1-1/2 inch **valves in operations** building basement with open end for future connections.
7. Provide motor starter and **MCP** in MCC BE with On/Off switch at the MCC. Provide conduit and wire to the **supply well** and injection well. Provide a junction box for connecting motor leads **to wiring in the well head protection box**. Provide 120 VAC to to a receptacle in each well head vault.

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1/2



4'x4'x4'
PRECAST VAULT
NO BOTTOM
METAL COVER

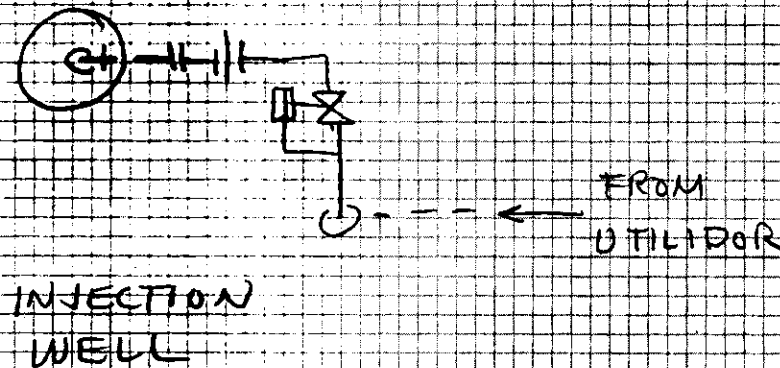
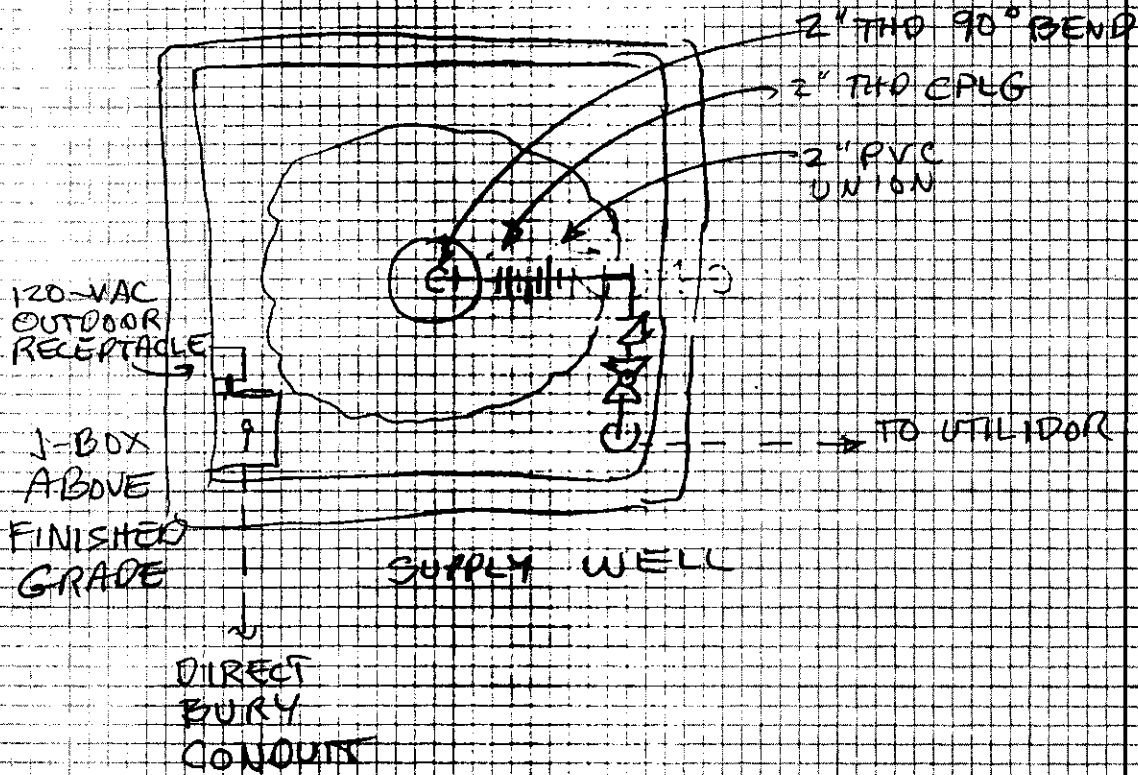
WELL HEAD PROTECTION VAULT
SECTION

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JUL 23 1996

DATE CHECKED	CHECKED BY	JOB NUMBER	BY	DATE	CALC. NO.	SHEET NO. 2/3
PROJECT			SUBJECT			



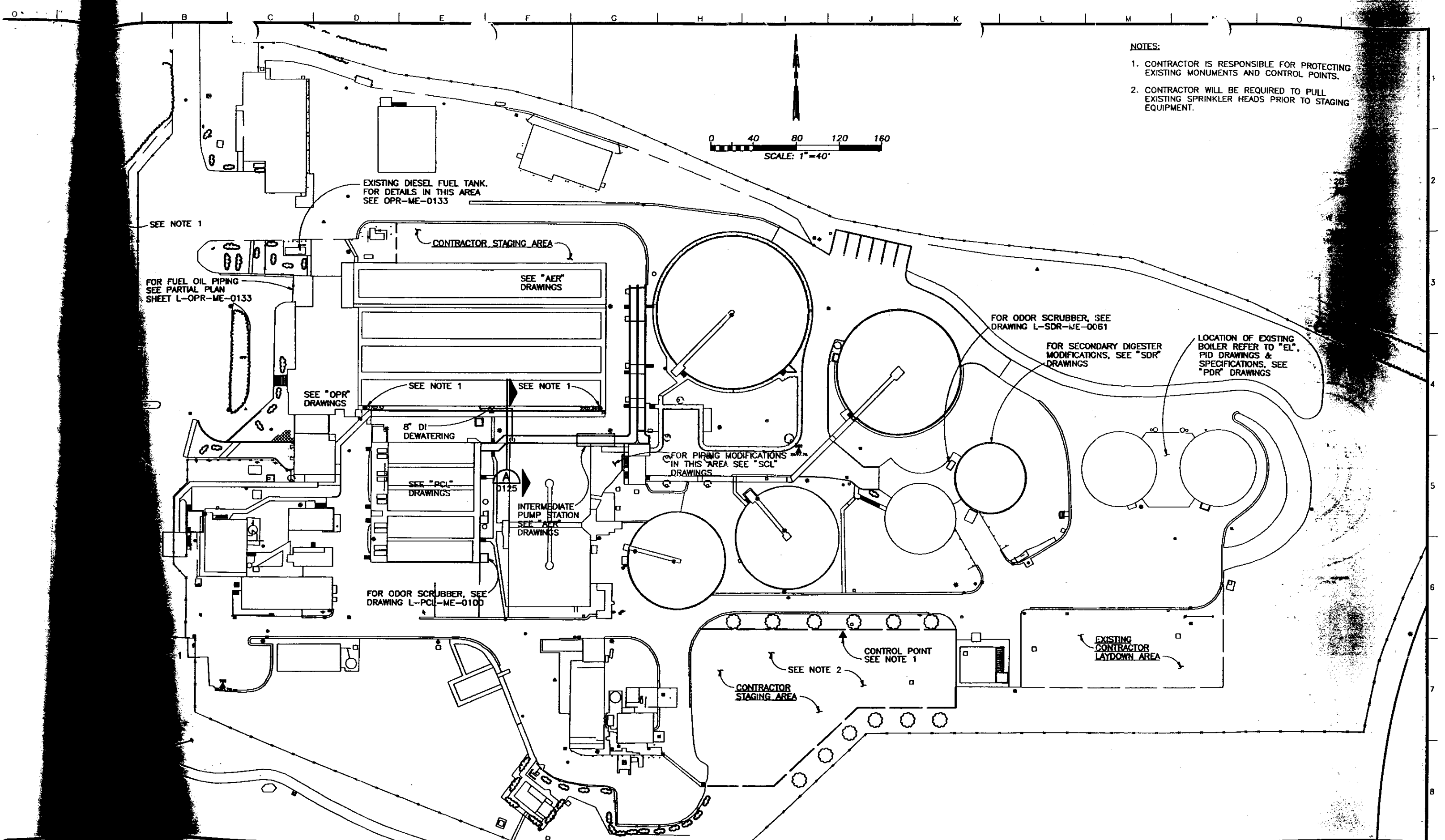
REFERENCES/NOTES



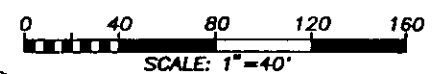
WELL HEAD PROTECTION VAULT
PLAN

MICROFILMED
DEC 23 1986

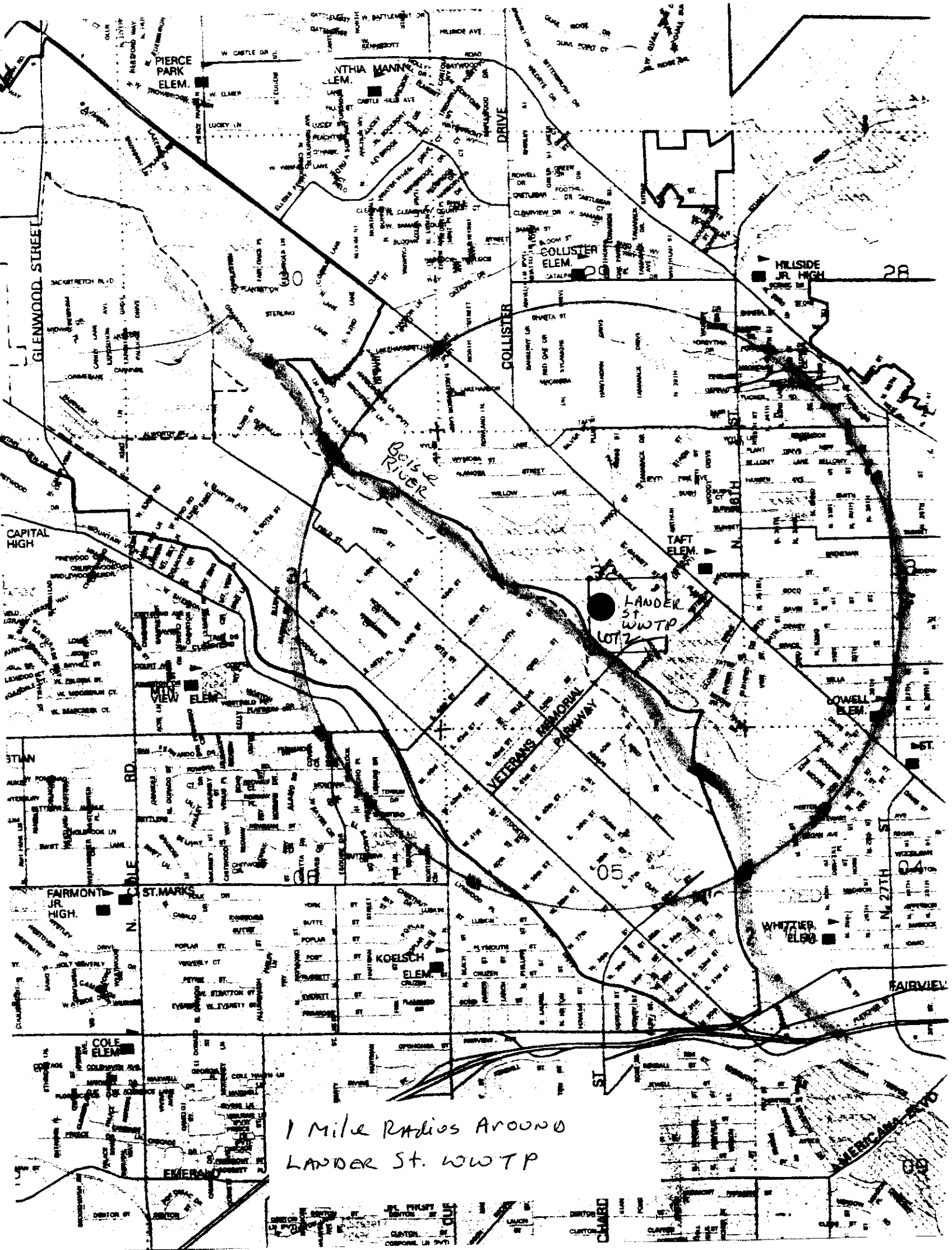
DATE CHECKED	CHECKED BY	JOB NUMBER	BY	DATE	CALC. NO.	SHEET NO. 3/4
PROJECT		SUBJECT				



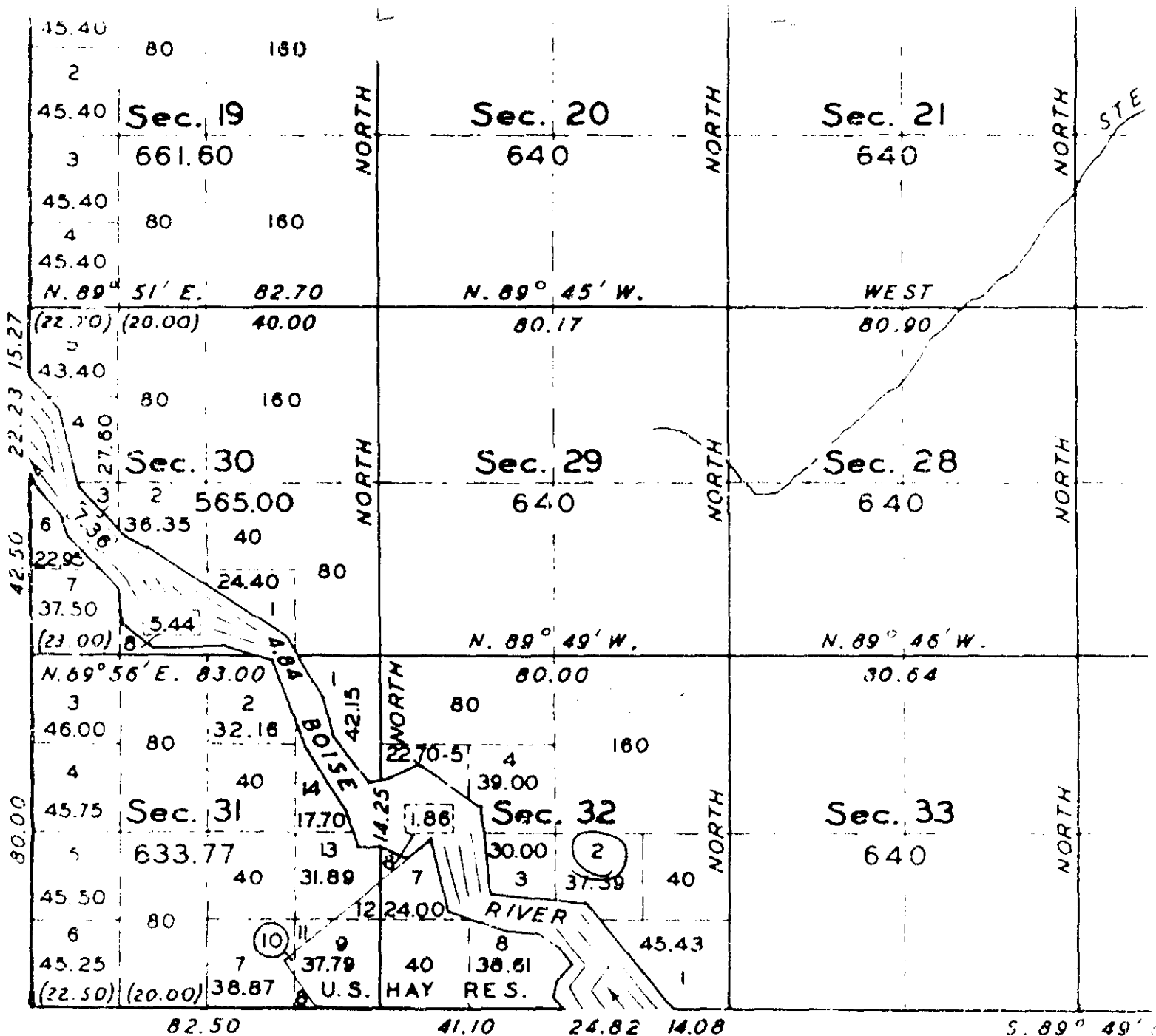
- NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING MONUMENTS AND CONTROL POINTS.
 2. CONTRACTOR WILL BE REQUIRED TO PULL EXISTING SPRINKLER HEADS PRIOR TO STAGING EQUIPMENT.



SCALE AS SHOWN DATE NOV 1995 L-3	700 CLEARWATER LANE P.O. BOX 8748 BOISE, IDAHO 83707 (208) 345-5310		VERIFY SCALES (LINE IS 2-INCHES AT FULL SIZE IF NOT 2" - SCALE ACCORDINGLY!)		BOISE PUBLIC WORKS 150 N. CAPITOL BLVD. BOISE, IDAHO 83702 (208) 384-3900	<table border="1"><thead><tr><th>ZONE</th><th>REV.</th><th>DESCRIPTION</th><th>BY</th><th>DATE</th><th>APP.</th></tr></thead><tbody><tr><td colspan="6">REVISIONS</td></tr><tr><td colspan="6"> </td></tr><tr><td colspan="6"> </td></tr></tbody></table>	ZONE	REV.	DESCRIPTION	BY	DATE	APP.	REVISIONS																		CITY OF BOISE, IDAHO LANDER STREET WWT AERATION BASIN AND BLOWER MODIFICATIONS	MECHANICAL YARD PIPING PLAN		SCALE AS SHOWN DATE NOV 1995 PROJECT NO. CSP 705 DRAWING NUMBER ME-0124
	ZONE	REV.	DESCRIPTION	BY			DATE	APP.																										
	REVISIONS																																	
PROJECT NO. 11331B.Z1	SHEET 15 OF 157	DRAWN: B.M. CLERG DESIGNED: S.E. CLARK CHECKED: K. FINKSON PCP FILE: TMSFULL.PCP		CAD FILE NO. LYRME124.DWG																														



1 Mile Radios Around
LANDER ST. WWTP



MADE FROM THE OFFICIAL RECORD

63-12351

MICROFILMED

DEC 23 1956

Ident. No.

To appropriate the public waters of the State of Idaho

JUL 01 1996

WATER RESOURCES
WESTERN REGION

1. Name of Applicant City of Boise Phone (208) 384-4261
Mailing address 790 Lander ST Boi 83703
2. Source of water supply ground water which is a tributary of _____
3. Location of point of diversion is Township 4N Range 2E Sec. 132, in the NW 1/4, SE 1/4, ADA 1/4, Govt. Lot 2, B.M., _____ County; additional points of diversion if any: _____
4. Water will be used for the following purposes:
Amount .1CFS for heating/cooling purposes from all year round 1-1 to 12-31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated is (a) .1CFS and/or (b) _____
cubic feet per second acre feet per annum
6. Proposed diverting works:
a. Describe type and size of devices used to divert water from the source well pump
b. Height of storage dam n/a feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet
c. Proposed well diameter is 12 inches; proposed depth of well is 40 feet
d. Is ground water with a temperature of greater than 85°F being sought? no
e. If well is already drilled, when? 9-95; Drilling firm Donald Murphy Contractor's Inc
Well was drilled for (well owner) City of Boise; Drilling Permit No. n/a
7. Time required for completion of works and application of water to proposed beneficial use is 1 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
a. Hydropower; show total feet of head and proposed capacity in KW. n/a
b. Stockwatering; list number and kind of livestock. n/a
c. Municipal; show name of municipality. City of Boise
d. Domestic; show number of households. 0
e. Other; describe fully. water for heat pump system
- MICROFILMED
DEC 23 1996

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DEC 23 1996

9. Description of place of use:

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

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

TWP	RGE	SEC	N E				N W				S W				S E				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
4N	2E	32													H/C				

Total number of acres to be irrigated 0

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

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

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

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

12. Remarks: n/a

Use to be non Consumptive - Associated With Closed loop heat pump System Injection Appl./Permit. # 63-W-0138

NB zone = 20-40' per Joel Hathorn

13. MAP OF PROPOSED PROJECT REQUIRED - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.) see previous submittal dated May 15, 1996

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

MICROFILMED

JUL 23 1996

Joel Hathorn Proj Manager
Signature of Applicant (and title, if applicable)

Received by [Signature] Date 7-1-96 Time 12:00 Noon Preliminary check by Cyl
Fee \$ 5000 Received by [Signature] # W020866 Date 5-14-96
Publication prepared by [Signature] Date 8-7-96 Published in Idaho Statesman
Publication approved [Signature] Date 9-18-96



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

July 12, 2001

CITY OF BOISE
PUBLIC WORKS DEPT
PO BOX 500
BOISE ID 83701-0500

RE: License No. 63-12351 - Issuance of License

Dear Water Right Holder(s):

The Department of Water Resources has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review the conditions of approval and remarks listed on your license.

The license is a PRELIMINARY ORDER issued by the Department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

Please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at 208-327-7946.

Sincerely,

Shelley W. Keen
Water Rights Supervisor

SWK:klt

Enclosure(s)

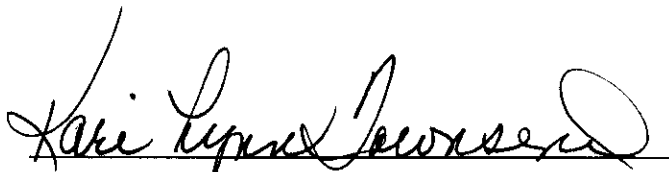
MICROFILMED
SEP 19 2001

CERTIFICATE OF MAILING

I hereby certify that on July 12, 2001 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER(Approved License) to the person(s) listed below:

RE: WATER RIGHT NO. 63-12351

CITY OF BOISE
PUBLIC WORKS DEPT
PO BOX 500
BOISE ID 83701-0500

A handwritten signature in cursive script, reading "Kari Lynn Townsend", written over a horizontal line.

Kari Lynn Townsend
Secretary

MICROFILMED
SEP 19 2001

**EXPLANATORY INFORMATION
TO ACCOMPANY A
PRELIMINARY ORDER**

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources (department) unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the department or the Idaho Water Resource Board (Board) is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) the petition for reconsideration is disposed of; or
- (b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

LICENSE REVIEW CHECKLIST

Permit No 63-12351

Date: 7-6-2001 Reviewer: Kay Walker

topp X9

Change/OK

Name/Address OK

Source OK
Point of Diversion: OK

Does change clarify original intended source? If no, void permit.
Change (P39/P49) Add (P45/P44) Feds (P40)

W32 (multiple in 1/4/1/4)
W36 (overlap)
W59 (subdivision description)

Place of Use OK

Change (P41/P49) Add (P41/P44) Feds (P43)

W60 (subdivision description)
W27 (ppu acre limit)

Overlaps: Right(s): _____
File reviewed _____ Profile reports printed _____

P/D & P/U amend (P37) Feds (P48)

Rate of Diversion:

Permitted rate 0.10 cfs
Fee Limit 0.20 cfs
Measured _____ cfs
Theoretical 0.32 cfs

Recommended Total Diversion Rate 0.10

Water Uses OK

Change (P46)

Season of Use per new Standards

Irrigation _____ cfs _____ af
Stockwater _____ cfs _____ af
Domestic _____ cfs _____ af
Heat 0.10 cfs 72.4 af
Cool 0.10 cfs 72.4 af
Total 0.10 cfs 72.4 af

~~Irrigation~~ - overlap (R58-R61, R62-R65, R66-R69)
~~supp. Gw~~ (WB7/065/104)
~~overlap spec combined rts~~ (W35)
~~<1 acre~~ (W31)
~~Domestic~~ (W01/wb5/070/071/075)
~~Power~~ (W42 or W43/025/027/R22 or R23)
~~Fish~~ (042)
~~Fire~~ (077)
~~Water Quality~~ (081/R07)
~~Payette~~ - (W22/047/27A)
~~Stockwater for US~~ (R37)

Volume Determination

_____ cfs x 1.9835 x _____ days = _____ af (vs) _____ acres x _____ (FHR) = _____ af

Remarks: R07

Additional Conditions

☒ Watermaster Control
☒ GW Measurement/Measuring Device
☒ Other
☒ Trust R55 - remove 051)
☒ Non-trust (048/049)

GW Dist? _____
Water Mgmt. Dist? _____
Crit. GWMA? _____
GWMA? _____
Government Lots? yes

Advance Priority? ☒ yes ☐ no If yes, explain why below.

SRBA Claim? Not req'd

Adjust memo _____

Amend Letters _____ P87, S06

Second Amendment Notice _____ S06

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

DEC 21 1998

Department of Water Resources

A. GENERAL INFORMATION

Permit No. 63-12351

1. Owner: City of Boise Phone No. (208) 384-4262

Current Address: 790 Garden St. Boise, ID 83703

2. Accompanied by: Larry Bryant + Bill Duncan EXAM DATE: 6-16-98

Address: (Same) Phone No. (208) 384-4262

Relationship to Permit Holder: (Bryant) Lead Plant Mechanic

3. Source: Groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None for Heating + Cooling

2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident No.	Gov't Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
	<u>2</u>		<u>NW</u>	<u>SE</u>	<u>32</u>	<u>4N</u>	<u>2E</u>	<u>Ada</u>	<u>Site Visit Map</u>

2. Place(s) of Use:

Indicate Method of Determination Site Visit Map

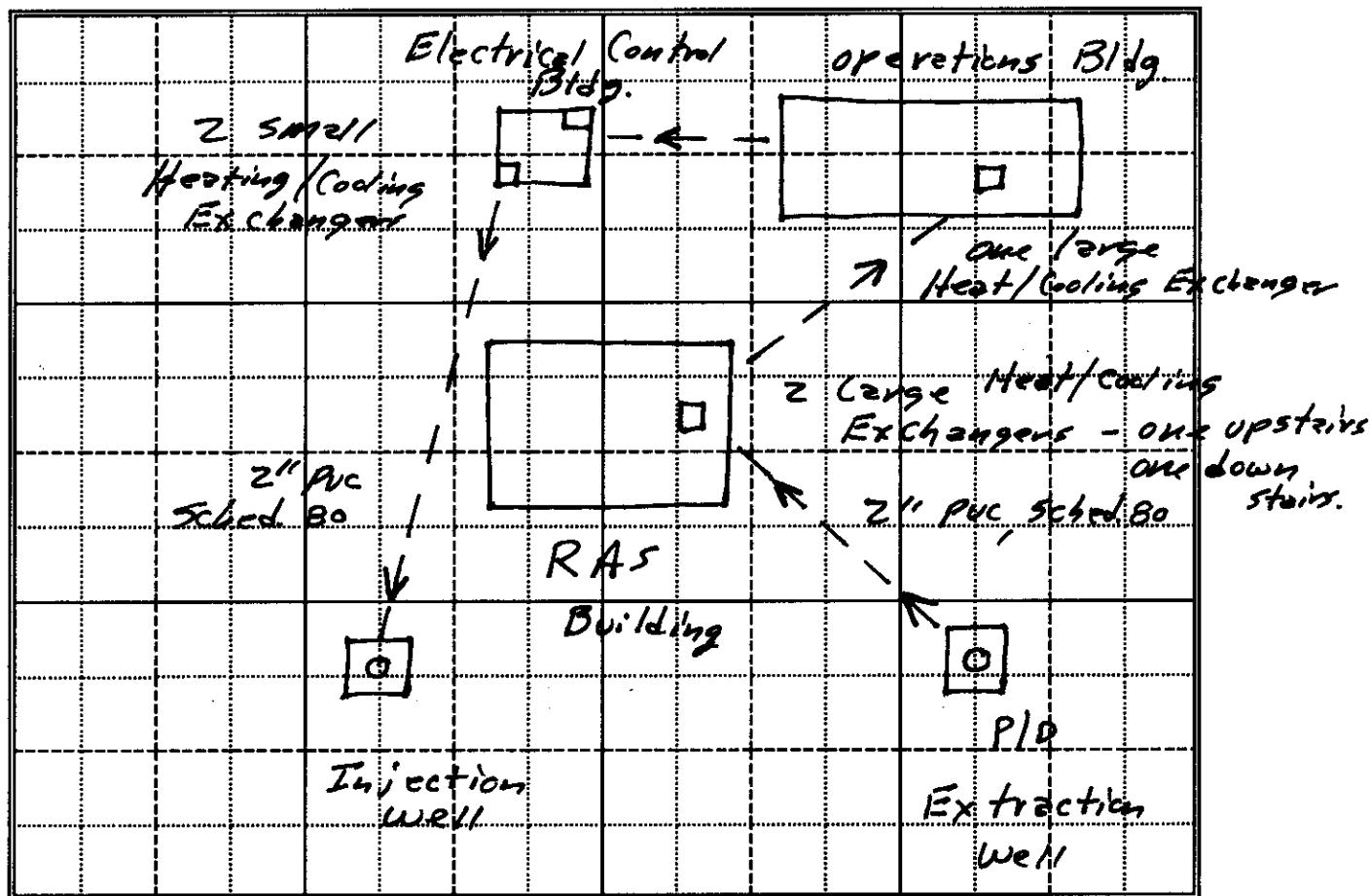
TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
<u>4N</u>	<u>2E</u>	<u>32</u>																	

Heating
Cooling
lot 2

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3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate well size/ditch size/pipe i.d. as applicable.



Scale: 1" = None

☒ Copy of USGS 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)

☒ 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
Extraction	Franklin	5	Model 2943278304	F.E. Myers	Cat. # J5080B

*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

2. Measurements: None, closed loop system operates at 40 psi.

E. NARRATIVE/REMARKS/COMMENTS

1. This permit is for a Heating and Cooling water system at the Lander Street Waste Water Treatment plant. Two de-watering wells used during construction were modified for use in this water system. One well is the Extraction or Production well, and the other is the Injection well used to dispose of the spent water.
2. The system is a closed loop and operates at 40 psi. Water is pumped through Heating/Cooling exchangers in the buildings and then returned to the Injection well. The RAS Building has 2 large exchangers, the Operations Building one large exchanger, and the Electrical Control Building, 2 small exchangers. The RAS Building is 2 storey, with an exchanger on each floor.
3. Both the Extraction + Injection wells have 40' of 12" sched. 40 PVC casing with slots in the bottom 20'. The water is extracted and returned to the same zone. (cont 4).
4. Modification of the de-watering wells was approved in 1996.

Have conditions of permit approval been met? ☒ yes ☐ no

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SEP 19 2001

F. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: None, Theoretical Cal.

Production (Extraction Well)

$$Q = \frac{(8.8)(54P)(70\%)}{5' + (40\text{psi})\left(\frac{34'}{14.7\text{psi}}\right)} = 0.32 \text{ cfs} > 0.10 \text{ cfs}$$

From Pump Perf. Curve:

$$Q = 98 \text{ GPM} = 0.22 \text{ cfs}$$

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = (0.10)(365)(1.9835) = 72.4$$

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

AFA

2. Volume Calculations for Other Uses:

Heating + Cooling

72.4 AFA

Non-Consumptive Use.

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
<u>Heating</u>	<u>01/01</u>	<u>12/31</u>	<u>0.10</u>	<u>72.4</u>
<u>Cooling</u>	<u>01/01</u>	<u>12/31</u>	<u>0.10</u>	<u>72.4</u>
Totals:			<u>0.10</u>	<u>72.4</u>

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

Field Examiner's Name Jan Tomich Date 6-16-98

Reviewer _____ Date _____

SEAL

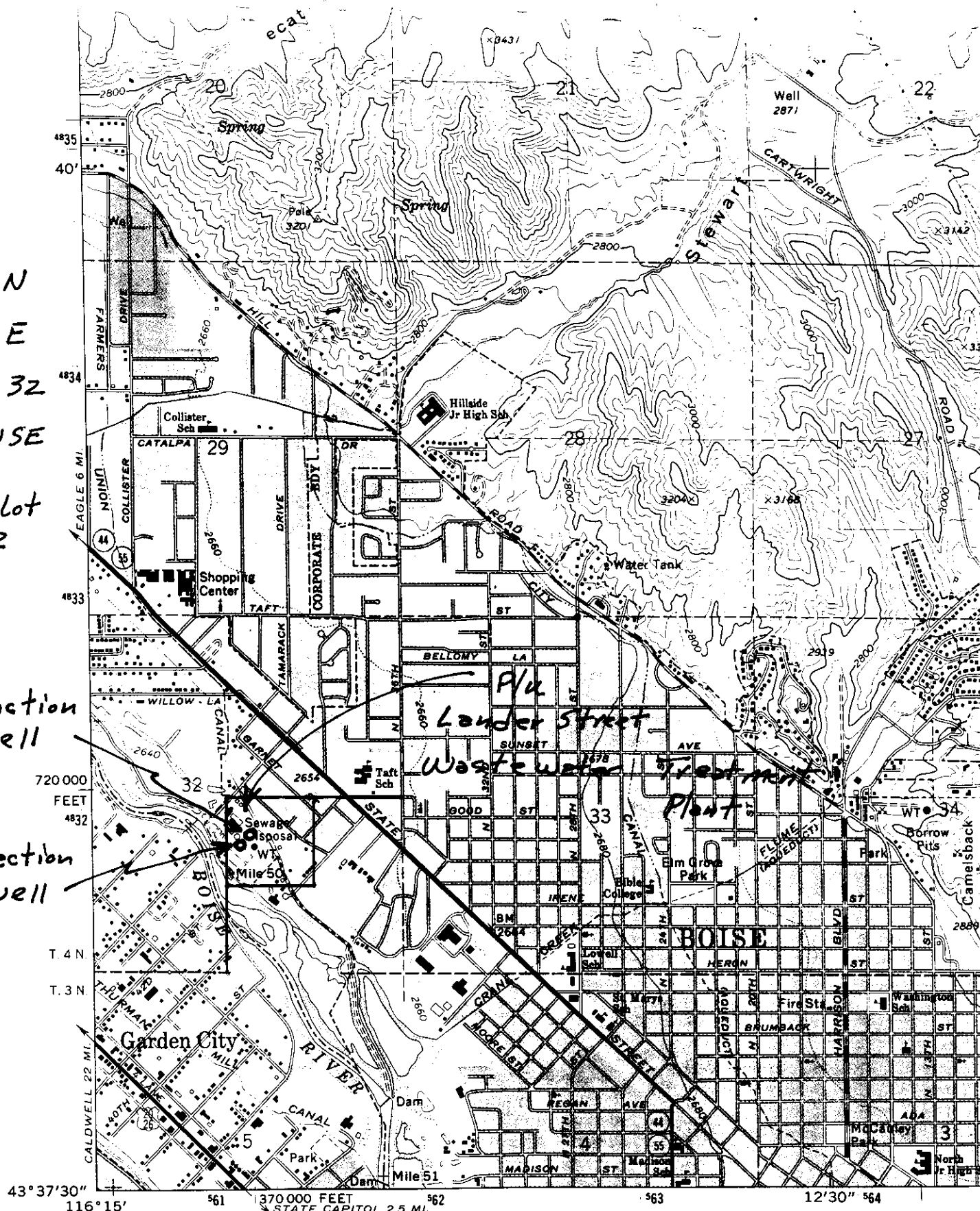
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SEP 19 2001

T4N
R2E
Sec. 32
NWSE
Gov. Lot
2

P/D
Production
well

Injection
well



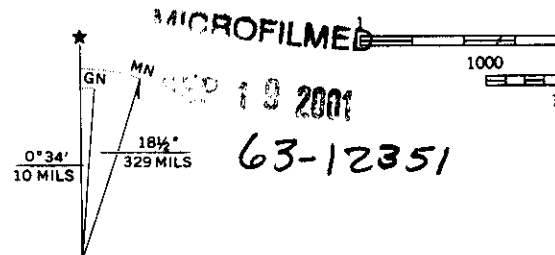
(CLOVERDALE)
2771 III SE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial
photographs taken 1971. Field checked 1972
Supersedes map dated 1954

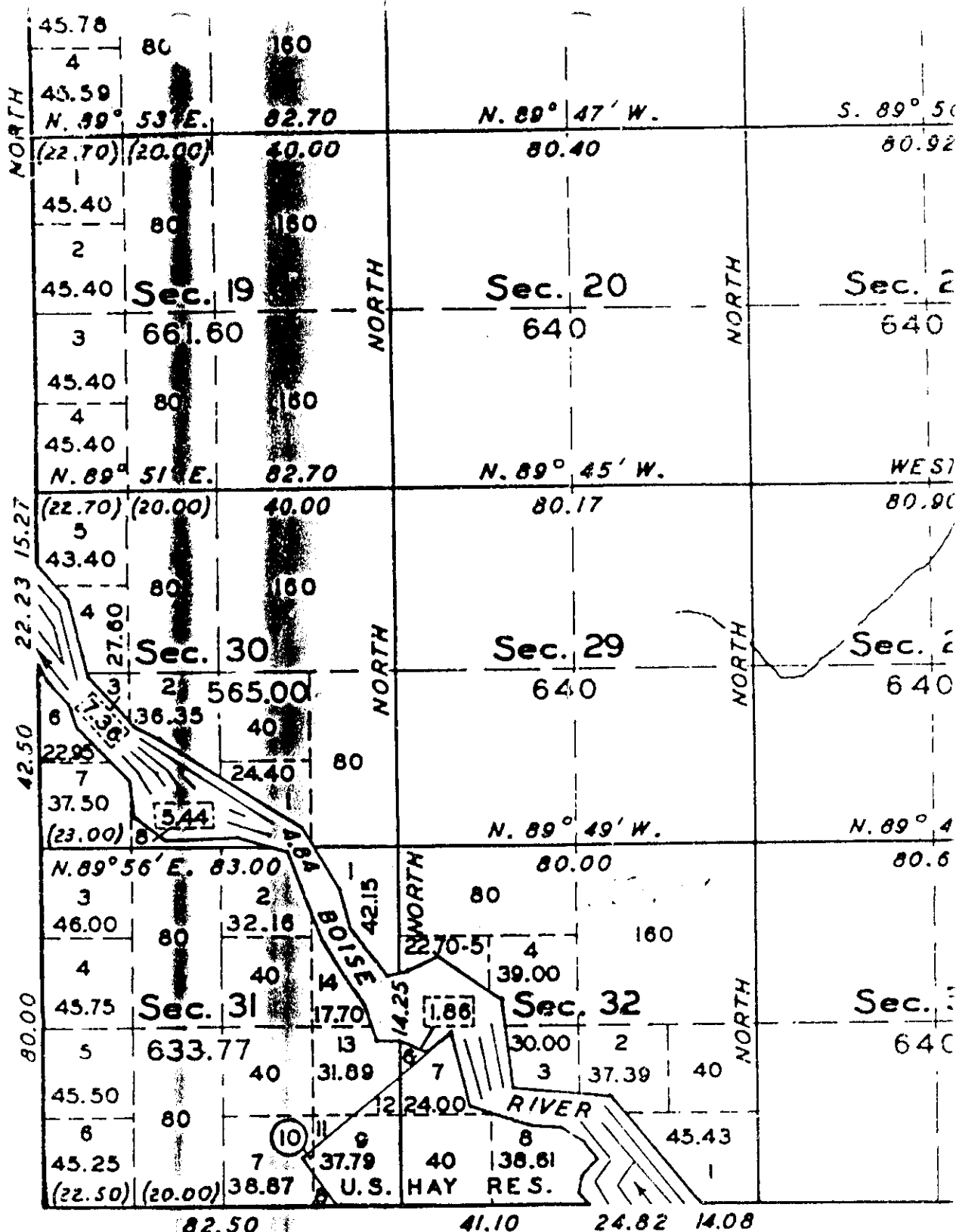
Projection and 10,000-foot grid ticks: Idaho coordinate
system, west zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid ticks,
zone 11, shown in blue. 1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 15 meters north and



UTM GRID AND 1972 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

FOR SALE BY U. S.

T4N
R2E
Sec. 32
NW SE
Lot 2



80
0 AN INCH
ATION $18^{\circ} 45' E.$

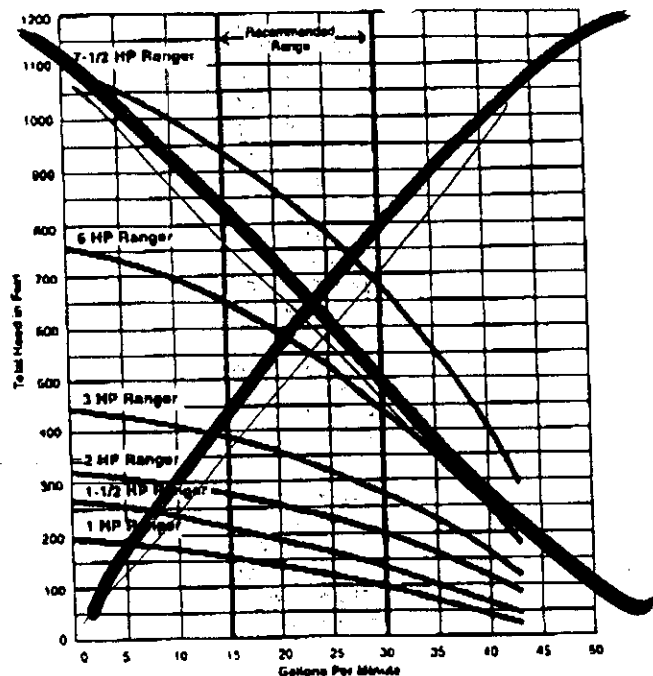
MADE FROM THE OF

MICROFILMED
SEP 19 2001

63-12351

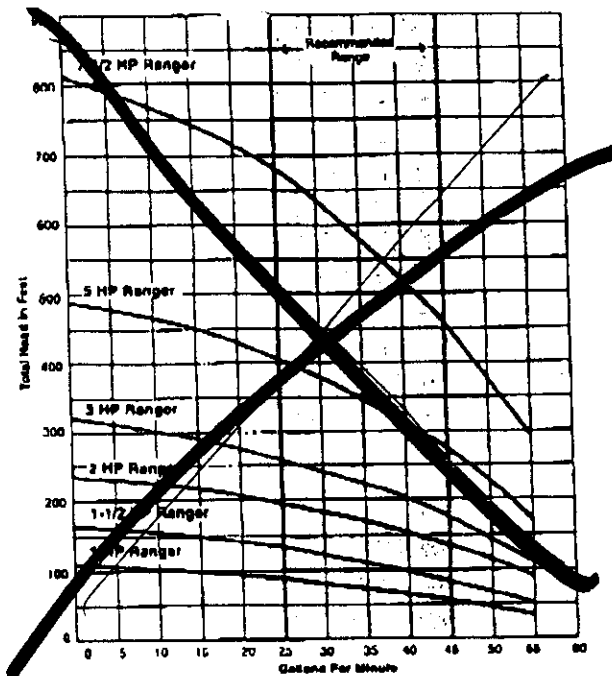
25 GPM Ranger Series

Performance Curves



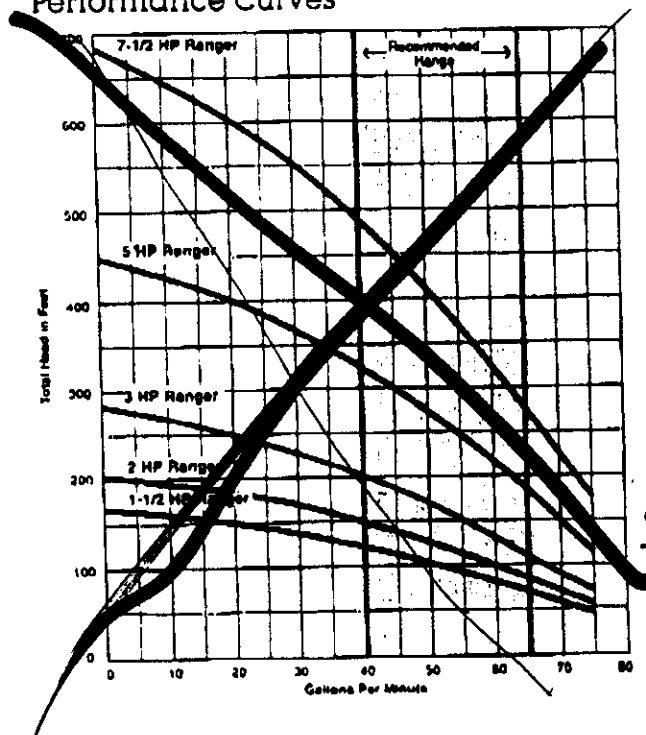
35 GPM Ranger Series

Performance Curves



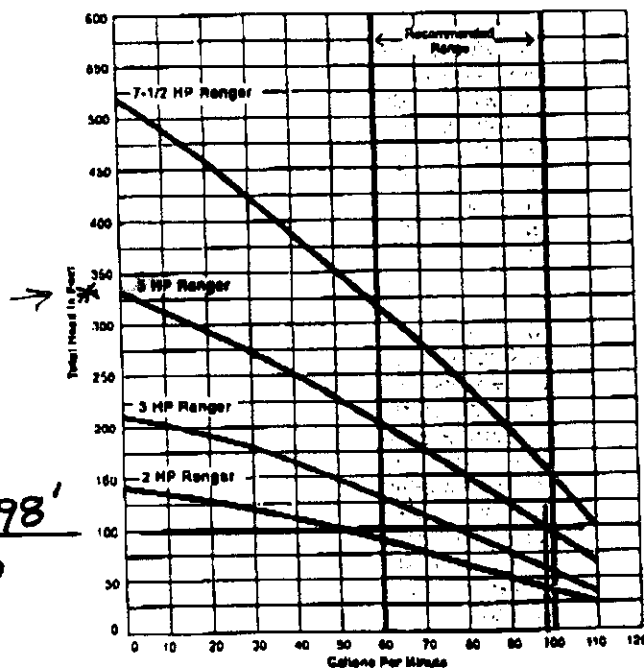
50 GPM Ranger Series

Performance Curves



80 GPM Ranger Series

Performance Curves



Production (Extraction)
Well Pump.

98 GPM

80 GPM Ranger Series
5 HP J5080B
F.E. Myers Co.

MICROFILMED

63-12351

SEP 19 2001

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

Production Well (Extraction Well)

~~Production Well~~ *(old dewatering well)*

1. DRILLING PERMIT NO: 63-96-W-0997-400 OTHER APPLICABLE NO: 63-12351

2. OWNER: City of Boise Phone: (208) 384-4262

Address: 790 Cander St., Boise, ID 83703

3. WELL LOCATION: Twp 4N, Rge. 2E, Sec. 32, NW 1/4 SE 1/4
County Ada (Provide sketch map and photo on reverse.)

4. DRILLER: Donald Murphy Contractors Inc. Lic. No. P.O. Box 6139
When Drilled? 9-95 Federal Way,
WA 98063

5. WELL CONSTRUCTION: Sched. 40, PVC open at top
Casing Diameter 12 inches Water tight cap? ☐ Yes ☒ No Access Port: ☐ Yes ☐ No
Casing $\geq$ 12 inches above ground? ☒ Yes ☐ No - Describe Bottom 20' is slotted.
Depth of Casing 40 ft. Method Drilled _____
Condition of Well Casing: ☒ Good ☐ Fair ☐ Poor Describe _____
Control Valve? ☒ Yes ☐ No Pressure Gauge: ☐ Yes ☒ No
Condition of Piping and Valving Good
Auger to a depth of _____ ft. Evidence of Annular Seal ☐ Yes ☒ No None
Are there obvious construction problems that may be a source for contamination or waste of water? Backfilled
☐ Yes ☒ No (Describe in Remarks and Attach Photo - On Reverse) 36" hole
with pea
gravel.

6. HYDROLOGIC INFORMATION:
Depth to Static Water 5 ft. Water Temperature Cold °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: Production well for Heating and Cooling.

MICROFILMED

SEP 19 2001

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

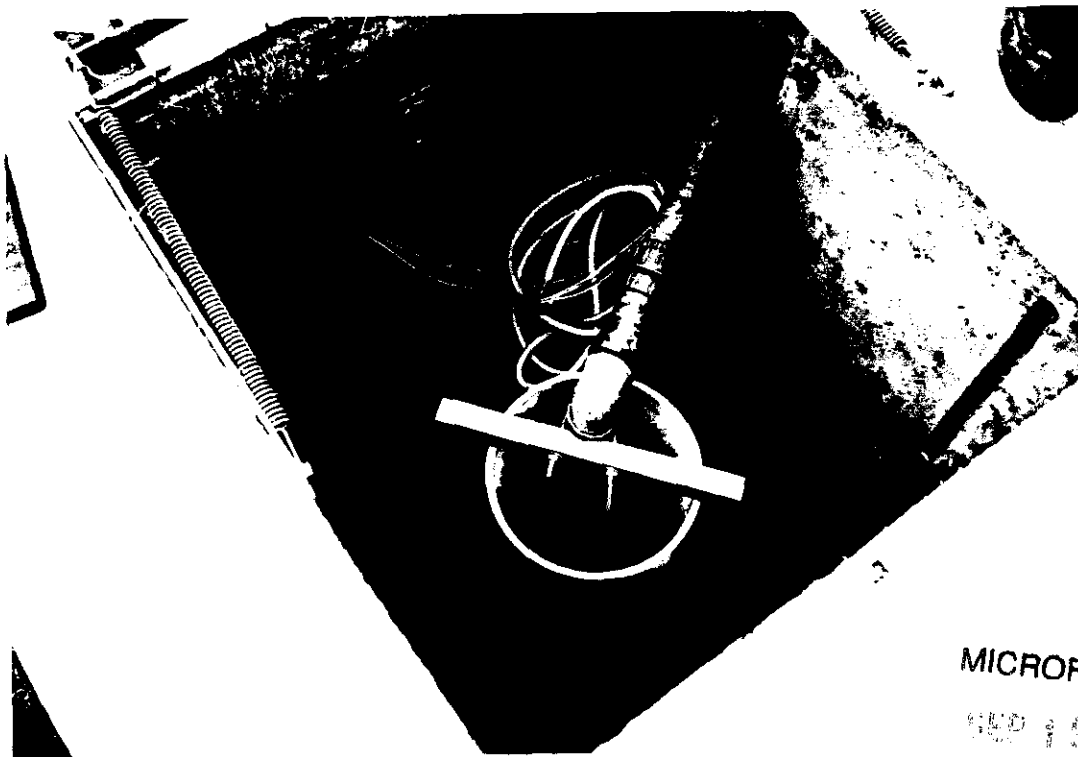
How far away from the well is this source? _____

9. REMARKS: This well is a production well for Heating and Cooling of buildings at the Lander Street Wastewater Treatment Plant. The well was used for de-watering during construction, and then modified for use as a production well.

Wan Zornich Water Rights Examiner
Signature of Dept. Representative & Title

6-16-98
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:



MICROFILMED
SEP 10 2001

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

Injection Well

1. DRILLING PERMIT NO: ~~63-96-W-0498-400~~ *(old dewatering well)* OTHER APPLICABLE NO: 63-12351
2. OWNER: City of Boise Phone: (208) 384-4262
Address: 790 Lander St., Boise, ID 83703
3. WELL LOCATION: Twp 4N Rge. 2E Sec. 32 lot 2 NW 1/4 SE 1/4
County Ada (Provide sketch map and photo on reverse.)
4. DRILLER: Donald Murphy Contractors, Inc. Lic. No. P.O. Box 6139
When Drilled? 9-95 Federal Way,
WA 98063
5. WELL CONSTRUCTION: Sched. 40 PVC open at top
Casing Diameter 12 inches Water tight cap? ☐ Yes ☒ No Access Port: ☐ Yes ☐ No
Casing $\geq$ 12 inches above ground? ☒ Yes ☐ No - Describe _____
Depth of Casing 40 ft. Method Drilled Bottom 20' is slotted
Condition of Well Casing: ☒ Good ☐ Fair ☐ Poor Describe _____
Control Valve? ☒ Yes ☐ No Pressure Gauge: ☐ Yes ☒ No
Condition of Piping and Valving Good
Auger to a depth of _____ ft. Evidence of Annular Seal ☐ Yes ☒ No None -
Are there obvious construction problems that may be a source for contamination or waste of water? Back filled
☐ Yes ☒ No (Describe in Remarks and Attach Photo - On Reverse) 36" hole
with Pea
Gravel
6. HYDROLOGIC INFORMATION:
Depth to Static Water 3 1/2 ft. Water Temperature Cold °F
Flowing Artesian ☐ Yes ☒ No Pressure: _____ (psi)
Water Sample Taken? ☐ Yes ☒ No If yes, describe purpose _____
Water Quality Measurements/Observations (Describe) _____
7. WELL USE: MICROFILMED
☐ Domestic ☐ Irrigation ☐ Stock
☐ Test ☐ Municipal ☐ Industrial
☐ Abandoned ☐ Waste Disposal/Injection ☐ Not Used
☒ Other: Injection well for Heating and Cooling.

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

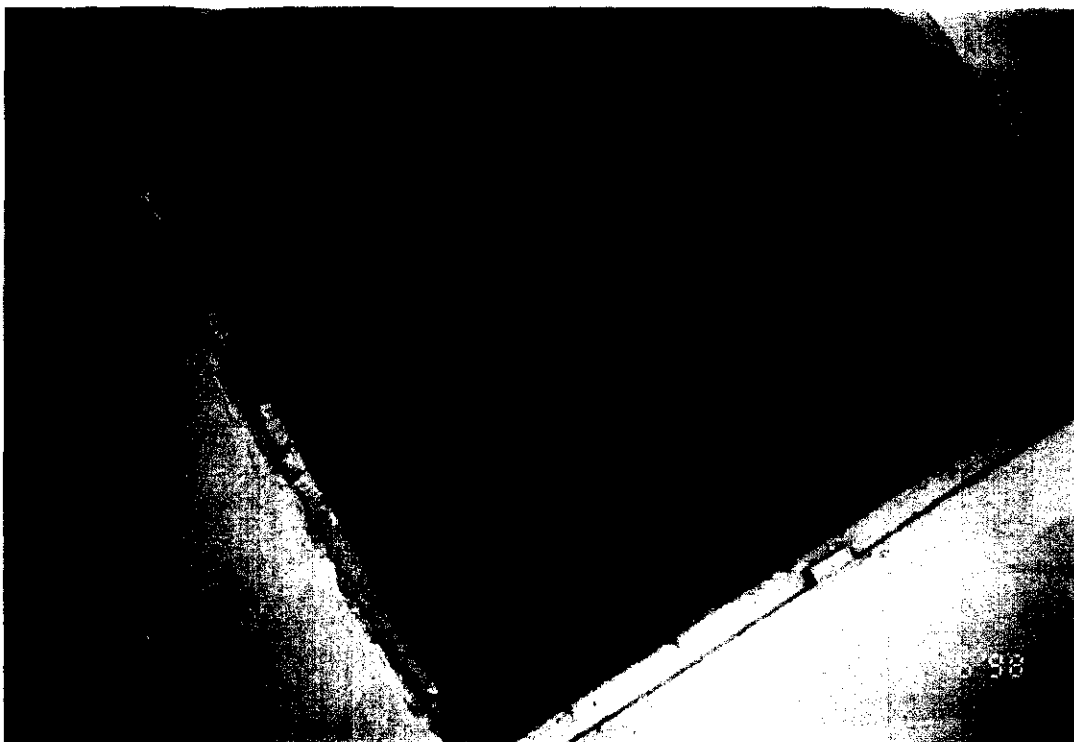
9. REMARKS:

This well is an injection well for Heating and Cooling of buildings at the Lander Street Wastewater Treatment Plant. The well was used for de-watering during construction and then modified for use as an injection well.

Dan Tomich Water Right Examiner
Signature of Dept. Representative & Title

6-16-78
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:



MICROFILMED

13 2001

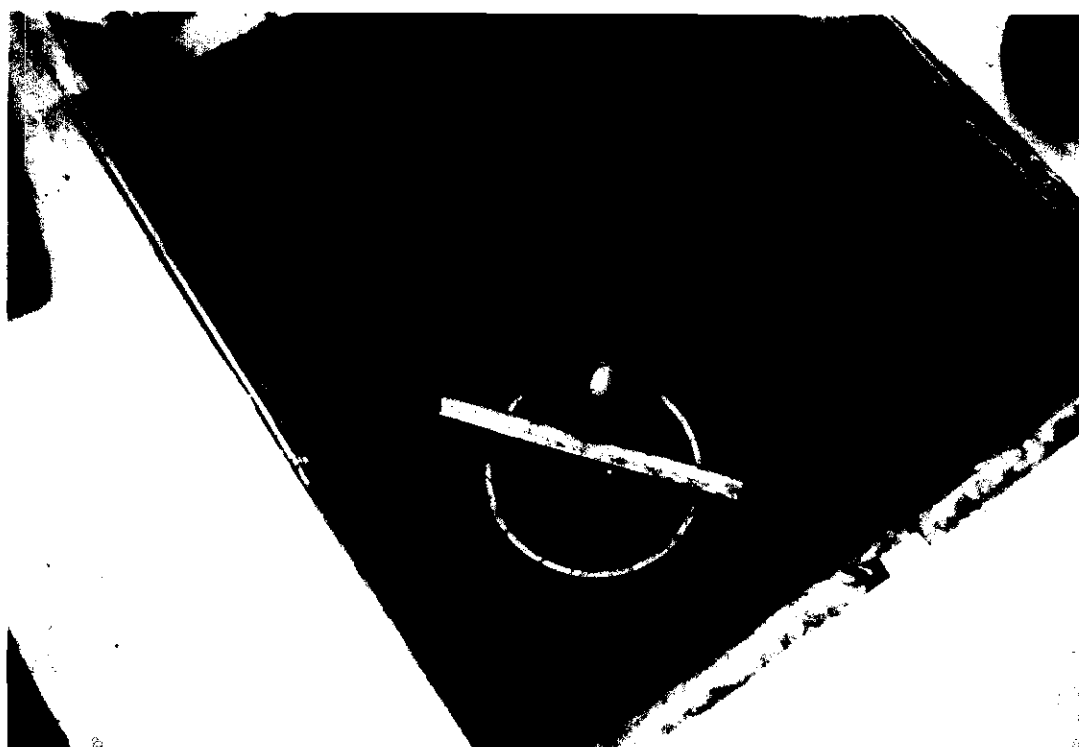
1 of 4

P/D

Extraction
well
in Concrete
Box in
foreground.



RAS
Building
in
background
(Plu)



P/D

Extraction
well

MICROFILMED
SEP 19 2001

63-12351

2 of 4

P/u

RAS

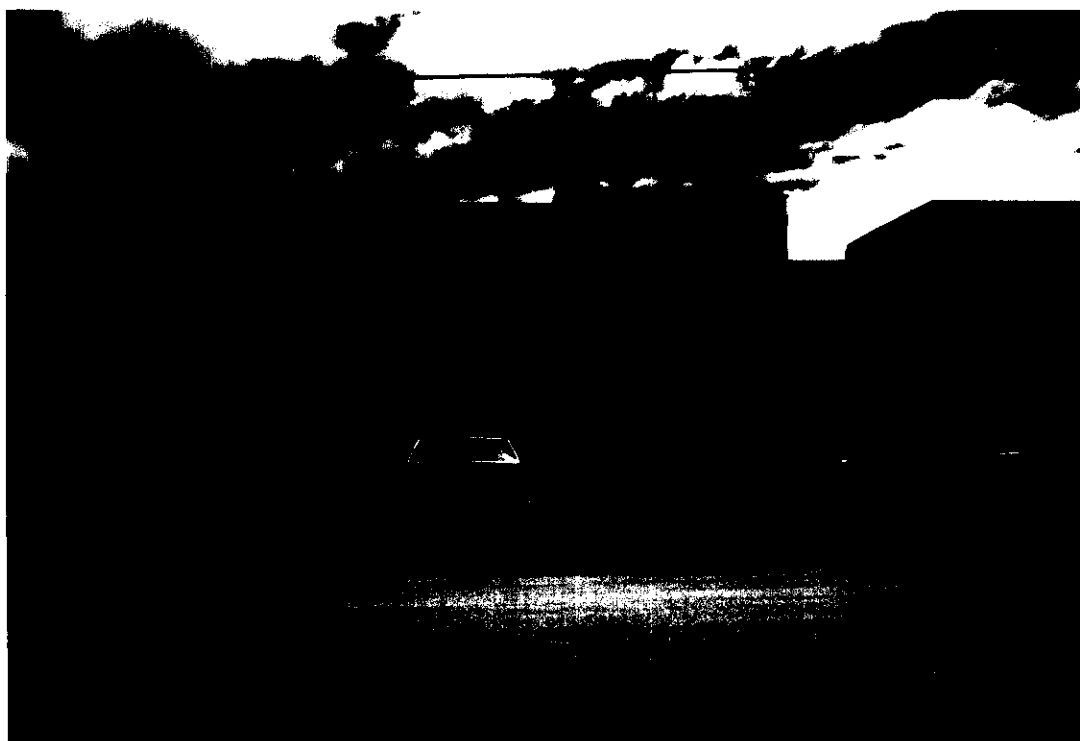
Building



P/u

Operations

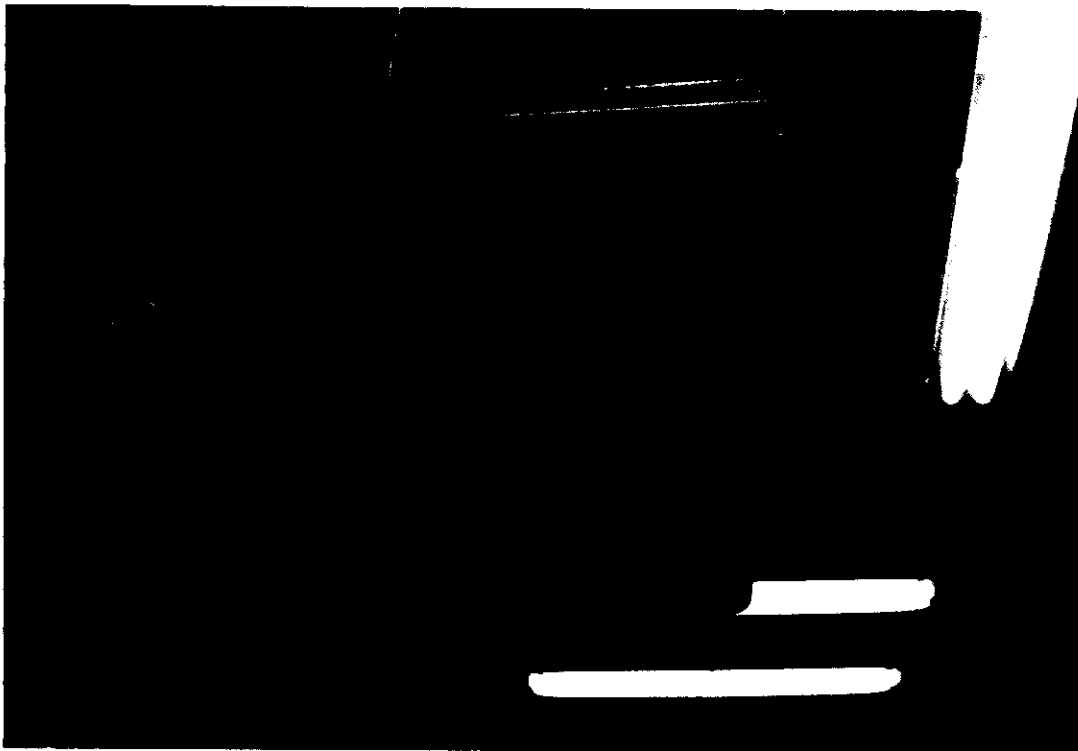
Building



MICROFILMED

SEP 19 2001

63-12351



3 of 4

P/u
one of
Large
H/c
Exchangers
in
RAS
Bldg.



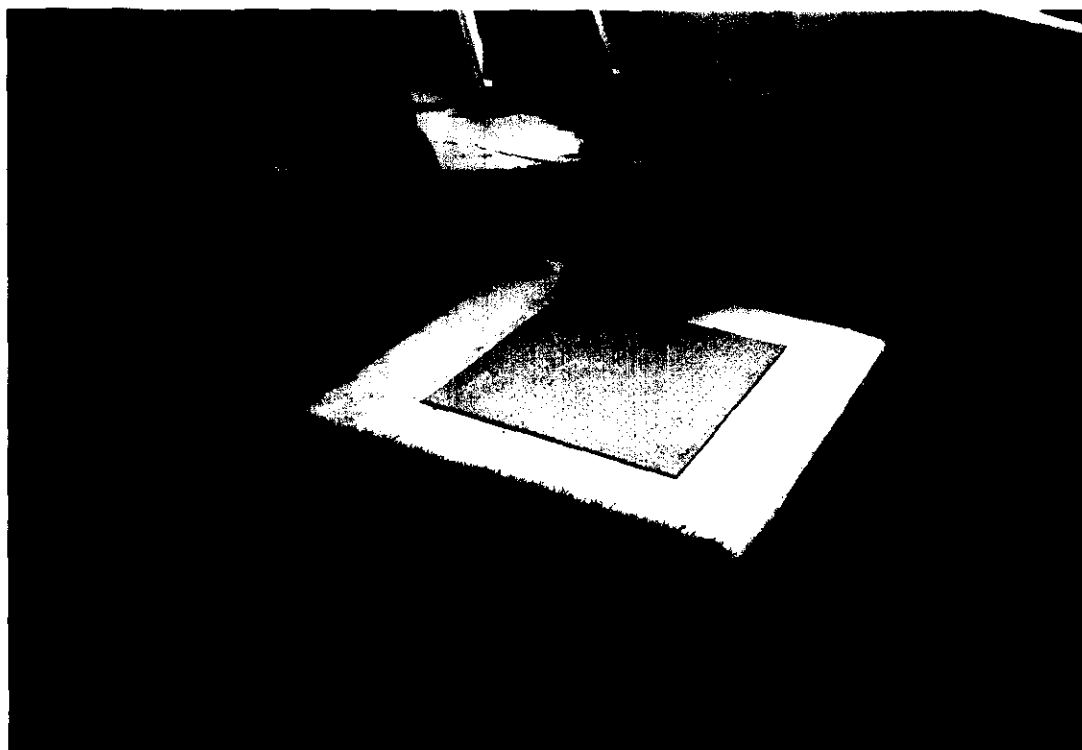
P/u
one of
Small
H/c
Exchangers
in
Electrical
Control
Bldg.

MICROFILMED 63-12351

2001 1 2 2001

4 of 4

Injection
Well
in
Concrete
Box



Injection
Well



MICROFILMED
NO 19 2001

63-12351



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 23, 1998

City of Boise
790 Lander St
Boise ID 83703

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 63-12351

Dear Permit Holder:

The department acknowledges receipt of the proof of beneficial use form submitted for the above referenced permit. The next step in the process of developing a water right is for the department to conduct a field examination to determine and confirm the use being made of the water.

Be advised that Section 42-248, Idaho Code, requires you or the owner of this water right to maintain current ownership and address records on file with the department. Forms to file a change of ownership of a water right and/or a change in the address of the water right owner are available from any department office.

If you have questions concerning the field examination, please contact the department's Western Regional Office in Boise at (208)334-2190.

Sincerely,

JULIE L. YARBROUGH

Senior Secretary, Water Allocation Bureau

c: IDWR - Regional Office

MICROFILMED

FEB 26 1998

**ANALYSIS SHEET
FOR
PROOF OF BENEFICIAL USE**

Permit No. 63-12351 Reviewed by [Signature] Date 2-19-98

GENERAL CONSIDERATIONS

TYPES OF USE

yes Name same as permit?
yes Address same as permit?
yes Proof timely received?
If not, complete calculation below.

Injection - Heat / Cool

Correct Uses? yes

SOURCE OF WATER

 Surface water source

✓ Ground water source

yes Drilling permit required?

no Copy in the file? Drilling Permit No. 63-60-0138 ^{inject. well #}

200- Amount paid for permit

NO Well log in the file?

 Correct?

LICENSE EXAMINATION FEE

MEASURING DEVICE

yes Required?
50- Amount Submitted
yes Correct?

NO Required?
 / Installed?
 / Waiver requested?

PRIORITY CALCULATION

Date proof received	<u> </u>	<u> </u>
Date proof due	<u> </u>	<u> </u>
No. of days late	<u> </u>	<u> </u>
Priority Date	<u> </u>	<u> </u>
New Priority Date	<u> </u>	<u> </u>

DEFICIENCIES OR ACTION ITEMS

Proof acceptable

DATA ENTRY

New Address X Proof Made 11-6-97

September 30, 1997

CITY OF BOISE
790 LANDER ST
BOISE ID 83703

PROOF DUE NOTICE

RE: PERMIT NO. 63-12351

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 December 1, 1997. (See last page of your approved permit or your last approved extension request.) Enclosed is a form which when accompanied by the license examination fee or a complete field examination report prepared by a certified water right examiner 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.

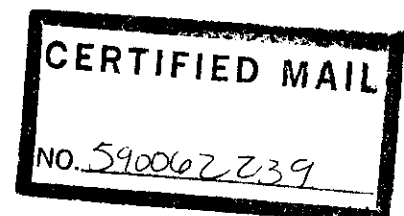
Either an acceptable proof of beneficial use submittal or an acceptable request for an extension of time must be received by this department on or before the above described proof due date. If neither is received, the department will send you a lapse notice. Within sixty (60) days of the mailing of the lapse notice, the permit will no longer be of any force nor effect.

SINCERELY,

JULIE L. YARBROUGH
Senior Secretary

Enclosures

MICROFILMED
FEB 26 1998





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

December 12, 1996

CITY OF BOISE
790 LANDER ST
BOISE ID 83703

PERMIT APPROVAL NOTICE

RE: PERMIT NO. 63-12351

Dear Permit Holder:

Enclosed is a copy of your approved application for permit. Please be sure to thoroughly review the "Conditions of Approval and Remarks" listing on the permit.

Enclosed is a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop this permit into a licensed water right. Also enclosed is a form entitled "Proof of Beneficial Use". If your project is already completed, you should complete and submit this form immediately.

Also, please note that as of July 1, 1996, water right owners are required to report any change of water right ownership and any change of mailing address to the department. If you have acquired a water right or have changed your mailing address PRIOR TO July 1, 1996, you have until July 30, 1998, to notify the department. If you acquire a water right or change your mailing address AFTER July 1, 1996, you must notify the department within 120 days of the change.

Failure to report these changes could result in a \$100 late filing fee. Contact any office of the department to obtain the proper reporting form.

Sincerely,

Shelley W. Keen
Water Rights Supervisor

SK:ph

Enclosures

MICROFILMED

**APPLICATION FOR PERMIT
STATE OFFICE REVIEW**
by Cindy Zimmerman

11/96

No.: 63-12351 Name: Boise Date: 12/9/96 Ad OK? ✓ / Gvmt Lts: ✓

AREA OF CONCERN?

- No/Yes: BRD Mor / Boise Front GWMA / Trust / Non-trust

PROTESTED:

- 020 (Protest Agreement) LT. Geo

SYSTEM COMPLETED:

Yes/proof filed

- NA

1 year/no proof

- P16

+1 year

- 26A-P17

GROUNDWATER: <✓ FLO-CH>

+ 0.2 cfs

- 01M

=/- 0.2 cfs

- No MD

=/+ 5 a.

- 01M, 065 (if GW use SW 1st)

DRILLING PERMIT:

Existing well

- NA (pre 7/1/87)

Included w/permit

- Permit No. _____, P99

No WD permit?

- 046-46B-P23 (post 7/1/87)

irr. in WD

- P05 (new well)

SURFACE WATER <✓ FLO-CH> (Surface water that *doesn't sink* is regulated):

Water District (dem)

- 005 (req) WD # _____ <SEE MAP & LISTING>

+ 0.2 cfs

- 01J (meas dev)-P08

=/- 0.2 cfs

- 01H (lock dev)-P01 or No MD

in WD + 0.2 cfs

- 01M or No MD (in-stream)

- 0.2 cfs

- No MD

=/+ 5 a. irr.

- 01M

RIVER BASINS (*Surface water):

Snake R (01)

- 11A-P04, NA

(02/03-irr)

- 007-P07 (w/ remark *WB9- Weiser), NA

Boise River (63)

- 05A (if WD), 11E (not 42-111 use), NA

Payette River (65)

- 064 (regulated uses), 047-P04 (Payette Lake), NA

USE:

Domestic (surface)

- *WB5 (Boise River above Star Bridge); 27A (Payette River); NA

Fish Propagation

- 07A-042 (req)-010/06A/09E (WQ)-P10; 044 (North of 1000 Springs)

Irr <POU> =/- 5 a

- 057 (0.03 cfs/acre)

+ 5 a

- 03A (0.02 cfs/acre)

Mining

- 054 (req) & 06A/010/09E-P10

Power

- 08A-17K-025-027-028-01F(P19)-09E(P10);

+25 cfs-P18; 17G (FERC) or 17M (FERG); 18B-P09

Storage (✓3 compo.)

- 18A (multiple MD within district), 18B-P09 (+10' dam), *W07

LOCATION:

42-248 area

- In 20/30/40/50/60/70/80 (87) basin P84

Boise Front LoGeo

- 058 (-85° GW temp only)

In-stream dev.

- P52 (stream channel alteration)

Irr Dist/Canal Co.

- 023 (Twin Falls area)

Swan Falls Flag

- _____ <SEE CODE CHART>

Trust

- 051-052-053-P74 (Consumptive Uses), NA

Non-Trust <1>

- 048-049 (Consumptive Uses), NA

OWNERSHIP: Non-owner

- 004 (PD/PU) _____

OTHER CONDITIONS:

STANDARD REMARKS:

- Heat/Cool/Lander St.

BENEFICIAL USE DUE:

- 12-1- 1997

COMMENTS:

- _____

MEMORANDUM

TO: FILE NO. 63-12351

FROM: CINDY ZIMMERMAN

RE: GENERAL REVIEW OF COOLING USE REQUIREMENTS

DATE: 12/09/96

RATE OF FLOW AND ANNUAL VOLUME FOR COOLING USE

GIVEN:

Source Temperature	=	52 degrees
Area / Single Story Electrical Room	=	810 sq. ft.
Temperature Outside	=	85 degrees
Temperature Inside	=	70 degrees
Building Efficiency	=	12.54 (per applicant)
Temperature Required	=	72 degrees
Days temperature above 70	=	90 days
Hours per day temp above 70	=	12 hours

CALCULATIONS:

Single Floor Cooling Load	=	(152,361) btu/hr
Temp. Drop Across System	=	-6 degrees

FLOW RATE:

Single Floor Flow Rate	=	51 gpm
	=	0.11 cfs

VOLUME:

Single Floor Annual Volume	=	10.1 af
----------------------------	---	---------

EFFICIENCY RATING INFORMATION **

0.28 Best energy efficiency rating
0.44 Good energy efficiency rating
0.67 Average energy efficiency rating
1.11 Poor energy efficiency rating

** Source - Administrator's Memorandum dated 9/28/92.

MICROFILMED
DEC 23 1996

MEMORANDUM

TO: FILE 63-12351

FROM: CINDY ZIMMERMAN

RE: GENERAL REVIEW OF COOLING USE REQUIREMENTS

DATE: 12/10/96

RATE OF FLOW AND ANNUAL VOLUME FOR COOLING USE

GIVEN:

Source Temperature	=	52 degrees
Area / Single Story Control Room	=	119 sq. ft.
Temperature Outside	=	85 degrees
Temperature Inside	=	70 degrees
Building Efficiency	=	12.54 (per applicant)
Temperature Required	=	72 degrees
Days temperature above 70	=	90 days
Hours per day temp above 70	=	12 hours

CALCULATIONS:

Single Floor Cooling Load	=	(22,384) btu/hr
Temp. Drop Across System	=	-6 degrees

FLOW RATE:

Single Floor Flow Rate	=	7 gpm
	=	0.02 cfs

VOLUME:

Single Floor Annual Volume	=	1.5 af
----------------------------	---	--------

EFFICIENCY RATING INFORMATION **

0.28 Best energy efficiency rating
0.44 Good energy efficiency rating
0.67 Average energy efficiency rating
1.11 Poor energy efficiency rating

** Source - Administrator's Memorandum dated 9/28/92.

MICROFILMED

DEC 23 1996

MEMORANDUM

TO: FILE NO. 63-12351

FROM: CINDY ZIMMERMAN

RE: GENERAL REVIEW OF COOLING USE REQUIREMENTS

DATE: 12/09/96

RATE OF FLOW AND ANNUAL VOLUME FOR COOLING USE

GIVEN:

Source Temperature	=	52 degrees
Area / Two Story Mixed Uses	=	208 sq. ft.
Temperature Outside	=	85 degrees
Temperature Inside	=	70 degrees
Building Efficiency	=	12.54 (per applicant)
Temperature Required	=	72 degrees
Days temperature above 70	=	90 days
Hours per day temp above 70	=	12 hours

CALCULATIONS:

Single Floor Cooling Load	=	(39,125) btu/hr
Two+ Floor Cooling Load	=	(31,300) btu/hr
Temp. Drop Across System	=	-6 degrees

FLOW RATE:

Single Floor Flow Rate	=	13 gpm
	=	0.03 cfs
Two+ Floor Flow Rate	=	10 gpm
	=	0.02 cfs

VOLUME:

Single Floor Annual Volume	=	2.6 af
Two+ Floor Annual Volume	=	2.1 af

EFFICIENCY RATING INFORMATION **

0.28 Best energy efficiency rating
0.44 Good energy efficiency rating
0.67 Average energy efficiency rating
1.11 Poor energy efficiency rating

** Source - Administrator's Memorandum dated 9/28/92.

MICROFILMED

DEC 23 1996



PUBLIC WORKS DEPARTMENT
CITY HALL
4TH FLOOR

H. BRENT COLES
MAYOR

COUNCIL MEMBERS

CAROLYN TERTELING
COUNCIL PRESIDENT
MIKE WETHERELL
COUNCIL PRO TEM

SARA BAKER
PAULA FORNEY
ANNE STITES HAUSRATH
M. JEROME MAPP

RECEIVED

OCT 22 1996

Department of Water Resources

October 17, 1996

Department of Water Resources
1301 N. Orchard St.
Statehouse Mail
Boise, Idaho 83720-9000

Application for Permit No. 63-12351

Dear Ms. Zimmerman,

This letter is in response to your letter dated October 9, 1996.

There will be parts of three buildings that will be heated and cooled from the water wells. The water temperature of the wells will be 52 degrees at the extraction well and will range from 44 degrees to 60 degrees at the injection well.

The first room is 810SF, with a R value of 2.28. The room is an electrical room on the first floor of the building and will be the only room that will be heated and cooled with the heat pump.

The second room is 119SF, with a R value of 12.54. The room is a control room on the only floor in the building and will be the only room that will be heated and cooled with the heat pump.

The third room is a two story building. The total size of each floor is 104SF, with a R value of 12.54. Both floors will be heated and cooled with the heat pump.

If you have any other questions feel free to call me at 384-4204.

Sincerely,

Garry Lunn
Project Inspector.

RECEIVED

DEC 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

October 9, 1996

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

CITY OF BOISE
790 LANDER ST
BOISE ID 83703

RE: Application for Permit No. 63-12351

Dear Sirs;

The above referenced application has been sent to the State Office for final review and processing; however, before the application process can continue, I will need some additional information.

The application lists heating and cooling uses at your waste water treatment facility. However, information about the heating and cooling system you propose to develop was not included on the application. Please provide information identifying the number of buildings, number of stories and square footage of each building, type of construction efficiency factor (specifically insulation R value), and temperature of water at the well head.

I will hold the application for 14 days from further processing pending your reply.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Cindy Zimmerman'.

Cindy Zimmerman
Water Resource Agent

MICROFILMED

DEC 23 1996

MEMORANDUM

RECEIVED

SEP 30 1996

TO: FILE

Department of Water Resources

FROM: STEVE LESTER 

DATE: SEPTEMBER 25, 1996

RE: APPL. 63-12351, RECOMMENDED CONDITIONS OF APPROVAL

See RBW's letter dated June 13, 1996. Then see injection well permit (copy in file). The application attachments address RBW's concerns. The following conditions of approval, or something related to the concepts therein, are recommended:

* No. 27, non-consumptive.

* Water bearing zone is 20-40 ft., and all flows to be re-injected per injection well permit 63-W-138.

* Subject to all conditions of approval in injection well permit.

* No. 46 - some variation of drilling permit requirements, either via standard condition or inclusion of something like "based on a finding by the Director, the right holder must show to the satisfaction of the Director that adequate wellhead repairs and/or other minimum well construction standards have been met".

Note that priority is July 1, not May 16. Fee was paid early with injection well application but water right was not filed until later.

MAILED
DEC 23 1996

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPROPRIATION APPLICATION ANALYSIS SHEET

INITIAL REVIEW BY: cjl DATE: 8.2.96 APPLICATION: 63.12351

REQUIRED INFORMATION

Name: (If applicant is a corporation or partnership, names and addresses for the director, officers, and other partners must be included.)
 Address:
 Source: (See USGS Quad for names of water sources)
 Point of Diversion: (10 acres for spring, lot & block descriptions for Subdivisions, local name)
 County:
 Quantity: (flow and/or volume)
 Period of use:
 Nature of proposed use: (Include description of use)
 Description of diverting works:
 Time required for beneficial use of water:
 Place of use or acres irrigated:
 Map: (show T, R, S, QQ &/or QQQ)
 Subdivision plat: (for > 1 home in restricted area. $\geq$ 5 homes in non-restricted area)
 Signature: (If applicant is corp., partnership, or municipality, title of signatory is required)
 Fee:
 Yes ___ No* In form to receipt:

Gov't. Lots:
☒ P/D
☐ P/U

* Include advertising
remark!

ADDITIONAL INFORMATION

YES NO

☒ ☐ Overlapping place of use: (Describe source & relationship to present application on next page.)
☒ ☐ Overlapping point of diversion.
☐ ☐ Field check required: Field check by: _____
☐ ☐ Field report attached:
☐ ☒ Critical groundwater area:
☒ ☒ Groundwater management area:
☒ ☐ 1992 moratorium: BS 63 mitigation - see comments
☐ ☒ Copy to SCA staff: (perennial stream, non-pump diversion &/or any mining).
☐ ☒ Copy to Dam Safety staff: (for any storage)
☐ ☐ Mitigation plan: where ground water replaces surface water for irrigation, request additional information &/or mitigation plan to address reduced aquifer recharge
☐ ☐ Send power requirement letter:
☐ ☐ Send fish farm requirement letter:
☐ ☐ Power residency affidavit:
☐ ☐ Power efficiency form:
☐ ☐ Diversion greater than 5 cfs or 500 af or irrigation greater than 200 acres: (If yes, attach Large Diversion supplementary analysis sheet.)
☐ ☐ *REQUEST ADDITIONAL INFORMATION FROM THE APPLICANT

DATE REQUESTED _____

ADDITIONAL INFORMATION ON REVERSE SIDE:

PROCESSING

APP. NO. 63-12351

YES NO

In form for advertising:

Statewide advertising: (> 10 cfs &/or 1000 af)

Fee amount, receipt number and date recorded on application:

SEND COPIES TO:

YES NO

YES NO

I.D. Health & Welfare

I.D. District Health

I.D. Fish & Game

I.D. Lands

Adjudication Bureau

U.S. BLM

U.S. Forest Service

Water Dist. # _____

Other _____

FINAL REGIONAL PROCESSING REVIEW:

YES NO

Affidavit of publication received:

Application published correctly: If not, record action taken.

Publication dates and paper recorded on application:

Protests received. Final date for protest 9-8-96

Protest dates, resolution of protest recorded on application:

Recommendations attached: See 9/25/96 memo for recommendationsMeasuring device required: no since < .20 cfs? plus closed loop.

Measuring port required:

Water delivered by water master? District # Shallow g.w. close to river but closed loop so

Special conditions of approval or cover letter:

See RBW letter 8/13/96 re repair of wells: then see 9/25 memo re recommendations. Also see approved injection well permit 63-W-138 (copy attached in this file).

See below for additional information

Recommended Date or Priority

7-1-1996(Print 5-16 but filed 7-1)

Recommended by:

82Aggwe

Date:

9/25/96STATE OFFICE REVIEW

See below for additional information. By _____

Date _____

ADDITIONAL INFORMATION:numerous overlaps - all other sources &/or uses.See database comments for more info.



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

August 8, 1996

City of Boise
790 Lander St.
Boise, Idaho 83702

RECEIVED

AUG 12 1996

WATER RESOURCES
WESTERN REGION

RE: Approved Permit to Maintain an Injection Well No. 63-W-138

Dear Sir:

Enclosed is a copy of the approved permit referenced above.

Attachment I contains standard conditions for the operation of the well. Attachment II contains specific conditions regarding the well. Please note that if the use of the well is desired after the expiration date shown on Attachment II, a new application for permit to maintain the well will be required.

Enclosed is a Notice of Completion of Construction form which should be submitted to this office upon completion of the well. If you have any questions, please call me at 327-7950.

Sincerely,

Helen L. Harrington-Thornton, P.G.
Hydrogeologist
Groundwater Protection Section

Encl: Permit

✓ cc: Rob Whitney, IDWR-Western Region

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DEC 23 1996

Permit No. 3-W-0138

APPROVED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT TO
EXPIRATION DATE: 8/31/2006 CONSTRUCT X

MAINTAIN _____
AN INJECTION WELL

Under the Provisions of Title 42, Chapter 38 of the Idaho

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WATER RESOURCES
WESTERN REGION

I. GENERAL INFORMATION

A. Name and Address of Legal Contact (X) Owner () Operator

Name City of Boise

Address 790 Lander St

City Boise State ID Zip Code 83703

Phone No (208) 384-4261

Facility Name and Location (if different than above)

Name Lander Street Wastewater Treatment Facility

Address 790 Lander Street

City Boise State ID Zip Code 83703

B. Location of Well (attach map see item II L)

Township 4N Range 2E Section 13, NW 1/4 SE 1/4 SE 1/4 Lot NA

Subdivision Name Bell Second Subdivision Block NA Lot NA

County Ada

C. Is facility located on Indian Lands? Yes () No ()

D. Injection Well Classification

1. Depth of well: _____ Less than or equal to 18 feet below land surface

X Greater than 18 feet below land surface

2. Classification: 5A7 (see list below)

5A5 Electric Power Generation
5A6 Geothermal Heat
5A7 Closed-Loop Heat Pump Return
5A8 Aquaculture Return Flow
5A19 Cooling Water Return
5B22 Saline Water Intrusion Barrier
5D2 Storm Runoff
5D3 Improved Sinkholes
5D4 Industrial Storm Runoff
5F1 Agricultural Runoff Waste
5G30 Special Drainage Water
5N24 Low-level Radioactive Waste Disposal
5R21 Aquifer Recharge
5S23 Subsidence Control
5W9 Untreated Sewage

5W10 Cesspools
5W11 Septic Systems (General)
5W12 Water Treatment Plant Effluent
5W20 Industrial Process Water
5W31 Septic Systems (Well Disposal)
5W32 Septic Systems (Drainfield)
5X13 Mine Tailings Backfill
5X14 Solution Mining
5X15 In-Situ Fossil Fuel Recovery
5X16 Spent Brine Return Flow
5X25 Experimental Technology
5X26 Aquifer Remediation
5X27 Other Wells
5X28 Service Station Waste
5X29 Abandoned Drinking Water Wells

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II. TECHNICAL DATA

- A. Description of injection well, if bored, drilled or driven
If well has not been constructed:

Well Bore: Diameter NA inches Depth _____ feet

- B. Description of injection well, if bored, drilled or driven
If well is constructed:

Well Bore: Diameter 12 inches Depth 40 feet

Surface Casing: diameter NA inches Depth NA feet

Perforation depth: from 20 feet to 40 feet

Surface seal: (XX) No () Yes, Type _____ Depth _____ feet

Secondary casing, if applicable:

Diameter NA inches

Initial depth NA feet Terminal depth NA

Seal type NA Packer depth NA

Well Log available (XX) No () Yes (if yes, attach a copy)

Driller's Name/Address Donald Murphy Contractor's Inc., P. O. Box 6139
Federal Way, WA 98063

Month, Day, Year, Drilled 9-95

- C. Description of injection well, if dug

Surface dimensions NA feet, by _____ feet, or Diameter _____ inches

Depth _____ feet Filler material, if any _____

Date constructed: _____

Name/address of contractor _____

- D. Distance to nearest domestic well .07 miles

Direction to nearest domestic well E-NE

Depth to ground water 5-8' in summer 8-10' in winter

- E. Frequency of Injection x Continuous _____ Seasonal _____ Intermittent

Maximum Average Weekly Rate of Injection 45 gpm

Maximum Capacity 45 gpm

- F. Are hazardous wastes, as defined in 40 CFR, Part 261, present in the injected fluids? (excluding 5F1) Yes x No
If yes, attach RCRA numbers for constituents identified as hazardous (see 40 CFR, Part 261 of the Federal Register):

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- G. If well is class 5F1, (Agricultural Runoff Waste) or class 5D, (Surface runoff):
Method of irrigation for (for class 5F1): gravity sprinkler
Use of lands in drainage area:

NA

Pesticides/fertilizers/chemicals used (type and quantity) _____

Approximate Drainage area: _____ acres

Settling pond at injection site? () No () Yes, size _____

Screening structure at well? () No () Yes, Size and mesh _____

- H. If well is class 5W20, (Industrial Process Waste) or other industrial waste:

Type of Waste NA

Describe Treatment prior to injection: _____

(Attach statement describing the complete physical, chemical and microbiological quality of the fluids.)

- I. Description of the type of business and the principal products _____

Municipal Waste water treatment facility

- J. Alternate methods of disposal that have been considered _____

Yes, discharge the water out with the plant to the Boise River

- K. Why were they rejected? _____

1). Minimize the impact on ground water levels

2). Reduce impacts on the Boise River

3). A closed loop extraction/injection system is low risk

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L. Attach a topographic map or aerial photo showing area within a one mile radius, to include:

- a. Location of injection well described herein and associated facilities (drain ditches, settling pond, etc.),
- b. Other injection wells and associated facilities,
- c. Approximate drainage area (if applicable),
- d. Intake and discharge or injection structures (if applicable),
- e. Hazardous waste facilities,
- f. All drinking water wells,
- g. All other wells, springs and surface waters.

III. A. Any request to treat any document or portion thereof as a trade secret as defined under Chapter 8, Title 48, Idaho Code shall be made at the time said document is submitted to the Department. The person making the request shall stamp or otherwise mark each page or item on a page, to which the request applies, with the word "confidential."

Be it know that the undersigned (owner/operator) hereby makes Application for Permit to Construct or Maintain a Waste Disposal and Injection Well. The above information is true and correct to the best of my knowledge.

January 31, 1996

Date

Paul H. Johnson
Project Engineer
Signature and Title

B. Action of the Department of Water Resources

I have examined Application No. 63-W-0138 and said application is hereby approved subject to the attached conditions.

Witness my hand this 8th day of August 1996

Dolly D. Flannery
Official, Idaho Department of Water Resources

Chief, Resource Protection Bureau
Title

For Department Use Only

Received by IFW Date 5/16/96 Reviewed by _____

Fees \$50- Receipted by _____ Receipt No. W020866

Forwarded to S. O. _____

Notice of completion received _____

Field Inspection _____

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DEC 23 1996



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

NOTICE OF

☒

Change in Use

☐

Change in Ownership

☐

Change in Operator

FOR AN INJECTION WELL

Under the Provision of Title 42, Chapter 39 of the Idaho Code

1. Permit No. _____

2. Name and Address of Legal Contact: Owner

☒

Operator

☐

Name City of Boise

Street Address 790 Lander Street

City Boise State ID Zip 83703

Phone Number (208) 384-4261

3. Change: Convert a construction dewatering well to an injection well

Any request to treat any document or portion thereof as a trade secret as defined under Chapter 8, Title 48, Idaho Code shall be made at the time said document is submitted to the Department. The person making the request shall stamp or otherwise mark each page or item on a page, to which the request applies, with the word "confidential."

Be it known that the undersigned (owner/operator) hereby submits this change as checked above.

The above information is true to the best of my knowledge.

5/16/96
Date

Joel Hathorn
Signature and Title

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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
NOTICE OF

Completion of Construction

FOR AN INJECTION WELL
Under the Provision of Title 42, Chapter 39 of the Idaho Code

1. Inventory/Permit No. _____
2. Name and Address of Legal Contact: Owner ☒ Operator ☐
Name City of Boise
Street Address 790 Lander Street
City Boise State ID Zip 83703
Phone Number (208) 384-4261
Facility Name Lander Street Wastewater Treatment Plant
3. Construction or modification of well completed on 9-95 (date)
 - a. If equal or less than 18' deep: no attachments required
 - b. If well is greater than 18' deep:
 1. Attach copy of well driller's report and all other reports of construction and testing as required by the Director. (see attached)
 2. An inspection may be conducted following receipt of completed form. If you wish to be present at inspection, please check here. ☐

Any request to treat any document or portion thereof as a trade secret as defined under Chapter 8, Title 48, Idaho Code shall be made at the time said document is submitted to the Department. The person making the request shall stamp or otherwise mark each page or item on a page, to which the request applies, with the word "confidential."

Be it known that the undersigned (owner/operator) hereby submits this Notice of Completion of Construction, The above information is true to the best of my knowledge.

5/16/96
Date

Paul H. H. H. H.
Signature and Title
Project Engineer



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

ATTACHMENT I
STANDARD CONDITIONS AND REQUIREMENTS PERTAINING TO
CONSTRUCTING, MODIFYING, OPERATING AND/OR ABANDONING
AN INJECTION WELL

Standard Conditions and Requirements pertaining to all injection wells

A. Construction Requirements

1. The injection well shall be constructed by an Idaho licensed driller and shall conform with the current Minimum Well Construction Standards of the State and the Conditions of this Permit, except that a licensed driller is not required for the construction of a mine shaft, a hole without mechanically-powered equipment or a shallow injection well.
2. The injection well shall be constructed to prevent the entrance of any fluids other than that specified in the permit.
3. The injection well shall be constructed to prevent waste of artesian fluids and pressure or movement of fluids from one aquifer to another.
4. When construction or modification of an injection well has been completed, the owner shall inform the Director of completion on a form provided by the Department.
5. A sampling port shall be provided at the well head if the injection well system is enclosed. If the well is located within a pond or other catchment basin, an elevated walkway to the wellhead for sampling access must be constructed and maintained in safe operating condition by the operator of the injection well.

B. Operational Conditions

1. The injection well will not be used until the construction, operation and maintenance requirements of the permit are met and provisions are made for any required inspection, monitoring and record keeping.
2. Injection of any contaminant as defined in Rule 37.03.010.09 of the Rules into a present or future drinking or other ground water source that may cause a health hazard or adversely affect a designated and protected use is prohibited.
3. The injection well owner or operator shall develop approved procedures to detect constructional or operational failure of the well in a timely fashion and shall have contingency plans to cope with the failure of the well.
4. Authorized officials of the Department shall be allowed to enter, inspect and/or sample:
 - a. the injection well and related facilities;
 - b. the owner or operator's records of the injection operation;
 - c. monitoring instrumentation associated with the injection operation; and
 - d. the injected fluids.
5. The injection facilities shall be operated and maintained to achieve compliance with all terms and conditions of this permit.
 - a. Proper operation and maintenance includes effective performance, adequate funding, operator staffing and training, and adequate laboratory and process control, including appropriate quality assurance procedures.
 - b. If compliance cannot be met, the owner shall take corrective action or terminate injection.
6. The owner shall mitigate any adverse impacts resulting from noncompliance with the terms and conditions or the permit.
7. If an injection well was constructed prior to issuance of this permit, it shall be brought into compliance with the terms and conditions of this permit in accordance with the schedule of compliance issued by the Director.

C. Requirements for Abandonment

1. Notice of abandonment shall be submitted on a form provided by the Director not less than ten

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working days prior to commencement of abandonment activities except as provided for under Attachment II.

2. Methods of abandonment for all injection wells shall be approved by the Director prior to commencement of the activity.
3. Notice of completion of abandonment shall be submitted to the Director within 30 days of completion.
4. All deep injection wells shall be plugged with cement grout or other impervious material in such a manner as to prevent movement of fluids into or between drinking water sources.
5. Following permanent cessation of use, or where an injection well is not completed, the Director shall be notified. Abandonment or other action, as prescribed by the Director shall be completed.
6. The injection well owner or operator shall maintain the financial responsibility to insure that the injection operation is abandoned as prescribed.
7. Temporary abandonment, including use of a welded steel plate to cover the well opening, or a packer to occlude the well bore does not exempt the owner or operator from the requirement to obtain a permit. A well that is permitted as temporarily abandoned must receive a new permit in order to inject fluids.

D. Monitoring, Record Keeping and Reporting Requirements

1. Monitoring
 - a. All monitoring tests and analyses are to be performed by a state-certified laboratory or other laboratory, as approved by the Director, using recommended methods as defined in Idaho's Injection Well Rules and Regulations.
 - b. All required field instruments shall be periodically tested and maintained to ensure accuracy of results.
 - c. All samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity and fluids injected.
2. Record Keeping
 - a. The permittee shall maintain records of all monitoring activities, to include:
 - 1) date, time and exact place of sampling;
 - 2) person or firm performing the analysis;
 - 3) date of analysis, analytical methods used and results of analysis;
 - 4) calibration and maintenance of all monitoring instruments; and
 - 5) all original tapes, strip charts or other data from continuous or automated monitoring instruments.
 - b. The permittee shall retain for a period of five (5) years all records of monitoring, construction and application information.
 - 1) The period of retention for records shall be extended during the course of any litigation regarding the discharge of contaminants by the permittee or when requested by the Director.
 - 2) This requirement shall continue in effect during the five (5) year period following abandonment of the injection well.
3. Reporting
 - a. All monitoring results shall be reported to the Director as prescribed by the permit.
 - b. The Director shall be notified in writing by the permittee within five (5) days after the discovery of a violation of the terms and conditions of the permit. If an injection activity endangers human health or the environment, use of the injection well shall be immediately discontinued and the owner or operator shall immediately notify the Director. The notification shall contain the following information:
 - 1) a description of the violation and its cause;
 - 2) the duration of the violation, including dates and times; if not corrected or use of the well discontinued, the anticipated time of correction;
 - 3) steps being taken to reduce, eliminate and prevent recurrence of the discharge.
 - c. Where the permittee becomes aware that it failed to submit any relevant facts in any permit application or reports to the Director, that person shall promptly submit such facts or information.

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- d. The permittee shall furnish the Director, within a reasonable time, any information which the Director may request to determine compliance with this permit.
- e. All permits, notices and reports submitted to the Director shall be signed and certified.
- f. The Director shall be notified in writing of planned physical alterations or additions to any facility related to the permitted injection well operation.
- g. Additional information to be reported to the Director in writing:
 - 1) transfers of ownership;
 - 2) any change in operational status not previously reported;
 - 3) any anticipated noncompliance;
 - 4) reports of progress toward meeting the requirements of any compliance schedule attached or assigned to this permit.

E. Additional conditions and requirements pertaining to this permit are shown on Attachment II.

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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

ATTACHMENT II
SPECIAL CONDITIONS AND REQUIREMENTS
PERTAINING TO
CONSTRUCTION, MODIFYING, OPERATING AND/OR ABANDONING
AN INJECTION WELL (HEAT PUMP WELLS)
SUBCLASS 5A7

1. Rules and Regulations for Construction and Use of Injection Wells shall be followed. Violation of the effluent quality standards stated in rule 37.03.03.050.04 is adequate cause for cancellation of the permit.
2. Discharge into the well shall be restricted to the heat pump water.
3. A closed loop system shall be maintained to prevent contamination of the discharge. A protected air vent may be installed if needed, and a sampling port is required.
4. Additives shall be used in the water only if approved by the Department of Water Resources.
5. Should the use of the well lead to degradation of the quality of the ground water, this permit may be canceled.
6. A well log shall be submitted to the Department within 30 days of the completion of this well.
7. This permit shall expire on Aug. 31, 2006. If use of the well is desired beyond this date, a new application must be filed.

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DEC 28 1998



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

June 13, 1996

Joel Hathhorn
City of Boise (Lander st. WWTP)
790 Lander st.
Boise, ID 83703

RE: Repair of Dewatering Wells associated with heat pump system at
the Lander Street WWTP.

Dear Mr. Hathhorn:

I have received the information submitted by you, regarding the upgrade/repair of the above referenced wells. The purpose of this letter is to clarify the cities responsibility to maintain a well in a manner that will safeguard the groundwater.

Since the wells were constructed for dewatering purposes as an exception to license and drilling permit requirements and by nature of use did not constitute a well by Rule, the Department will not seek drilling permits at this time. However, I have enclosed applications for repair of a well in order to document the upgrade of these wells to an adequate standard. The schematic diagram of the proposed repair appears to observe the intent of administrative rules intending to protect the groundwater. Additionally, approval of this repair procedure will constitute a waiver of minimum standards for casing height above ground (12"), minimum seal depth and casing material since it appears that this waiver will not compromise the groundwater. The well owner is still responsible to maintain the well in a manner that will prevent waste and contamination of the groundwater. If, in the future, it is determined that these wells are contributing to waste or contamination of the resource, further repair or abandonment may be required. Additionally, if the use from the production well exceeds that of Section 42-111 (enclosed), a water right will be required. An application to appropriate water is also enclosed. *

Please return the enclosed applications for repair and water right application to this office prior to completing the repair. If you have questions please feel free to contact me.

Sincerely,


Robert B. Whitney
Sr. Water Resource Agent
Well Construction Regulation

cc: Slifka, Lester

* See attachments to Application
dated 12/4/95 - list

- diagrams

- piping plant

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includes well(s) repair ("well head protection").

- JL 9/25/96

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WATER RESOURCES
WESTERN REGIONThe Idaho
Statesman

P.O. BOX 40, BOISE, IDAHO 83707

LEGAL ADVERTISING INVOICE

Amount Due

\$77.52

Account Number 047628		Identification NOTICE OF APPLICATION FOR WATER RIGHT 63-12312, 63-12346, 63-12351	
Ordered By Sue Taylor	P.O. Number	Rate NT	Run Dates August 15 & 22, 1996
Sue Taylor IDAHO DEPARTMENT OF WATER RESOURCES Western Region 2735 Airport Way Boise, Idaho 83705-5082		Estimated Inches	Real Inches
		# Affidavits 1	Legal Number 5679

LEGAL NOTICE

NOTICE OF APPLICATION
FOR WATER RIGHT

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

63-12312

CITY OF BOISE
PUBLIC WORKS DEPT
PO BOX 500
BOISE, ID 837010500

Source: GROUNDWATER
Diversion Pt: SWNWSW Sec 22 T04N R01E
In ADA County.

Use: INDUSTRIAL (2.700 CFS)
Total Diversion: (2.700 CFS)

Date Filed: 2/15/1996

In: ADA County

T04N R01E S22 NWSW

Water bearing zone to be appropriated is 40 to 80 feet. Non-consumptive use at waste treatment plant; return flows to Boise River.

63-12346

CALDWELL, ROBERT E
PO BOX 507
EAGLE, ID 836160507

Source: GROUNDWATER
Diversion Pt: NENW Sec 15 T04N R01W in
ADA County.

Use: DOMESTIC (0.040 CFS)
Total Diversion: (0.040 CFS)

Date Filed: 7/12/1996

In: ADA County

T04N R01W S15 NENW

63-12351

CITY OF BOISE
790 LANDER ST
BOISE, ID 83703

Source: GROUNDWATER
Diversion Pt: LOT 2 (NWSE) Sec 32 T04N
R02E In ADA County.

Use: HEATING (0.100 CFS)
COOLING (0.100 CFS)
Total Diversion: (0.100 CFS)

Date Filed: 7/1/1996

In: ADA County

T04N R02E S32 Lot 2(NWSE)

Water bearing zone to be appropriated is 20 to 40 feet; all flows to be reinjected into same zone.

Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec. 42-203A, Idaho Code. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705 together with a protest fee of \$25.00 on or before SEPTEMBER 3, 1996. The protestant must also send a copy of the protest to the applicant.

KARL J. DREHER, Director
Pub. August 15 & 22, 1996 5679

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 AUGUST 15, 1996

and ending with the issue of AUGUST 22, 1996

Linda Porter

STATE OF IDAHO)

ss.

COUNTY OF ADA)

On this 22nd day of AUGUST in the year of 1996

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.

MICROFILMED Notary Public for Idaho

Residing at Boise, Idaho

My commission expires: 5/97

63-12351

CITY OF BOISE
790 LANDER ST
BOISE, ID 83703

Source: GROUNDWATER

Diversion Pt: LOT 2 (NWSE) Sec 32 T 04N R 02E in ADA County.

Use: HEATING	(	0.100 CFS)
COOLING	(	0.100 CFS)
Total Diversion:	(	0.100 CFS)

Date Filed: 7/ 1/1996

In: ADA County
T04N R02E S32 Lot 2(NWSE)

Water bearing zone to be appropriated is 20 to 40 feet; all flows to be reinjected into same zone.

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