Hi Ken,

A review of our records for Queen’s Hospital shows that no official water use permit was ever issued. I have attached a copy of two Board of Land and Natural Resources submittals that establishes the permitted use for Queen’s. Back in 1981, when existing uses were certified by the BLNR, I understand that no permits were issued for private users, such as Queen’s. Our database recognizes an allocation of 0.237 mgd for Queen’s complex. Please let me know if you have trouble reading the attachment and I can send a copy via regular mail too.

The latest 12-month moving average withdrawal available at this time shows their usage is 0.196 as of March 2003. We are working on getting more updated information.

Aloha,

Lenore
July 31, 1996

Ms. Rae M. Loui  
Deputy Director  
State Dept. of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, HI 96809

Dear Ms. Loui:

This is in response to your letter dated July 12 related to an apparent over pumpage on Well No. 1851-54.

On July 10, 1996, I sent Mr. Neil Fujii a letter explaining that our previous monthly ground water usage reports were in error. I think that letter and your over pumpage notification letter crossed in the mail. I have since spoken to Lenore Nakama and I believe the issue is satisfactorily resolved. In fact, there was no over pumpage situation on this well.

If you have any questions or need any additional information, please do not hesitate to call me at 547-4596. Thank you.

Sincerely,

Richard D. Morgan, Director  
Facilities and Building Services
Ms. Rosalie Kasaba  
Queen's Medical Center  
1301 Punchbowl St.  
Honolulu, HI 96813

Dear Ms. Kasaba:

Notice of Water Use Permit Violation  
Well No. 1851-54 (WUP No. 15)  
Nuuanu Ground Water Management Area, Oahu

Reported monthly pumpage at Well No. 1851-54 show that the current twelve-month moving average withdrawal is in excess of the 0.237 mgd allocation that was certified by the Board of Land and Natural Resources on September 11, 1981.

Please provide a written explanation by August 15, 1996 for the overpumpage and an estimate for the length of time that you will need to come into compliance with the terms of the permit.

Be advised that failure to comply with the terms of your permit may result in Commission fines up to $1000 per day and/or revocation of the permit. HRS §174C-15(b), §174C-58(2).

If you have any questions, please contact Lenore Nakama at 587-0218.

Sincerely,

RAE M. LOUI  
Deputy Director

LN:ss
July 10, 1996

Mr. Neil Fujii  
Climatologist  
State of Hawaii  
Dept. of Land & Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Fujii:

We recently discovered an error in our monthly ground water usage reports. I have attached the amended monthly ground water usage figures for The Queen's Medical Center from 10/91 to present. The numbers we were reporting to you were higher than what was actually used.

There are two meters that are read monthly and the numbers are combined to calculate our total ground water usage. We recently found that one of these meters reads in tenths of a gallon while the other reads in whole gallons only. We have corrected our calculations and will insure that subsequent monthly groundwater usage reports are correct. These amended numbers are consistent with the Board of Water Supply sewage charges.

I apologize for any inconvenience this oversight might have caused. If you have further questions or concerns, please contact me at 547-4596. Thank you.

Sincerely,

Richard D. Morgan, Director  
Facilities and Building Services
Form 881-1

STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT
DIV. OF WATER & LAND DEVELOPMENT

REGISTRATION OF WELL AND DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and file form with the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Phone 548-3948 or 548-7545 for assistance.

BATTERY OF WELLS: For a battery of wells, on the surface, in a tunnel, or in a shaft, submit a registration form for each well together with a single map or plot plan showing layout of wells.

STATE WELL NO.: 1461-54
ISLAND: OAHU

WELL NAME OR DESIGNATION: QUEEN'S HOSPITAL

SOURCE OR STATION NAME (For a battery of wells): QUEEN'S HOSPITAL

A. WELL OPERATOR
Firm name: QUEEN'S MEDICAL CENTER
Contact person: RICHARD MORGAN
Address: P.O. BOX 961
Honolulu, Hawaii
Zip: 96813 Phone: 547-4596

B. OWNER OF WELL SITE
Firm name: QUEEN'S MEDICAL CENTER
Contact person: Rosalie Kasaba
Address: 1301 PUNCHBOWL STREET
HONOLULU, HAWAII
Zip: 96813 Phone: 547-4266

C. WELL LOCATION
Tax Map Key: 211135-3 Town, Place, District: HONOLULU, HAWAII
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the well location.

D. WELL DATA
For Drilled Wells, submit "as-built" drawing, driller's log, and pump test results, and complete items below. For Tunnels and Shafts, submit construction drawings, plot plan, or sketch map.

Ground elevation (Mean sea level): 36 ft.
Reference point (Used to measure depth to water): Elevation: ft.
Description: __________________________
Depth to water (Below reference point): ft.
Maximum recorded chloride: 64, mg/l Year drilled or constructed: 1958 - Pacific Drilling Co., 1981 by Roscoe Moss Co.
Minimum recorded chloride: ppm Perforated casing depth (Below ground): 356 ft.
Maximum chloride in 1987: ppm Total depth of well: 460 ft.

E. INSTALLED PUMP DATA
Pump type: Vertical shaft Submersible Centrifugal Other (specify): __________
Power: Diesel HP Gas, HP Electric, 20 HP Other (specify): __________
Pump capacity: 750 gallons per minute
Pump installation contractor: Doonwood Engineering Co.

For Official Use Only:
Date received: 3-7-89 Date accepted: __________
Field checked by: Date: __________
Latitude: 21° 19' 47.2" Hydrologic Unit: 1951-54
Longitude: 157° 01' 52"
State Well No.: 1461-54

References: Hawaii Revised Statutes, Chapter 174C.
Hawaii Administrative Rules, Chapters 13-167 to 13-171.
F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Water use data are recorded: ☐ Daily ☐ Weekly ☐ Monthly

Method of measurement: ☐ Flow Meter ☐ Orifice
☐ Other (describe): 

Quantity of Use (Report metered or estimated monthly water use from the well described on the reverse side of this form, for the calendar years 1983 through 1987. For a battery of wells which are not individually metered, but which are connected to a single meter or other measuring device, report total use from the battery):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>10,299,000</td>
<td>15,554,000</td>
<td>7,814,000</td>
<td>14,388,000</td>
<td>15,160,000</td>
</tr>
<tr>
<td>February</td>
<td>9,426,000</td>
<td>14,818,000</td>
<td>12,803,000</td>
<td>14,350,000</td>
<td>13,113,000</td>
</tr>
<tr>
<td>March</td>
<td>9,225,000</td>
<td>16,039,000</td>
<td>14,526,000</td>
<td>13,613,000</td>
<td>14,205,000</td>
</tr>
<tr>
<td>April</td>
<td>8,474,000</td>
<td>15,375,000</td>
<td>13,706,000</td>
<td>14,352,000</td>
<td>13,658,000</td>
</tr>
<tr>
<td>May</td>
<td>8,490,000</td>
<td>16,063,000</td>
<td>14,547,000</td>
<td>14,098,000</td>
<td>14,982,000</td>
</tr>
<tr>
<td>June</td>
<td>8,686,000</td>
<td>15,510,000</td>
<td>14,058,000</td>
<td>13,612,000</td>
<td>7,723,000</td>
</tr>
<tr>
<td>July</td>
<td>9,923,000</td>
<td>15,227,000</td>
<td>14,613,000</td>
<td>14,331,000</td>
<td>18,699,000</td>
</tr>
<tr>
<td>August</td>
<td>12,032,000</td>
<td>16,020,000</td>
<td>14,406,000</td>
<td>14,883,000</td>
<td>8,742,000</td>
</tr>
<tr>
<td>September</td>
<td>11,138,000</td>
<td>15,497,000</td>
<td>14,167,000</td>
<td>14,266,000</td>
<td>8,669,000</td>
</tr>
<tr>
<td>October</td>
<td>10,865,000</td>
<td>4,399,000</td>
<td>14,679,000</td>
<td>14,619,000</td>
<td>8,520,000</td>
</tr>
<tr>
<td>November</td>
<td>15,293,000</td>
<td>997,000</td>
<td>14,650,000</td>
<td>14,687,000</td>
<td>14,182,000</td>
</tr>
<tr>
<td>December</td>
<td>15,479,000</td>
<td>757,000</td>
<td>14,593,000</td>
<td>14,517,000</td>
<td>7,153,000</td>
</tr>
<tr>
<td>ANNUAL</td>
<td>129,400,000</td>
<td>146,256,000</td>
<td>164,562,000</td>
<td>171,716,000</td>
<td>144,813,000</td>
</tr>
</tbody>
</table>

Minimum day's use: Est. 150,000 gallons Maximum day's use: Est. 250,000 gallons

Typical times of usage: 24 hours

Type of Use (Check all category boxes that apply and provide additional information as indicated.):

- ☐ Municipal (including resorts, hotels, businesses)
- ☐ Domestic (systems serving 25 people or less)
- ☐ Irrigation
- ☐ Industrial
- ☐ Military
- ☐ Other

Additional Information

- Number of service connections:
- Acres Irrigated:
- Crop(s): ☐ Sugar ☐ Pineapple
  ☐ Other (specify):
- Non-Crop: ☐ Landscape ☐ Golf Course
  ☐ Other (specify):
- Method: ☐ Drip ☐ Furrow ☐ Sprinkler
  ☐ Cooling ☐ Manufacturing ☐ Mill
  ☐ Other (specify):
- Specify (livestock, aquaculture, etc.): 

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: Richard D. Morgan Date: March 1, 1985
Printed Name: Richard D. Morgan
Firm or Title (Well Operator, etc.): Director of Facilities & Building Services
State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Water and Land Development  
Honolulu, Hawaii  

June 18, 1982

Chairman and Members  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii  

Gentlemen:  

RESUBMITTAL  
Terms of Water Withdrawal and Use Permits  

The Department's Administrative Rules on ground water control require that the Board specify the period or duration of permits and the commencement and completion dates for the construction of ground water sources. After investigation and study of this matter, DOWAID is ready to make specific recommendations for adoption by the Board of Land and Natural Resources.

The Ground Water Use Law specifies that permits may be issued up to a maximum of 50 years and allows for extension of the permit after one-half of the permit period has lapsed. The staff is recommending that the duration of each permit be established at twenty (20) years with a review every five years by the Board to determine compliance with provisions of the permit. The staff feels that 20 years is a reasonable time for regulating ground water withdrawals and uses at this early stage of the program. As the Department gains experience in ground water regulation, the duration of the permits may be reviewed and adjusted as appropriate in the future.

On the commencement and completion dates, the staff recommends that a period of 24 months be established for completing the development of the ground water source. This construction period is a reasonable time for drilling, testing, and for the installation of permanent pumps and controls to fully bring the ground water source into operation. The period may be extended upon a showing of good cause and good faith performance. The permit and construction dates should commence on the date the permit is issued by the Department.

It is recommended that the above terms be standardized for all water withdrawal and use permits issued by the Board, subject to adjustments required by the Board for any permit.

RECOMMENDATION:

That the Board establish the terms of ground water withdrawal and use permits at 20 years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit and that the development of the ground water source be completed within 24 months from the date of permit issuance for all permits issued by the Board, subject to adjustments required by the Board for any permit.

Respectfully submitted,  

ROBERT T. CHUCK  
Manager-Chief Engineer  

APPROVED FOR SUBMITTAL  

SCSCHU ONO, Chairman  

ITEM D-1  
C/10/82  
B12
June 9, 1982

Mr. Michael McElroy, Director
Department of Land Utilization
City & County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. McElroy:

We have reviewed The Queen's Medical Center Application for Plan Review Use and Hawaii Capital District Certificate of Appropriateness.

The on-site well mentioned in the Appendix, pages A-23 and A-24, refers to state well number 1851-54 which is located in the Honolulu Ground Water Control Area and was certified by the Board of Land and Natural Resources as a lawful existing use. The well has several pumps with a combined capacity of 1300 gallons per minute (gpm).

The preserved use, however, is 1.08 million gallons per day or 750 gpm, averaged annually. The engineer's analysis of the system concludes that "water consumption and demand furnished will not be appreciably different from the present condition" and that "the on-site well is expected to be adequate for the development."

As long as the use of water from the well remains at or below the preserved use of 750 gpm or 1.08 mgd, averaged annually, no action will be necessary. If, however, the use is increased or modified in any way, the Department of Land and Natural Resources should be contacted at 548-7619.

Very truly yours,

ROBERT T. CHUCK
Manager-Chief Engineer

ES:ko

Passed all attachments to Director site.
MEMORANDUM FOR THE RECORD

June 7, 1982

From: Neal Iwada

Subject: Queen's Medical Center pumps (Well 1851-54)

The subject of the pumping capacity were questioned. The Declaration of Water Withdrawal and Use form submitted by Queen's Medical Center stated a pump capacity of 750 gpm. However, in the Queen's Medical Center Application for Plan Review Use and Hawaii Capital District Certificate of Appropriateness prepared by Architects Hawaii Ltd. December 18, 1981 it stated that:

There are three pumps servicing the well with a combined capacity of 1300 gpm.

Per telephone conversation with Mr. Michael Yoneda, chief Engineer for Queens Medical Center, it was learned that they actually have four pumps. However, the additional pumps act as a back-up should system pressures drop. 99.9% of the time 750 gpm capacity is being run.
May 4, 1982

Mr. Michael McElroy, Director
Department of Land Utilization
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. McElroy:

Thank you for your April 29, 1982 transmittal to our office of the Queen's Medical Center Master Plan application for a certificate of appropriateness.

Our staff has reviewed this plan and finds it does not affect the historically significance structures (Harkness and Mabel Smyth) on the Queen's Hospital grounds. Thus we have no concern with regards to the approval of this application.

Sincerely yours,

Roy K. C. Sue
State Parks Administrator

DX:ss 6/3/82

[Handwritten note: No objections specific to DOWALD programs.]
THE QUEEN'S MEDICAL CENTER

APPLICATION FOR PLAN REVIEW USE AND

HAWAII CAPITAL DISTRICT CERTIFICATE OF APPROPRIATENESS

Prepared by Architects Hawaii Ltd.

December 18, 1981
2. Adequacy of the Existing System.

The proposed Queen's Medical Center expansion/modification program encompasses a total area of approximately 66,000 square feet. The majority of the proposed development area is presently occupied by existing buildings or over paved areas. Additional runoff, if any, as a result of the construction of the proposed facilities is expected to be negligible, since there will not be any changes to the hydrologic consideration of the site. Impact and effect to the existing and available storm drainage system described above will be minimal.

D. Domestic Water System

1. Existing Water System.

The potable water supply for the Queen's Medical Center is presently supported by an onsite well. There are three pumps servicing the well with a combined capacity of 1300 GPM. These pumps are located in the utility building at the corner of Vineyard Boulevard and Miller Street (See Fig. 3).

The onsite water supply is supplemented by connections to the City's 8" waterlines located on Miller Street and Luahala Street, and to the 12" waterline on Lusitana Street.

The connection at Miller Street has an 8" meter located at the corner of Miller Street and Vineyard Boulevard. This meter services the domestic water system, which is used as an emergency supply and as a back-up to the on-site water supply.

The connection at Lusitana Street has a 5/8" meter located at Lusitana Street above the Kekala Wing. This meter services the nearby facilities, and the average monthly consumption recorded by this meter is 50,000 gallons.

The connection at Lauhala Street has a 4" meter located midblock of Lauhala Street. This meter services the Cancer Center of Hawaii.

The existing water system from the on-site is distributed through a loop within the existing facilities. A 12" distribution line exits from the well source at the utility building and runs makai below grade between the General Services building and the Pauahi Wing. This 12" waterline continues Diamond A-23
Head in an utility tunnel under the Pauahi, Nalani, Iolani, and Kinau Wings. From the Kinau Wing, the 12" waterline branches into a 6" line that services the Kekala Wing and a 8" line that continues mauka towards the Physicians Office Building. The 8" line then enters the mauka utility tunnel which runs ewa under the Physicians Office Building and the parking garage structure, and finally completes the loop ending back at the utility building.

2. Fireflow Requirement

Fire protection service is provided by connections to the 8" waterlines along Miller Street and Lauhala Street. Fire flow is monitored by detector check meters located at the corner of Miller Street and Vineyard Boulevard, and at Lauhala Street outside the Cancer Center of Hawaii.

3. Adequacy of Water Facilities

The proposed expansion/modification of the Queen's Medical Center will not substantially increase the number of patient-bed. Water consumption and demand furnished will not be appreciably different from the present condition. Source from the on-site well is expected to be adequate for the development. Water supply therefore is not anticipated to be a problem.
State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Water and Land Development  
Honolulu, Hawaii  
September 11, 1981

Chairman and Members  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii  

Gentlemen:

Certification of Ground Water Withdrawals and Uses,  
Honolulu Ground Water Control Area, Oahu

The Honolulu Ground Water Control Area was designated by the Board of Land and Natural Resources on February 27, 1981 under authority of Chapter 177, HRS, and Chapter 188 of Title 13, Administrative Rules entitled "Rules for the Control of Ground Water Use in the State of Hawaii". The Department's regulatory procedures provide for water users to declare their existing water uses within a ninety-day period which ended June 4, 1981 and allows the Board 180 days to certify the declared uses.

The recommended certification of total annual, average daily, and maximum daily withdrawals for individual wells and/or well fields is included in the attachment, "Certification of Ground Water Withdrawals and Uses, Honolulu Ground Water Control Area", for the Moanalua-Kaimuki Subarea and Waialae-Hawaii Kai Subarea. A comparison of the recommended quantity for certification and the sustainable yield adopted by the Board on July 24, 1981 is tabulated below:

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Sustainable Yield (mgd)</th>
<th>Recommended Certification (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moanalua-Kaimuki</td>
<td>15</td>
<td>41.827</td>
</tr>
<tr>
<td>Waialae-Hawaii Kai</td>
<td>5</td>
<td>1.100</td>
</tr>
</tbody>
</table>

The remaining ground water supplies may be withdrawn by obtaining permits from the Board of Land and Natural Resources.

RECOMMENDATION:

That the Board certify the existing withdrawals and uses for each well tabulated on the attached "Certification of Ground Water Withdrawals and Uses, Honolulu Ground Water Control Area" dated September 11, 1981, subject to any special conditions and applicable laws, rules and regulations.

Respectfully submitted,

ROBERT T. CHUCK  
Manager-Chief Engineer

APPROVED FOR SUBMITTAL:

SUSUMI ONO, Chairman  

Approved by the Board of Land & Natural Resources at the meeting held on

ITEM D-4
### Certification of Ground Water Withdrawals and Uses

**Honolulu Ground Water Control Area**

<table>
<thead>
<tr>
<th>User/Source</th>
<th>State Well No.</th>
<th>Total Wells</th>
<th>Source Use</th>
<th>5-yr.Ave Withdrawal</th>
<th>Declared Existing Use</th>
<th>Preserved Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MOANALUA-KAIMUKI Subarea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Board of Water Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalikik Station</td>
<td>1748-03 to 10</td>
<td>8 Mun.</td>
<td>22.32</td>
<td>3.69 Mun.</td>
<td>14.17</td>
<td>1,346.85</td>
</tr>
<tr>
<td>Palolo Well</td>
<td>1847-01</td>
<td>1 Mun.</td>
<td>1.51</td>
<td>1.31 Mun.</td>
<td>1.70</td>
<td>478.15</td>
</tr>
<tr>
<td>Wai'anae Station</td>
<td>1849-13 to 16</td>
<td>4 Mun.</td>
<td>10.08</td>
<td>5.75 Mun.</td>
<td>10.08</td>
<td>2,020.75</td>
</tr>
<tr>
<td>Ureaudale Station</td>
<td>1851-11, 13, 24,</td>
<td>31 to 35, 67</td>
<td>9 Mun.</td>
<td>22.536</td>
<td>0.64 Mun.</td>
<td>18.14</td>
</tr>
<tr>
<td>Kalihi Pump</td>
<td>1862-09 to 16</td>
<td>16 to 19, 22</td>
<td>8 Mun.</td>
<td>14.112</td>
<td>4.63 Mun.</td>
<td>11.82</td>
</tr>
<tr>
<td>Kalihi Shaft</td>
<td>2052-08</td>
<td>1 Mun.</td>
<td>17.28</td>
<td>8.11 Mun.</td>
<td>17.28</td>
<td>2,960.15</td>
</tr>
<tr>
<td>Moanalua Station</td>
<td>2153-10 to 12</td>
<td>2 Mun.</td>
<td>6.019</td>
<td>3.29 Mun.</td>
<td>6.048</td>
<td>1,204.65</td>
</tr>
<tr>
<td><strong>Subtotal (BWS Wells)</strong></td>
<td>34</td>
<td></td>
<td>93,846</td>
<td>33.62</td>
<td>79,320</td>
<td>13,271.20</td>
</tr>
<tr>
<td><strong>Private Users</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amo'oku H. C. &amp; U.</td>
<td>2053-05</td>
<td>1 Ind.</td>
<td>0.576</td>
<td>0.139 Ind.</td>
<td>0.576</td>
<td>56.74</td>
</tr>
<tr>
<td>Army - Ft. Shafter</td>
<td>2053-10, 11</td>
<td>2 Dom.</td>
<td>3.6</td>
<td>1.035 Dom.</td>
<td>3.6</td>
<td>377.73</td>
</tr>
<tr>
<td>Army - Tripler</td>
<td>2153-07, 00</td>
<td>2 Dom.</td>
<td>1.555</td>
<td>0.609 Dom.</td>
<td>1.555</td>
<td>222.29</td>
</tr>
<tr>
<td>Bishop Trust</td>
<td>1851-26</td>
<td>1 Ind.</td>
<td>1.15</td>
<td>0.66 Ind.</td>
<td>1.15</td>
<td>21.90</td>
</tr>
<tr>
<td>Del Monte Corp.</td>
<td>1952-13</td>
<td>1 Ind.</td>
<td>1.296</td>
<td>0.244 Ind.</td>
<td>1.296</td>
<td>99.06</td>
</tr>
<tr>
<td>Castle &amp; Cooke Foods</td>
<td>1952-11, 13, 20, 21</td>
<td>4 Ind.</td>
<td>0.614</td>
<td>2.0 Ind.</td>
<td>0.614</td>
<td>912.90</td>
</tr>
<tr>
<td>Hawaiian Meat Co., Ltd.</td>
<td>2053-09</td>
<td>1 Ind.</td>
<td>0.144</td>
<td>0.082 Ind.</td>
<td>0.144</td>
<td>29.93</td>
</tr>
<tr>
<td>Honolulu Gas Co.</td>
<td>1952-14</td>
<td>1 Ind.</td>
<td>14.8</td>
<td>2.5 Ind.</td>
<td>14.8</td>
<td>912.50</td>
</tr>
<tr>
<td>Honolulu Int. C.C.</td>
<td>2154-01</td>
<td>1 Irr.</td>
<td>0.346</td>
<td>0.346 Irr.</td>
<td>0.346</td>
<td>126.29</td>
</tr>
<tr>
<td>Kamehameha Schools</td>
<td>2052-07, 11</td>
<td>2 Dom.</td>
<td>1.728</td>
<td>0.189 Dom.</td>
<td>1.728</td>
<td>68.89</td>
</tr>
<tr>
<td>Kawahiko Church</td>
<td>1851-00</td>
<td>1 Irr.</td>
<td>0.100</td>
<td>No data Irr.</td>
<td>0.100</td>
<td>7.30</td>
</tr>
<tr>
<td>Kokua Kai Koyo</td>
<td>1749-19</td>
<td>1 Dom.</td>
<td>0.576</td>
<td>0.336 Dom.</td>
<td>0.576</td>
<td>122.30</td>
</tr>
<tr>
<td>Lov- o's Bakery</td>
<td>1749-19</td>
<td>1 Ind.</td>
<td>No data</td>
<td>No data Ind.</td>
<td>0.043</td>
<td>7.70</td>
</tr>
<tr>
<td>M.T.H. Inc.</td>
<td>1851-20</td>
<td>1 Ind.</td>
<td>No data</td>
<td>No data Ind.</td>
<td>0.043</td>
<td>7.70</td>
</tr>
<tr>
<td>Pacific Beach Hotel</td>
<td>1750-09</td>
<td>1 Oth.</td>
<td>No data</td>
<td>No data Oth.</td>
<td>7.30</td>
<td>0.02</td>
</tr>
<tr>
<td>Pacific Club</td>
<td>1851-07</td>
<td>1 Dom.</td>
<td>0.434</td>
<td>No data Dom.</td>
<td>0.434</td>
<td>14.60</td>
</tr>
<tr>
<td>Pacific Laundry</td>
<td>1851-58</td>
<td>1 Dom.</td>
<td>0.576</td>
<td>No data Dom.</td>
<td>0.576</td>
<td>36.50</td>
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<tr>
<td>Palama Settlement</td>
<td>1952-13</td>
<td>1 Oth.</td>
<td>No data</td>
<td>No data Oth.</td>
<td>8.76</td>
<td>0.24</td>
</tr>
<tr>
<td>Punahou School</td>
<td>1892-10</td>
<td>1 Dom.</td>
<td>0.728</td>
<td>0.142 Dom.</td>
<td>0.728</td>
<td>51.83</td>
</tr>
<tr>
<td>Queen's Mod. Cntr.</td>
<td>1951-04</td>
<td>1 Dom.</td>
<td>1.000</td>
<td>0.237 Dom.</td>
<td>1.000</td>
<td>96.50</td>
</tr>
<tr>
<td>S. M. Damon Estate</td>
<td>2153-02</td>
<td>1 Oth.</td>
<td>0.144</td>
<td>0.021 Oth.</td>
<td>0.144</td>
<td>7.66</td>
</tr>
<tr>
<td><strong>Subtotal (Private Users)</strong></td>
<td>27</td>
<td></td>
<td>27.06</td>
<td>0.007</td>
<td>35.93</td>
<td>2,993.55</td>
</tr>
<tr>
<td><strong>TOTAL - Moanalua-Kaimuki Subarea</strong></td>
<td>61</td>
<td></td>
<td>121.774</td>
<td>41.027</td>
<td>114.873</td>
<td>15,566.85</td>
</tr>
</tbody>
</table>

| Board of Water Supply |               |             |            |                     |                       |              |
| Naalae-Hawaii Kai Subarea |               |             |            |                     |                       |              |
| **Board of Water Supply** |               |             |            |                     |                       |              |
| Aina Koa | 1746-01 | 1 Mun. | 0.504 | 0.40 Aun. | 0.504 | 146.04 | 0.40 |
| Waialae Iki Station | 1746-02 | 1 Mun. | 0.504 | 0.19 Mun. | 0.504 | 69.35 | 0.19 |
| Waialae Shaft | 1747-02 | 1 Mun. | 2.000 | 0.24 Mun. | 0.69 | 127.04 | 0.24 |
| **Subtotal (BWS Wells)** | 3 | | 3.008 | 0.83 | 1.698 | 302.50 | 0.83 |
| **Private User** |               |             |            |                     |                       |              |
| Waialae Country Club | 1646-01 | 1 Irr. | 0.864 | 0.270 Irr. | 0.864 | 98.55 | 0.270 |
| **TOTAL - Waialae-Hawaii Kai Subarea** | 4 | | 4.752 | 1.100 | 2.562 | 401.50 | 1.100 |
FIELD MEMORANDUM

WELL(S) NO. 1851-54  DATE  June 15, 1981

LOCATION  Queen's Medical Hospital, Oahu, Hawaii

SUBJECT  Field Check of well

PRESENT  Mr. Michael Yoneda - Chief Engineer; NI and MY - DEWALD

FIELD NOTES  Well is located in cement building behind of the hospital near the corner of Lucitania and Miller Streets. Well has been recently resealed to 10" BWS and BOH makes check of well.

Water from the well is being used for all purposes. No major problems have been encountered at the well or the pumping systems. There is heavy construction going on in the vicinity of the well.

(see photo)

N. Imada  6/15/81

Well No. 1851-54

6/15/81
Mr. Neil Imada  
Division of Water & Land Development  
P. O. Box 373  
Honolulu, HI 96809  

SUBJECT: The Queen's Medical Center - Well Pumpage Data  

Dear Mr. Imada:  

Per your request, the following well pumpage data is submitted for the years 1981 - 1982.  

<table>
<thead>
<tr>
<th>MONTH/YEAR</th>
<th>CONSUMPTION (1,000 Gals.)</th>
<th>MONTH/YEAR</th>
<th>CONSUMPTION (1,000 Gals.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan./81</td>
<td>7,371 0.238</td>
<td>Jan./82</td>
<td>6,788 0.219</td>
</tr>
<tr>
<td>Feb./81</td>
<td>7,074 0.259</td>
<td>Feb./82</td>
<td>6,773 0.242</td>
</tr>
<tr>
<td>Mar./81</td>
<td>8,341 0.264</td>
<td>Mar./82</td>
<td>7,235 0.233</td>
</tr>
<tr>
<td>April/81</td>
<td>8,021 0.267</td>
<td>April/82</td>
<td>6,955 0.232</td>
</tr>
<tr>
<td>May/81</td>
<td>8,468 0.273</td>
<td>. . Meter 000</td>
<td>May/82-Sept./82</td>
</tr>
<tr>
<td>June/81</td>
<td>8,773 0.292</td>
<td>Oct./82</td>
<td>7,967 0.257</td>
</tr>
<tr>
<td>July/81</td>
<td>8,712 0.281</td>
<td>Nov./82</td>
<td>9,453 0.315</td>
</tr>
<tr>
<td>Aug./81</td>
<td>8,957 0.289</td>
<td>Dec./82</td>
<td>9,359 0.362</td>
</tr>
<tr>
<td>Sept./81</td>
<td>8,034 0.268</td>
<td>1982 Average:</td>
<td>0.257</td>
</tr>
<tr>
<td>Oct./81</td>
<td>8,061 0.269</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov./81</td>
<td>6,953 0.252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec./81</td>
<td>6,788 0.219</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1981 Average: 0.262  

Very Truly Yours,  

Michael Yoneda  
Chief Engineer  

MY: ck  

cc: Files
March 18, 1983

Mr. Michael Yoneda
Chief Engineer
Queen's Medical Center
P.O. Box 861
Honolulu, HI 96808

Dear Mr. Yoneda:

We acknowledge receipt of the Queen's Medical Center well pumpage data for calendar years 1981 and 1982.

We appreciate your efforts and look forward to continued cooperation in this matter.

Very truly yours,

ROBERT T. CHUCK
Manager-Chief Engineer

NI:js
March 8, 1983

Mr. Neil Imada
Division of Water & Land Development
P. O. Box 373
Honolulu, HI 96809

SUBJECT: The Queen's Medical Center - Well Pumpage Data

Dear Mr. Imada:

Per your request, the following well pumpage data is submitted for the years 1981 - 1982.

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<td>Jan./82</td>
<td>6,788 0.219</td>
</tr>
<tr>
<td>Feb./81</td>
<td>7,074 0.253</td>
<td>Feb./82</td>
<td>6,773 0.242</td>
</tr>
<tr>
<td>Mar./81</td>
<td>8,341 0.269</td>
<td>Mar./82</td>
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<td>Dec./82</td>
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</tr>
<tr>
<td>Aug./81</td>
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<td>1982 Average:</td>
<td>9,302 0.287</td>
</tr>
<tr>
<td>Sept./81</td>
<td>8,034 0.268</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct./81</td>
<td>8,061 0.260</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov./81</td>
<td>6,953 0.232</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec./81</td>
<td>6,788 0.219</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1981 Average: 0.262

Very Truly Yours,

Michael Yoneda
Chief Engineer

MY:ck

cc: Files
June 2, 1981

Queen's Medical Center
1301 Punchbowl Street
Honolulu, Hawaii 96813

Attention: Mr. Michael Yonéda
Chief Engineer

Gentlemen:

Honolulu Ground Water Control Area

We acknowledge receipt on May 29, 1981, your Declaration of Existing Water Withdrawal and Use in the Honolulu Ground Water Control Area. Our staff will review the data and may contact you for a field inspection of your well(s) before certification of your declared water use is made by the Board of Land and Natural Resources.

We appreciate your early filing of the declaration of existing water use.

Very truly yours,

Robert T. Chuck
Manager-Chief Engineer

ES: dh
DECLARATION OF EXISTING WATER WITHDRAWAL AND USE
Honolulu and Waialua Ground Water Control Areas

Instructions: This form must be properly completed, signed, and submitted for each individual well or connected battery of wells on or before June 4, 1981, in accordance with Regulation 9 of the Department. Submit the form with any attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

1. WATER USER: Name: Queen's Medical Center
   Mailing address: 151 Punchbowl St.
   Phone: 539-4911

2. WATER USER'S WELL CONNECTED BATTERY OF WELLS:
   User's Well Name and Location
   Tax Map Key:

   User's Well No. (s) Pump or natural flow capacity (gpm) Capacity determined by flowmeter, nameplate, orifice, etc. (specify) Year pump inst./modified
   1 750 Nameplate 1958

3. BENEFICIAL USE OF WATER:
   (a) Major Use: [ ] Municipal [ ] Agriculture [ ] Military [ ] Industrial [ ] Domestic [ ] Other
      (specify)
   (b) Minor Uses: [ ] Air conditioning [ ] Grooming lawn irrigation
      (specify)
   (c) For Agriculture Use list crop(s), total acreage irrigated, and attach map showing acreage irrigated by the well source.

4. BENEFICIALLY USED WATER WITHDRAWALS:
   (a) All figures given in (b) are records of: [ ] Metered flow [ ] Nameplate pump capacity [ ] Orifice [ ] Weir [ ] Other
      (specify)
   (b) Records available (in million gallons per day, three decimal places):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>152</td>
<td>.144</td>
<td>.331</td>
<td>.235</td>
<td>.216</td>
<td>.206</td>
<td>.204</td>
</tr>
<tr>
<td>Feb.</td>
<td>.133</td>
<td>.191</td>
<td>.232</td>
<td>.195</td>
<td>.223</td>
<td>.221</td>
<td>.213</td>
</tr>
<tr>
<td>Mar.</td>
<td>.148</td>
<td>.217</td>
<td>.216</td>
<td>.183</td>
<td>.286</td>
<td>.242</td>
<td>.234</td>
</tr>
<tr>
<td>Apr.</td>
<td>.260</td>
<td>.199</td>
<td>.214</td>
<td>.224</td>
<td>.242</td>
<td>.249</td>
<td>.241</td>
</tr>
<tr>
<td>May</td>
<td>.329</td>
<td>.231</td>
<td>.232</td>
<td>.212</td>
<td>.234</td>
<td>.251</td>
<td>.245</td>
</tr>
<tr>
<td>June</td>
<td>.301</td>
<td>.241</td>
<td>.301</td>
<td>.253</td>
<td>.301</td>
<td>.244</td>
<td>.261</td>
</tr>
<tr>
<td>July</td>
<td>.155</td>
<td>.263</td>
<td>.241</td>
<td>.237</td>
<td>.234</td>
<td>.247</td>
<td>.242</td>
</tr>
<tr>
<td>Aug.</td>
<td>.250</td>
<td>.295</td>
<td>.258</td>
<td>.251</td>
<td>.286</td>
<td>.256</td>
<td>.255</td>
</tr>
<tr>
<td>Sep.</td>
<td>.250</td>
<td>.267</td>
<td>.240</td>
<td>.257</td>
<td>.280</td>
<td>.250</td>
<td>.251</td>
</tr>
<tr>
<td>Oct.</td>
<td>.254</td>
<td>.306</td>
<td>.251</td>
<td>.247</td>
<td>.304</td>
<td>.304</td>
<td>.247</td>
</tr>
<tr>
<td>Nov.</td>
<td>.301</td>
<td>.323</td>
<td>.302</td>
<td>.226</td>
<td>.325</td>
<td>.243</td>
<td>.254</td>
</tr>
<tr>
<td>Dec.</td>
<td>.145</td>
<td>.327</td>
<td>.235</td>
<td>.216</td>
<td>.222</td>
<td>.242</td>
<td>.222</td>
</tr>
<tr>
<td>Yr. total</td>
<td>2.541</td>
<td>2.763</td>
<td>2.744</td>
<td>2.712</td>
<td>2.714</td>
<td>2.920</td>
<td>2.838</td>
</tr>
<tr>
<td>Mo. Ave</td>
<td>212</td>
<td>280</td>
<td>236</td>
<td>230</td>
<td>220</td>
<td>248</td>
<td>233</td>
</tr>
</tbody>
</table>

5-year average: 2.835 mgd. Highest day use: 2.77 mgd.

(c) For Agriculture Use only: description of withdrawal schedule (include times of day and days of week:

5. WELL DESCRIPTION:
On the attached sheet, make corrections or additions thereon in red pencil as necessary and return with Declaration form. If information is readily available in another form, you may submit it in lieu of the corrected sheet.

Declaration: Under penalties provided in Regulation 9 of the Department of Land and Natural Resources, the undersigned declare and certify that this declaration has been examined, including accompanying statements, and to the best of our knowledge and belief, it is true, correct, and complete.

Water User: The Queen's Medical Center
(print) Michael Yokota
(signature) Date: 5/26/81
Chie Engineer

Landowner of Well Site: The Queen's Medical Center
(print) Michael Yokota
(signature) Date: 5/26/81
Chie Engineer

For Official Use: Last day to certify Date certified
Amount certified WELL(S) No.
WELL INFORMATION SHEET

Instructions: The following information is currently on file at the Department of Land and Natural Resources, Division of Water and Land Development. If there are any changes, please make the necessary corrections and return to the Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Well Number: 1891-84

Name or Location: Queens Hospital

Owner or User: Queens Hospital

Year drilled: 1958

Driller: Pacific Drilling

Ground Surface Elevation in feet referenced to mean sea level: 34

Casing Diameter in inches: 10

Total depth of well in feet: 460

Casing depth in feet: 356

Major Use:

☑ Domestic ☐ Disposal
☐ Municipal ☐ Unused ☐ Lost
☐ Irrigation ☐ Sealed ☐ Recharge
☐ Industrial ☐ Observation ☐ Other (specify)

Static Water Level in feet: 26.7

Chloride content of water in milligrams/liter: 41-65

Installed pump capacity in million gallons per day: 

Average annual draft in million gallons per day: 0.7
DECLARATION OF EXISTING WATER WITHDRAWAL AND USE
Honolulu and Waialua Ground Water Contour Areas

Instructions: This form must be properly completed, signed, and submitted for each individual well or connected battery of wells on or before June 4, 1981, in accordance with Regulation 9 of the Department. Submit the form with any attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

1. WATER USER: Name: Queen's Medical Center Mailing address: 1301 Punchbowl St.

2. WATER USER'S □ WELL □ CONNECTED BATTERY OF WELLS:

<table>
<thead>
<tr>
<th>User's Well Name and Location</th>
<th>Tax Map Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nameplate</td>
<td>-------------</td>
</tr>
<tr>
<td>Capacity determined by flowmeter, nameplate, orifice, etc. (specify)</td>
<td>Year pump inst./modified</td>
</tr>
<tr>
<td>1</td>
<td>1954</td>
</tr>
</tbody>
</table>

3. BENEFICIALLY USED WATER:

   (a) Major Use: □ Municipal □ Agriculture □ Domestic □ Military □ Industrial □ Other (specify)

   (b) Minor Uses: □ Air conditioning □ Fertilizing □ Home irrigation (specify)

   (c) For Agriculture Use list crop(s), total acreage irrigated, and attach map showing acreage irrigated by the well source.

4. BENEFICIALLY USED WATER WITHDRAWALS:

   (a) All figures given in (b) are records of: □ Metered flow □ Nameplate pump capacity □ Orifice □ weir □ Other (specify)

   (b) Records available (in million gallons per day, three decimal places):

<table>
<thead>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>130</td>
<td>.214</td>
<td>.237</td>
<td>.223</td>
<td>.204</td>
<td>.204</td>
<td>.204</td>
</tr>
<tr>
<td>Feb.</td>
<td>.193</td>
<td>.181</td>
<td>.222</td>
<td>.182</td>
<td>.223</td>
<td>.216</td>
<td>.193</td>
</tr>
<tr>
<td>Mar.</td>
<td>.128</td>
<td>.214</td>
<td>.113</td>
<td>.144</td>
<td>.230</td>
<td>.223</td>
<td>.204</td>
</tr>
<tr>
<td>May</td>
<td>.204</td>
<td>.240</td>
<td>.223</td>
<td>.212</td>
<td>.284</td>
<td>.241</td>
<td>.254</td>
</tr>
<tr>
<td>June</td>
<td>.201</td>
<td>.241</td>
<td>.227</td>
<td>.253</td>
<td>.291</td>
<td>.244</td>
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<td>.131</td>
<td>.259</td>
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<td>.226</td>
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<td>.226</td>
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<td>.224</td>
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<td>.289</td>
<td>.231</td>
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<td>.261</td>
<td>.254</td>
</tr>
<tr>
<td>Nov.</td>
<td>.241</td>
<td>.223</td>
<td>.252</td>
<td>.226</td>
<td>.235</td>
<td>.241</td>
<td>.236</td>
</tr>
<tr>
<td>Dec.</td>
<td>.143</td>
<td>.227</td>
<td>.205</td>
<td>.214</td>
<td>.222</td>
<td>.222</td>
<td>.222</td>
</tr>
<tr>
<td>Yr. total</td>
<td>2,474</td>
<td>2,762</td>
<td>2,747</td>
<td>2,712</td>
<td>2,914</td>
<td>2,228</td>
<td>2,020</td>
</tr>
<tr>
<td>Mo. Ave.</td>
<td>.212</td>
<td>.230</td>
<td>.233</td>
<td>.236</td>
<td>.243</td>
<td>.245</td>
<td></td>
</tr>
</tbody>
</table>

   5-year average: 2.233 mgd, highest day use ___ mgd on _/2/81.

   (c) For Agriculture Use only: description of withdrawal schedule (include times of day and days of week):

5. WELL DESCRIPTION:

On the attached sheet, make corrections or additions thereon in red pencil as necessary and return with Declaration form. If information is readily available in another form, you may submit it in lieu of the corrected sheet.

Declaration: Under penalties provided in Regulation 9 of the Department of Land and Natural Resources, the undersigned declare and certify that this declaration has been examined, including accompanying statements, and to the best of our knowledge and belief, it is true, correct, and complete.

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(print) Michael Yoneda
(signature) Chief Engineer
Date: 5/26/81

Landowner of
Well Site: The Queen's Medical Center
(print) Michael Yoneda
(signature) Chief Engineer
Date: 5/26/81

For Official Use: Last day to certify ________ Date certified ________

Amount certified ________ WELL(S) No. ________
WELL INFORMATION SHEET

Instructions: The following information is currently on file at the Department of Land and Natural Resources, Division of Water and Land Development. If there are any changes, please make the necessary corrections and return to the Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

<table>
<thead>
<tr>
<th>Well Number:</th>
<th>1891-84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name or Location:</td>
<td>Queens Hospital</td>
</tr>
<tr>
<td>Owner or User:</td>
<td>Queens Hospital</td>
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<td>Average annual draft in million gallons per day:</td>
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May 19, 1981

Queen's Medical Center
1301 Punchbowl Street
Honolulu, Hawaii 96813

Attn: Mr. Stanley Okinaga

Gentlemen:

On February 27, 1981, the Board of Land and Natural Resources designated the Honolulu and Waialua Districts as the Honolulu Ground Water Control Area and the Waialua Ground Water Control Area. By this action, the Department of Land and Natural Resources is now responsible for regulating all uses of ground water in these areas.

If you are currently using ground water from any well or spring source, you are required to declare such water use to the Department of Land and Natural Resources if you wish to continue your present use. Specifically, you must fill out, sign, and return the enclosed Declaration of Existing Water Withdrawal and Use form to the Department by June 4, 1981, in accordance with Regulation 9 of the Department of Land and Natural Resources.

According to our records, you have 1 well(s) located on your property (Tax Map Key ____________). Please complete the enclosed form and return it as soon as possible to: Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

If you have any questions or need help in filling out the form, please call the Division of Water and Land Development at 548-7619. Thank you for your cooperation.

Very truly yours,

[Signature]
SUSUMU ONO
Chairman of the Board

Enc.
Mr. Ed Sakoda, Geologist  
Division of Water and Land Development  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Ed:

Pursuant to your recent request, I am transmitting a list of the public water systems and sources presently on our inventory of public water systems for the newly designated Waialua and Honolulu Groundwater Control Areas. As mentioned, a public water system as defined by Chapter 49, Public Health Regulations is any system which serves 25 or more persons 60 days per year. The enclosed list, therefore, does not include sources for water systems serving less than 25 persons.

HONOLULU GROUNDWATER CONTROL AREA

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FIELD INSPECTION REPORT

TO:                              DATE:  \#31

FROM:  

PROJECT:  Refilling Water Well   CONTRACTOR:  Roncey Mason Co

LOCATION:  

WEATHER:  Fair w/ Rain Showers

PRESIDENT AT SITE:  3-8-23

JOB NO:  

2- Description of Work:

- Casey arrived on site
- 18 sections 20' each - 3/8" steel, 10" diameter

- Dept of Water - Checkered condition of well walls & quantity of water
- Dept of water depth: from top of cement slab to bottom is 460.4" from
  top of cement slab to bottom of well 448.4"

- Inserted jacket ad 3 sections of 20' pipe

- Raised out at 5501
FIELD INSPECTION REPORT

TO: A11
FROM: 5.20

DATE: 4/1

PROJECT: Race Water Well
CONTRACTOR: Race
LOCATION: OWNER

WEATHER: Fair w/ Rain Stomem
PRESENCE AT SITE: 2

THE FOLLOWING WAS NOTED:


2. Welded each joint and plumbed pipe prior to making welds.

3. Joint No. 9 had to be realigned - pipe would not pull plumb.

4. Inserted 14 lengths without problems - 15th length would not move with truck crane. Created need for break weld. Removed 15th length and obtained a larger lifting Capacity crane.

5. Continued 16 length and terminated for the day.

REPORT NO 3
FIELD INSPECTION REPORT

TO:  

DATE:  Apr 2

FROM:  

PROJECT:  Pipeline Water Well

LOCATION:  Poono Man

WEATHER:  Fair with rain showers

PRESENCE AT SITE:  3

THE FOLLOWING WAS NOTED:

1. Inserted lengths 18'x18 and welded stops at top of length 18.

2. Installed plumbing needed to pump grout (cement) to bottom of well casing.

3. Mixed 10 tons of PCC to water consisting of 30,000 and pumped to bottom of well. Placed cement formed onto the top shot.

4. Dept of Water Reclaimed Chester Law and associate witnessed the grouting operation.

5. 1/2 of grout injected this date. STOP, let it set. Remainder goes in tomorrow.

2060p

COPY TO:  

SIGNED:  

REPORT NO:  4
FIELD INSPECTION REPORT

DATE 2/24/3

PROJECT

CONTRACTOR

OWNER

WEATHER

PRESENT AT SITE

3

THE FOLLOWING WAS NOTED

1. Dept of Water will submit to PWC a copy of their report on the condition of the PWC well judge to Cluster 10 & 12 Geologist

2. Dept of Water returned testing equipment

3. 120 lbs of grant report & pumped into well during questionnaire
FIELD INSPECTION REPORT

TO: OAH
JOB NO.

PROJECT Location
Refuse Water Well

CONTRACTOR Owner
Quanam Co.

WEATHER Fair

PRESENT AT SITE 4

THE FOLLOWING WAS NOTED:

1. Cut 4 feet off top section of inter casing to allow equipment to rest on solid footing.
2. Inserted rubber dart mounted on 3½" galvanized pipe 21' long connected air line to rubber dart - lowered dart + pipe into inter casing.
3. Fixed section #2 on pipe - lowered dart into casing to depth of pipe 4½' below surface of well casing head.
4. Inflated dart to form a positive seal and stop water flow.
5. Removed top section of 14" outer casing.
**FIELD INSPECTION REPORT**

TO:  

DATE: April 6 1981

JOB NO.

**PLACE WELL**

**OWNER**

R. Mont Co

**LOCATION**

**WEATHER**

Fair

**PRESENT AT SITE**

4  Sheet 2  Apr 6

**THE FOLLOWING WAS NOTED:**

1. Cut into casing below depth of pump inlet

2. Replaced 14" outer casing

3. Drilled rubber boot and

removerd from well Water

immediately flowed back to

normal level approximately

9' below bottom floor level

4. Placed 12 gallon of

clorox into well head

Clorox to remain for 24 hour

5. Replaced top flange on

14" Batey casing

**Project Completed**

6. Long & Narrative to be submit

to Bd of Water Supply & PUC by Rosco

Mont Co.

**COPIES TO:**

**SIGNED:** Thomas Aki
DEPARTMENT OF THE INTERIOR
GEological SURVEY
WATER RESOURCES DIVISION

Date: Apr. 24, 1969

ISOPHISTIC AREA 2

MISCELLANEOUS FIELD NOTES

0 W 98-1 Queen's Hospital

B.M. - El. 15.19 Floor near well casing.

Well located in Utility Bldg. in
basement SW Corner.

Layne International Maintains pumps for the
Hospital. Contact Layne for man to
shut off pumps before taking head reading.

Mr. Luis Garcia - Layne's pump Foreman.

According to Mr. Garcia, head readings can be taken any
time when the well pumps are not operating. The
storage tanks have a supply for 3 hours. The lines are
also interconnected with the city supply to work automatically.
Therefore, we can isolate the well for short periods for
our readings. Switch to well pumps on panel must be
set to OFF. White light means not enough water in tank.

Green light means as follows:

1969 - Head 27.85
4/24/69 @ 10:24 Head 26.69

loss = 1.16

(lower)

No. of sheets
Aquifer System Area Water Use Permit Index (total)

ISLAND OF OAHU

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WATER USE PERMIT NO. 015

This report has been prepared in accordance with 13-171-22(b) of the Hawaii Revised Statutes requiring a 20-year review of issued water use permits to determine permit compliance. Following is a summary of permit information, site characteristics, methodology, findings, and recommendations for this State permit file.

### Permit Information

| Water User:          | Queen’s Medical Center  
P.O. Box 861  
Honolulu, HI 96808 |
|----------------------|--------------------------|
| Landowner of Source: | Queen’s Medical Center  
1301 Punchbowl St.  
Honolulu, HI 96813 |
| Permitted Withdrawal Rate: | 0.237 mgd (Based upon a 12-month moving average) |
| Water Management Area: | Nu’uanu |
| Island:              | Oahu |
| Aquifer Sector/System: | Honolulu/Nu’uanu |
| System Sustainable Yield: | 15 mgd |
| Water Type:          | Fresh, Potable |
| Original CWRM Date:  | September 11th, 1981 |
| Standard Conditions: | 20 |
| Special Conditions:  | 51 |

### Water Source

| State Well Number(s): | 1851-54 |
| Well Name:            | Queen’s Hospital |
| Water Source TMK Number(s): | 1st Division, 2-1-035:003 |
| State Land Use Classification(s): | Urban |
| County Zoning Classification(s): | B-2 |
| Geographical Coordinates: | Latitude 21° 18’ 32.1” North  
Longitude 157° 51’ 14.0” West |

### End Use

| End Use TMK Number(s): | 1st Division, 2-1-035:003, 2-1-035:010 |
| State Land Use Classification(s): | Urban |

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1 Well is located in basement of structure. Coordinates were taken adjacent to the structure where satellite reception was available.
County Zoning Classification(s): B-2  
Beneficial Use Explanation: Use for general hospital needs (municipal, irrigation, etc.)

**Background Information**

State Well No. 1851-54 was drilled in 1958 to a depth of 460 ft. and is governed by Water Use Permit 015. There is no application on file for this permit, only a declaration of existing water use given on March 3rd, 1989.

Consistent water use reporting records are available for at least the past four years. The permittee’s 12-month moving average has not exceeded the permitted amount of 0.237 mgd during this time. There are no salinity records on file for State Well No. 1851-54. Reference the permit file for additional information on reporting history.

Water Use Permit 015 was approved during the September 11th, 1981 Commission on Water Resource Management meeting. This water source has been in use for approximately 50 years by the Queen’s Medical Center. Standard condition 20 and special condition 51 are the governing conditions for this water use permit. A complete list of all standard and special conditions is given in the final permit file.

**Field Investigation Information**

Contact: Mike Kim Seu  
Site Address: 1301 Punchbowl St.  
Honolulu, HI 96813

Brown and Caldwell conducted a field investigation on January 28th, 2008 from 3:00 p.m. until 4:00 p.m. with Mr Mike Kim Seu and Mr. Bob Laube, who is an associate of Mr. Kim Seu. During this time, type of water usage was verified, GPS coordinates of well head(s) were recorded, flow meter installation and functionality were documented, and property TMK information was verified. The wellhead, its related appurtenances, and water usage area were visually inspected to assess compliance with permit conditions. Visual inspection of water loss/waste was limited to outdoor areas within the usage boundary. The physical location of this site is at the Queen’s Medical Center on Punchbowl Street. Reference the TMK and GIS maps in the permit file for a visual representation of the site.
Summary of Findings for Water Use Permit No. 015

State Well No. 1851-54 is located on TMK parcel 2-1-035:003 at 21° 18’ 32.1” N, 157° 51’ 14.0” W, with a real time accuracy of ±17-feet. The actual well is located in the basement of a structure. Therefore, the GPS coordinates were taken adjacent to the building where satellite reception was available. These coordinates are approximate and do not represent the actual location of the well.

Water is drawn via three different well pumps (2 primary, 1 backup), which are housed in the mechanical room of the facilities building. Also at this location are the primary flowmeter station and main distribution valves and piping. Water is sent to buildings and landscaping areas throughout TMK parcels 2-1-035:003 and 2-1-035:010 where it is used for domestic purpose, irrigation, and general hospital use. The permittee has advised that a Honolulu Board of Water Supply backup system is available in the event of an emergency. Reference the Appendix for photographs of the previously described system components.

Based upon visual inspection of the system, all components appear to be in full working order. The permittee demonstrated functionality of an installed flowmeter and provided access to the site grounds where no wasting of water or water loss was observed. Visual inspection also confirmed that water use was within the permitted TMK boundaries. Water use is currently being reporting on a monthly basis with no recent evidence of overpumpage violations.

Although most permits have conditions that mandate salinity reporting, no such condition is associated with this particular permit. Therefore, lack of salinity reporting does not count against the permittee in achieving compliance with all standard and special conditions.

Recommendations

- Address the following discrepancies between the Commission’s electronic database and actual field investigation findings:
  - End use TMK parcel numbers
  - State land use and county zoning classifications
- No disciplinary action required for this WUP since the permittee is in compliance with all standard and special conditions.
20-Year Water Use Permit Review
Water Use Permit No. 015

APPENDIX

Field Investigation Photographs
Figure 1 - State Well No. 1851-54

Figure 2 - Primary pumps for State Well No. 1851-54
Figure 3 – Control system for well pumps 1 & 2

Figure 4 – Working flowmeter
Figure 5 – Distribution piping (typ.)

Figure 6 – Typical end use (domestic/agriculture)
Water Use Permit Survey

(Please complete one survey form for each WUP)

WUP Number: 015  Well Number(s): 1851-54

Contact Information (of the person who will be present at site visit):
Name: Mike Kimsey
Phone (for phone interview): 547-4777  Fax: 538-7025
Email: mkims@queens.org
Best time to reach for phone interview: (1400 hrs - 1600 hrs) - (0830 - 1030) (Monday - Friday)

Property Information (of the water use/well location):
Address: 1301 Punchbowl Street
City: Honolulu  Zip: 96813
Well Location TMK (list all if multiple wells present): 2-1-35:03
Water Use TMK (list all if used on multiple lots): nla

Water Use/Well Information:
Is the water source currently in use?  Yes ☐  No ☐
If no, please explain:

What are you currently using the water for? (example: “Use for 45 acres of diversified agriculture and 3 residences”):

Is a flow meter installed and working properly?  Yes ☐  No ☐
If no, please explain: nla

Do you submit monthly water use reports to the State?  Yes ☐  No ☐
If no, please explain: nla

Field Investigations:
A representative from Brown and Caldwell will be visiting wells in your area over the next several months between the times of 9:00 am and 5:00 pm. Each site investigation will take approximately 1-2 hours. Please indicate up to three potential days of the week and availability times for an on-site inspection of the well location and verification of water use compliance. The permit holder must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.

Option #1  Date (M-F): Tuesday  Time: 9:00 am ☒  12:00 pm ☒  3:00 pm ☐
Option #2  Date (M-F): Wednesday  Time: 9:00 am ☒  12:00 pm ☒  3:00 pm ☐
Option #3  Date (M-F): Thursday  Time: 9:00 am ☒  12:00 pm ☒  3:00 pm ☐

Once this survey is returned, a Brown and Caldwell representative will be contacting you to conduct a phone interview and finalize the exact date and time of your field investigation. Please fax/mail completed surveys by December 12th, 2007 and direct any questions related to this survey to Mr. Milo Smith of Brown and Caldwell at:

1099 Alakea Street, Suite #2400
Honolulu, HI 96813
Tel: (808) 203-2661
Fax: (808) 533-0226
mcsmith@brwncald.com

For Official Use Only

Received: 12/5/07  Information Updated: 12/5/07  Phone Interview Complete: 1/22/08
Notes/Comments: ____________________________________________________________
Phone Interview

WUP Number: 015 Well Number(s): 1951-54

Contact Name: Mike KimSen Phone Number: 547-4777

Attempt #1: Date/Time: 1/22/08 (10:39) Result: Reached

Attempt #2: Date/Time: 

Well Location TMK(s): 

Water Use TMK(s): 

Water Source Address: 1301 Punchbowl St.

City: Honolulu Zip Code: 96813

Currently using water source? Yes ☒ No ☐

Notes/Comments:

How often is the water source being used? Daily ☒ Weekly ☐ Monthly ☐

Notes/Comments: For Queens Facility

How long have you been using this water source?: Early 1960's

Has there been any rezoning of the water source/water use properties? Yes ☐ No ☒

Have you reported the rezoning to the State? Yes ☐ No ☐ N/A ☒

If no, explain:

Scheduled field investigation day/time: 1/28/08 @ 9:00 a.m. 3:00 p.m.

Notes (Special directions, site conditions, potential hazards, general notes, etc.): 

Send confirmation email ☑
Comments To Make:

- Although we prefer that you do not change your scheduled field investigation time, if you require a reschedule, you must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.

- A representative from Brown & Caldwell will be making a reminder phone call to you sometime during the week prior to your scheduled field investigation.

- It is very important that you provide access to the site at the day and time agreed upon. Due to a very tight schedule, if you fail to provide access at the agreed upon time and/or do not reschedule with at least a five (5) working day notice, a makeup date will not be allowed.

- If for some reason you don't know where your well head is located, it would be a good idea to locate it prior to your field investigation to help make the visit go quickly and smoothly.

- Other

  - How long has source been in use? -  ✔

  (see previous sheet)
Field Investigation Checklist

WUP Number: 019
Well Number(s): 1451-54

Water Source
Well Location TMK(s): 2-1-035:003
Well Head GPS Coordinates: Latitude: 21°19'.521" N Longitude: 157°51'.140" W
Well Type: Well Pump - 2 Primary (1 backup)

Currently using water source? Yes ☑ No ☐
Notes/Comments: ___________________________________

Is there a flow meter installed? Yes ☑ No ☐
Is the flow meter operational? Yes ☑ No ☐
Notes/Comments: ___________________________________

Water Use
Water Use TMK(s): 2-1-035:003

What is the water being used for? General hospital use;

Is the water being used within the permitted boundaries? Yes ☑ No ☐
If no, explain:
Hospital use - general, agricultural, domestic, etc

Is there any observed wasting of water or water loss? Yes ☐ No ☑
If no, explain:

Are the permit conditions being complied with? Yes ☑ No ☐
If no, explain:

Other
Photographs of: Water Source ☑ Water Meter ☑ Usage Area ☑ Pump/Motor ☑

General Notes/Comments:
- Photos taken outside of building where sal. reception available
- BWS backup available

Investigated By: M.S. Date: 1/28/08 Time: 3:00
Standard Conditions List

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization, which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in Section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its <Insert Date> meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

Variations of Standard Condition (8) are as follows:
   i. Modification of any permit condition shall be approved by the Commission. Modification of any permit condition without notification may result in the revocation of the water use permit.
9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality);
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

   Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

Variations of Standard Condition (10) are as follows:
   i. The applicant shall keep monthly pumpage estimates to be submitted annually to the Commission.
   ii. An approved flowmeter(s) need not be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a yearly basis (attached).
   iii. An approved flowmeter(s) must be installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature must be kept and reported to the Commission on a monthly basis in accordance with the Commission's September 16, 1992 action on reporting requirements.
   iv. Approved flowmeters must be installed to measure monthly withdrawals and a monthly record of withdrawals must be kept and reported to the Commission on Water Resource Management on a monthly basis.
   v. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a quarterly/yearly basis (attached).
   vi. An approved flowmeter shall be installed to measure water withdrawals
   vii. An approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of
Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, HI 96809, on a monthly basis.

viii. Although not stated as a condition of the permit §13-168-7 HAR requires you to keep a record of your monthly total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form.

ix. An approved flowmeter shall be installed and the withdrawal from Well 1851-73 shall be recorded and reported to DLNR on a monthly basis by the owner and/or operator of the well.

x. The withdrawals from these wells shall be recorded and reported to the DLNR on a monthly basis by the BWS.

xi. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting water usage on a monthly basis.

xii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

xiii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission along with water level and salinity measurements.

11. This permit shall be subject to the Commission’s periodic review of the <Aquifer> Aquifer System’s sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the <Aquifer> Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

   Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The uses(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee’s water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservations, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter
into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period or forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee’s water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the <Aquifer>Ground-Water Management Area.

17. The water use permit shall be subject to the Commission’s establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

19. Special conditions in the attached cover transmittal letter or attached exhibits are incorporated herein by reference.

20. If the ground-water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

Variations of Standard Condition (20) are as follows:
   i. The permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

21. This permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HRS § 174C-59 and the requirements of Chapter 174C, the Commission on Water Resource Management has the authority to allow the transfer of the permit and the use rights granted by this permit in a manner consistent with HRS § 174C-59. Any such transfer shall only occur with the Commission’s prior express written approval. Any sale, assignment, lease, alienation, or other transfer of any interest in this permit shall be void.

22. The water use permit granted shall be an interim water use permit, pursuant to HRS § 174C-50. The final determination of the water use quantity shall be made within five (5) years of the filing of the application to continue the existing use.

23. The water use permit shall be issued only after agricultural review.

24. That scheduled adjustments to Oahu Sugar Co. permitted use shall be initiated upon discontinuance of agricultural uses.
25. The issuance of this permit was approved by the Commission on Water Resource Management at its meeting on <Insert Date>.

26. The permit shall be subject to the review by the Attorney General.

27. The permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13.

28. The applicant shall obtain the necessary land acquisition documents from the Hawaii Housing Authority.
Special Conditions List

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

3. The applicant shall contact the Environmental Management Division, State Department of Health, at 586-4304, concerning “GUIDELINES APPLICABLE TO GOLF COURSES IN HAWAI’I” date <Insert Date & Version #>.

4. Standard Condition 10 is emphasized, to report consumption on a regular basis.

5. The applicant may continue this existing use of ground water within the limits approved by the Commission, and the actual issuance of the interim permit shall not be a reason to interrupt this existing use.

6. This interim water use permit shall cease to become interim and shall be subject to HRS § 174C-55 upon administrative review of the quantity within five (5) years, provided that all conditions of the use (including the review of the quantity which shall not be greater than the amount initially granted) remain the same. Enforcement of the allocation limit shall be stayed pending staff’s review and issuance of a permanent water use permit.

7. As-built drawings of the well and pump, and a complete pumping test record shall be submitted within sixty (60) days.

8. In the event the pump tests show that aquifer boundary conditions do not support the requested withdrawals, the Commission reserves the right to amend this permit, after a hearing, to a level that is supported by the pump tests.

9. The existing use may be continued within the levels approved by the Commission, and the actual issuance of the permit document shall not be a reason to interrupt the approved level of use.

10. The filing of an application by Kukui, Inc. for a new or modified water use permit for the Kualapuu Aquifer in excess of 2.0 mgd (total system withdrawal) shall be just cause for re-consideration of this interim permit by the Commission

11. Upon completion of a new transmission line for the transport of water use by Well #17, the permit shall be modified to reduce the allocation amount by the additional 79,220 gallons per day allocated for use of the Molokai Irrigation System.

12. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall conduct a feasibility study and submit a report describing
alternative sources of nonpotable water for irrigation uses at the resort area. It is suggested that the developer consider use of dual lines in the subdivisions so that effluent may be used in the existing reuse system. Another consideration is the development of brackish water wells in the Kaluakoi Aquifer system for mixing with the effluent generated at the resort.

13. Within six (6) months from the date of approval of a water use permit for the well, the application shall evaluate the filter back discharges into Kakaako Gulch to determine if excessive preventable waste is occurring and identify possible measures to eliminate or reduce such waste. The evaluation shall be conducted in cooperation with the Commission staff and staff of the Department of Health's Safe Drinking Water Branch, which regulates the drinking water system.

14. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall 1) implement a leakage control and detection system and compete repairs to prevent such leakage and 2) implement use of xeriscaping and low-flow fixtures.

15. Action on the future use portion of the water use permit application for Well #17 (Well No. 0901-01) is deferred pending the establishment of existing uses in the aquifer. Kukui Inc.'s application for uses in excess of those uses existing on July 15, 1992 will be considered "new" uses and will be taken up by the Commission as soon as other existing use applications have been decided. In the interim,

   a. The Commission shall recognize that there is disagreement between the applicant's staff calculations of reasonable-beneficial existing use
   b. The Applicant will have the burden of proof to show within six (6) months reasonable-beneficial existing use calculations that support the applicant's request as opposed to staff's calculations.
   c. The Commission's enforcement of the approved existing use allocation will be suspended for six (6) months.

16. The permittee shall submit a notice of intent and written request to continue the use at least ninety (90) days prior to the expiration of the interim five-year permit.

17. The Commission shall delegate to Maui Department of Water Supply the authority to allocate the use of water for municipal purposes, as provided in §174C-48(b).

18. Maui Department of Water Supply shall be exempt from the requirements for permit modifications, as provided in §174C-57(c).

19. The permittee must meter water use and monitor chloride concentrations on a monthly basis and submit monthly reports of water use and chloride concentrations to the Commission.

20. Standard Condition 16 is waived for saltwater wells.

21. The permit will be revoked if (1) stream monitoring shows that pumping the well reduces stream flow, or (2) the electromagnetic resistivity survey indicates that the
well was drilled into a dike compartment, unless the applicant submits a petition for an amendment to the interim instream flow standard with the well completion report. However, no use of the water may be made without a Pump Installation Permit, which cannot be issued during consideration of the amendment of the interim instream flow standard.

22. The applicant shall present the results of the electromagnetic resistivity survey, pump tests, and stream monitoring to a community meeting as well as to the Commission.

23. A final determination of water use quantity shall be made within five (5) years of the filing date of the application (<Insert Date>) to continue existing use.

24. The applicant shall implement, by December 31, 1995, a biological and hydraulic monitoring program for a minimum 2-year period that: 1) documents the existing operating procedure, 2) seeks to identify the impacts of all operating alternatives on Waikolu Stream, and 3) seeks to identify the effectiveness of weir modifications (Dam No. 1). This program shall incorporate the three new wells, Wells #4-6 (Well Nos. 0855-06, -05, &-04, respectively), which may be pumped within the approved limits, for monitoring and testing purposes only. Further, semi-annual reports summarizing data and preliminary findings shall be submitted to the Commission. It is suggested that the Department of Agriculture work with the State Division of Aquatic Resources and other affected agencies to prepare the monitoring program in light of the difficult technical questions raised by this application. A particular concern is the coordination of this monitoring program with the ongoing National Park Service study by Anne Brasher. A draft of this plan shall be submitted to the Commission staff within ninety (90) days for technical review and comment. Results of the monitoring program shall be used to make recommendations to the Commission on any additional use of the wells, and shall be made readily available to all interested parties.

25. That the Commission approves the well construction permit for the Kamiloloa-Waiola Well (Well No. 0759-01), subject to the standard well construction conditions and the special conditions for the pumping well for the aquifer tests.

26. That the Commission authorizes the Chairperson to approve and issue a pump installation permit upon acceptance of adequate pump test result, subject to the standard pump installation conditions.

27. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

28. The applicant shall follow the agreed monitoring plan.

29. If pesticides used by the applicant are found in ground or surface water and can be traced to the applicant's use, the CWRM may revoke the permit immediately upon such finding.
30. Issuance of the interim permit shall be withheld until the reservation of water for DHHL is set by rule. Applicant may continue this existing use within the approved limits.

31. The applicant shall submit well modification and pump installation permit applications for administrative approval by chairperson prior to beginning any work required to complete well.

32. Should any stream flow impacts result from use, petition to amend interim instream flow standards shall be submitted.

33. Should any dewatering result from use, pumping shall cease immediately.

34. Shall submit accurate schematic diagram of distribution system for the battery of 5 wells.

35. Shall be subject to a 6-month independent audit & monitoring.

36. Final pump capacity shall be determined from pump test results & approved administratively by signature of chair.

37. The permittee shall seek and submit to the Commission within ninety (90) days written confirmation from the Department of Land Utilization of the non-conforming use.

38. Pumping shall cease immediately if the chloride reports show that the brackish water developed in the well exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted. The authority to approve future variance requests is delegated to the chairperson.

39. The duration of the interim permit shall be:
   a. To July 1, 2006, or
   b. Until treated wastewater is available and acceptable for use, or
   c. Until such time that a significant change in permitted, actual, or projected uses or water supply occurs.

40. Action on any interim permit may be initiated by the Commission or any permittee upon letter request or pursuant to §174C-57 Haw. Rev. Stat. (Modification of permit terms).

41. This permit is approved under the assumption that wastewater will become available for reuse as an alternative supply source.

42. Require adherence to the chloride sampling protocol and the submittal of weekly chloride data. The authority to approve variances from the weekly reporting requirement is delegated to the Chairperson.

43. Require adherence to the Conservation Conditions.
44. In the event a water shortage is declared by the Commission, permittees in the <Insert Aquifer System> shall comply with the <Insert Aquifer System> water shortage plan adopted by the Commission.

45. The permittee shall contact the Department of Health, Clean Water Branch and obtain the necessary discharge permit(s).

46. Permit shall be interim and replaces existing WUP for 2051-07 & 11.

47. Applicant shall submit an acceptable archaeological inventory survey report to DHP. If historic sites affected, a plan to mitigate these affects must be accepted by DHP and completed by applicant.

48. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

49. (The permittee) may report monthly pumpage on yearly basis.

50. Prior to issuance of any permits, must submit filing fee for after-the-fact pump installation permit.

51. The term of this permit shall be twenty years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit.

52. The amount of water to be withdrawn under this permit shall be 0.19 mgd, averaged annually, for irrigation use. This permitted use of 0.19 mgd when added to a preserved use of 0.27 mgd amounts to a total of 0.46 mgd, averaged annually, which may be withdrawn from well 1646-01.

53. The use authorized by the permit must not interfered substantially and materially with existing individual household uses and existing uses.

54. The use of this well shall be subject to the shortage and emergency powers of the Board of Land and Natural Resources (BLNR).

55. This permit may be suspended or revoked, in accordance with Chapter 166.

56. The permit holder may be required to relinquish this permit to BLNR, in accordance with Chapter 166.

57. The withdrawal from Well 1646-10 shall be recorded and reported to DLNR on a monthly basis by the permittee.

58. In the event that emergency water use occurs, the permittee shall notify the Commission in writing within one (1) day of pumping, to in form the Commission as to the nature of the emergency and the expected duration of the emergency. A water
use report shall also be filed pursuant to Standard Condition 10 and Administrative Rule 13-168-7.

59. Note DOH’s requirements related to non-potable water systems (attached to original permit).

60. Standard Condition 16 requiring the submittal of a water shortage plan is waived.

61. All non-potable spigots and piping shall be clearly labeled as “DO NOT DRINK, NON-POTABLE” to prevent direct human consumption.

62. Standard Condition 10 is modified. Due to the inability to take water level measurements, the requirement to measure monthly water levels is waived. In addition, as long as the U.S. Geological Survey is collecting and analyzing the chloride content of the well water, the requirement for the permittee to measure and report chlorides is also waived.

63. Well elevation components must be surveyed by a licensed surveyor and this information must be submitted to commission prior to issuance of permanent permit.

64. The permittee shall obtain approvals from the Department of Health and the U.S. Environmental Protection Agency prior to use of the water.

65. This water use permit, WUP No. <Insert #>, shall supersede WUP No. <Insert #>.

66. WUP No. <Insert #> is revoked.

67. Standard Condition 17 is waived.

68. Standard Condition 22 for interim water use permits shall not apply.

69. To supplement our records, we request that you provide a map of the Galbraith Est. lands west of Wahiawa (2100 ac+) and the associated TMK’s for use area.

70. Deferred action on portion requested for golf course irrigation pending further refinement of irrigation requirement and a feasibility study for utilization of surface water sources, including Wahiawa Reservoir.

71. Written justification be provided for any 'cushion' of 0.5 mgd.

72. The water use permit shall be an interim permit. The duration of the interim permit shall be until treated wastewater is available and acceptable for use. The permittee shall continue discussions with Honolulu Board of Water Supply regarding the use of reclaimed water.

73. The permittee is put on notice that this is a qualified approval in that this permit may be modified or revoked prior to the expiration of the interim permit if the
Commission decides that the use of additional basal ground water for dust control and landscape irrigation is not reasonable-beneficial use.

74. The permittee encouraged to use drought-tolerant landscaping to conserve water.

75. Should the applicant provide written evidence that the county DHCD approves a 201E exemption for the elderly affordable housing project then the applicant may modify a corresponding portion of their existing aquacultural use to be used by the exemption approved project within the Commission approved water use permit limits under recommendation 5.

76. The applicant shall obtain a water lease/permit from Land Division prior to actual use of the well water.

77. Require the permittee to sign a contract by May 14, 1998 with the City Department of Wastewater Management to buy and use 0.400 mgd of R-1 water for a corresponding reduction in allocation for Well Nos. 1900-02, 17 to 20, and 1901-03.

78. Standard Condition 9 is waived.

79. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

80. Standard Condition 10 is waived.

81. Applicant must seek a determination from BLNR and Land Mgt Div as to whether water license required. If required, license must be obtained prior to issuance of permit. If not, permit will be issued w/out further action.

82. Commission defers action on use in excess of 452,000 gpd pending additional info from BWS and further staff analysis.

83. The permit shall be subject to the Commission's sustainable yield review by December 1990.

84. The Commission shall delegate to the Honolulu Board of Water Supply the authority to allocate the use of water for municipal purposes, in accordance with §174C-48(b) HRS.

85. Honolulu Board of Water Supply shall be exempt from the requirements of permit modifications as provided in §174C-57.

86. BWS must participate in discussions, to be coordinated by Commission Staff, regarding a monitoring program to address impacts to Kaneohe Bay water quality, prior to any action on applications for future municipal uses.

87. A pump installation permit application must be made and approved prior to the installation of a permanent pump.
88. The water withdrawn shall be 0.7 mgd for municipal use.

89. The installed pump capacity of the well shall not be more than 700 gpm or 1.01 mgd.

90. The term of permit shall automatically expire twelve months from the date of issuance.

91. The Honolulu Board of Water Supply may continue to submit monthly water data on their own form, provided that the data are submitted in a format that is acceptable to the Commission staff.

92. Standard Condition 7 shall not apply.

93. Standard Condition 22 shall not apply.

94. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

95. This permit shall be subject to conditions providing for stream restoration if the Commission determines that additional water should be returned to the streams.

96. HECO 1 mgd for industrial use

97. Campbell Estate 1 mgd for municipal use through BWS, by separate agreement with HECO

98. BWS 1 mgd for municipal use.

99. The permit shall be subject to the Commission’s sustainable yield review by <Insert Date>.

100. The applicant shall obtain the current version of the Department of Health’s Guidelines Applicable to Golf Courses in Hawaii. Where relevant and viable, items of the guidelines should be implemented and sustained appropriately. To obtain the current version, contact the Safe Drinking Water Branch, Environmental Management Division at 808-586-4258 (Honolulu).

101. The future use portion of the application shall be deferred until existing uses in the Koolauloa area are established.

102. The water to be withdrawn under this permit shall be a total of 0.03 mgd (0.02 mgd preserved plus an additional 0.01 mgd permitted use), averaged annually, for domestic and irrigation use.

103. Existing well 1851-09 shall be properly sealed by a licensed drilling contractor. A well modification permit application, enclosed, shall be submitted to the Department for approval of the well sealing. A filing fee for sealing the well will not be required.
104. The permittee is required to test the source using a certified private laboratory and submit the test results to the Commission within three (3) months. The Commission will then forward the results to the Department of Health for their review. The Department of Health recommends that the well be routinely tested for microbiological and chemical parameters thereafter.

105. The permittee is required to submit a completed Registration of Well and Declaration of Water use by <Insert Date>.

106. The permittee shall contact the Department of Health for a written determination on the status of their water system and comply with any Department of Health requirements for monitoring and testing.

107. In the event that the original spring source decontaminates, the new well authorized will be shut down.

108. That within each aquifer the total permitted use shall not exceed the sustainable yield.

109. That any water available for allocation shall be for in-district use.

110. That scheduled reductions to Oahu Sugar Co. permitted use shall be initiated upon final termination of an Osco lease or sub-lease, whichever occurs later.

111. That permits for water use issued in accordance with the proposed schedule shall be interim permits subject to review and adjustment by 1995.

112. That the permit shall be an interim permit for a new use which is afforded to existing users as specified in §13-171-20.

113. That the original allocation of 0.200 mgd shall be taken to hearing for possible revocation at a later date to complete the transfer of the water use permit entirely to Well No. 3407-02. This revocation would reduce the current allocation afforded to the Kunihiro Well (Well No. 3406-06) to zero.

114. This allocation incorporates the unspecified domestic needs of the applicant and therefore necessitates a single meter be installed at the well.

115. Should any impacts to nearby wells or streams be established by the use of this well, the applicant shall address these issues to the satisfaction of the Commission.

116. If an economically feasible nonpotable source is identified, the applicant shall convert to the alternative nonpotable source.

117. The permit shall be subject to the Chairperson's approval of a water use plan recommending possible measures to prevent or minimize saltwater contamination and establish courses of action to follow should the aquifer become to saline to use.
118. Permittee shall provide the necessary end-use information on the 10th residence to allow regulation of the use under Chapter 174C.

119. Standard Conditions 10 & 18 shall not apply.

120. Standard Condition 10 is modified to exempt the permittee from the requirement to install a flowmeter. Salt water withdrawals may instead be estimated based on pumping capacity and run time.

121. The applicant shall review the existing year long period of pumpage and streamflow data and provide analysis on ground and surface water interaction. Deadline is January 25, 1994.

122. The water use permit for Well Nos. 2301-27 to -32 for 0.75 mgd (WUP No. 419) shall be revoked upon issuance of a pump installation permit for the well.

123. The permittee shall use mulching to decrease evaporative losses and manage irrigation scheduling to minimize water demand.

124. The permittee shall submit a detailed agricultural plan to support any future water use permit application for increased agricultural use at this parcel.

125. If not already obtained, the permittee shall seek and obtain any necessary permits from the Department of Health for the proposed discharge to Malaekahana Stream.

126. Standard Condition 10 is modified to waive the requirement for installing a water meter on Well Nos. 2358-21, 22, and 29. The permittee shall install a water meter on Well No. 2358-26 to measure total monthly flow through the discharge line. This quantity should then be assumed to be the rate of natural flow from the other three wells for monthly reporting purposes.

127. The permit shall be effective upon submittal of documentation by Navy that it has met the DOH requirements for a public system.

128. This WUP shall be subject to Army’s application for a WUP to reduce the permitted use of the Army’s Schofield Shaft (2901-02 to 04, 10) by 0.208 mgd to a new total of 5.648 mgd. The Army’s application shall be submitted within 60 days after the approval of this WUP or this WUP shall be void. Approval of the modification request shall be obtained from the CWRM prior to use of Well No. 3100-02 and issuance of this WUP.

129. Navy shall submit an after-the-fact PIPA, and approval of the permit shall be obtained prior to use of the well.

130. The well shall not be used for drinking water purposes unless it is properly tested and treated.
131. This permit is approved subject to reclaimed water becoming a practical alternative and provided that the Department of Health approves the reuse application.

132. Should any opae ula be recovered in the well water, the permittee shall notify the Division of Aquatic Resources and provide specimens to the Division of Aquatic Resources for analysis.

133. If a single meter at the well is used, the Commission shall allow an additional 1,000 gallons per day to the water use permit amount for the domestic needs of two residences, although a permit for individual domestic consumption is not required. Otherwise, the applicant must provide a meter to separately measure the irrigation consumption.

134. This permit is approved under the requirement that conversion to either: 1) treated wastewater becoming available for reuse as an alternative supply source, provided that Department of Health concerns over the use of treated effluent over the potable water aquifer have been addressed; and/or 2) other nonpotable source becoming available will occur in a timely manner.

135. These permits shall be subject to a review of actual use within four years for possible modification of the permitted amount.

136. The permit shall be reviewed in two (2) years for possible additional revocation due to nonuse.

137. The allocation is based on the projects listed in Exhibit 5 (of Item 10 of the May 20, 1998 Staff Submittal), except for the Queen's Beach GC (TMK 139-11-2,3), Lot 9 (TMK 139-17-51), and Varsity Place (TMK 128-24-35).

138. Kamehameha Schools Bishop Estate/Honolulu Board of Water Supply shall transfer the water use permit within ninety (90) days of the effective date of the transfer of the pump station to the Honolulu Board of Water Supply, pursuant to §174C-59 Hawaii Revised Statutes.

139. The permittee shall ensure that the water is recycled by either directing it into the Waiahole Ditch for use by downstream farmers (subject to the approval of the Agribusiness Development Corporation's Board) or into Waiekele Farm's existing irrigation system.

140. The permittee shall file a completed application to modify WUP No. 758 to reduce the allocation by 0.100 mgd within 60 days. If a completed water use permit modification application is not received within 60 days from this submittal's date, then the subject water use permit application (WUPA No. 767) shall be deemed denied without prejudice without the need for another hearing.

141. The water withdrawn shall be for municipal use. No improvements to the existing sources are required as the existing source capacities are greater than the increase.
142. Water license must be determined through LM.

143. Proposed other uses will be considered at a later date.
RESUBMITAL
Terms of Water Withdrawal and Use Permits

The Department's Administrative Rules on ground water control require that the Board specify the period or duration of permits and the commencement and completion dates for the construction of ground water sources. After investigation and study of this matter, DONALD is ready to make specific recommendations for adoption by the Board of Land and Natural Resources.

The Ground Water Use Law specifies that permits may be issued up to a maximum of 50 years and allows for extension of the permit after one-half of the permit period has lapsed. The staff is recommending that the duration of each permit be established at twenty (20) years with a review every five years by the Board to determine compliance with provisions of the permit. The staff feels that 20 years is a reasonable time for regulating ground water withdrawals and uses at this early stage of the program. As the Department gains experience in ground water regulation, the duration of the permits may be reviewed and adjusted as appropriate in the future.

On the commencement and completion dates, the staff recommends that a period of 24 months be established for completing the development of the ground water source. This construction period is a reasonable time for drilling, testing, and for the installation of permanent pumps and controls to fully bring the ground water source into operation. The period may be extended upon a showing of good cause and good faith performance. The permit and construction dates should commence on the date the permit is issued by the Department.

It is recommended that the above terms be standardized for all water withdrawal and use permits issued by the Board, subject to adjustments required by the Board for any permit.

RECOMMENDATION:
That the Board establish the terms of ground water withdrawal and use permits at 20 years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit and that the development of the ground water source be completed within 24 months from the date of permit issuance for all permits issued by the Board, subject to adjustments required by the Board for any permit.

Respectfully submitted,

ROBERT T. CHUCK
Manager-Chief Engineer

APPROVED FOR SUBMITTAL

SUSUMU ONO, Chairman

ITEM D-1
State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Water and Land Development
Honolulu, Hawaii

September 11, 1981

Chairman and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Certification of Ground Water Withdrawals and Uses,
Honolulu Ground Water Control Area, Oahu

The Honolulu Ground Water Control Area was designated by the Board of Land and Natural Resources on February 27, 1981 under authority of Chapter 177, HRS, and Chapter 186 of Title 13, Administrative Rules entitled "Rules for the Control of Ground Water Use in the State of Hawaii". The Department's regulatory procedures provide for water users to declare their existing water uses within a ninety-day period which ended June 4, 1981 and allows the Board 180 days to certify the declared uses.

The recommended certification of total annual, average daily, and maximum daily withdrawals for individual wells and/or well fields is tabulated in the attachment, "Certification of Ground Water Withdrawals and Uses, Honolulu Ground Water Control Area"., for the Moanalua-Kaimuki Subarea and Waialae-Hawaii Kai Subareas. A comparison of the recommended quantity for certification and the sustainable yield adopted by the Board on July 24, 1981 is tabulated below:

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Sustainable Yield (mgd)</th>
<th>Recommended Certification (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moanalua-Kaimuki</td>
<td>55</td>
<td>41.827</td>
</tr>
<tr>
<td>Waialae-Hawaii Kai</td>
<td>5</td>
<td>1.100</td>
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</table>

The remaining ground water supplies may be withdrawn by obtaining permits from the Board of Land and Natural Resources.

RECOMMENDATION:

That the Board certify the existing withdrawals and uses for each well tabulated on the attached "Certification of Ground Water Withdrawals and Uses, Honolulu Ground Water Control Area" dated September 11, 1981, subject to any special conditions and applicable laws, rules and regulations.

Respectfully submitted,

ROBERT T. CHUCK
Manager-Chief Engineer

APPROVED FOR SUBMITTAL:

SUSUMU ONO, Chairman

Approved by the Board of Land & Natural Resources at the meeting held on 9/13/81.

ITEM D-4
<table>
<thead>
<tr>
<th>User/Source</th>
<th>Total Wells Use</th>
<th>DECLARED EXISTING USE</th>
<th>PRESERVED USE</th>
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<tr>
<td></td>
<td></td>
<td>Source Capacity (mgd)</td>
<td>3-yr Ave Withdrawal (mgd)</td>
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<tr>
<td>MOANALUA-KAIMUKI Subarea</td>
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<tr>
<td><strong>Board of Water Supply</strong></td>
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<tr>
<td>Kaimuki Station</td>
<td>10</td>
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<td>Paiko Well</td>
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<td>Kalili Pump</td>
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<td><strong>Subtotal (UWS Wells)</strong></td>
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<td><strong>Private Users</strong></td>
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<td>Kokusai Kogyo</td>
<td>19</td>
<td>0.576</td>
<td>0.33</td>
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<tr>
<td>Love's Bakery</td>
<td>18</td>
<td></td>
<td>0.043</td>
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<tr>
<td>MTL Inc.</td>
<td>20</td>
<td>0.893</td>
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</tr>
<tr>
<td>Pacific Beach Hotel</td>
<td>8</td>
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<tr>
<td>Pacific Club</td>
<td>58</td>
<td>0.576</td>
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<tr>
<td>Pacific Laundry</td>
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<td>0.376</td>
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<td>Palama Settlement</td>
<td>15</td>
<td>0.729</td>
<td>0.12</td>
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<tr>
<td>Punahou School</td>
<td>10</td>
<td>1.060</td>
<td>0.23</td>
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<tr>
<td>Queen's Med. Ctr</td>
<td>54</td>
<td>1.144</td>
<td>0.22</td>
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<tr>
<td>S. M. Dainan Estate</td>
<td>22</td>
<td>1.405</td>
<td>No data</td>
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<tr>
<td><strong>Subtotal (Private Users)</strong></td>
<td>27</td>
<td></td>
<td></td>
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<tr>
<td><strong>TOTAL - Moanalua-Kaimuki Subarea</strong></td>
<td>61</td>
<td>121.774</td>
<td>41.027</td>
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<tr>
<td>WAIALAE-HAWAII KAI Subarea</td>
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<tr>
<td><strong>Board of Water Supply</strong></td>
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</tr>
<tr>
<td>Aina Koa</td>
<td>81</td>
<td>0.504</td>
<td>0.41</td>
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<tr>
<td>Waialae Iki Station</td>
<td>81</td>
<td>0.504</td>
<td>0.19</td>
</tr>
<tr>
<td>Waialae Shaft</td>
<td>81</td>
<td>2.200</td>
<td>0.24</td>
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<tr>
<td><strong>Subtotal (UWS Wells)</strong></td>
<td>3</td>
<td>3.288</td>
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<tr>
<td><strong>Private User</strong></td>
<td></td>
<td></td>
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<tr>
<td>Waialae Country Club</td>
<td>81</td>
<td>0.964</td>
<td>0.270</td>
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<tr>
<td><strong>TOTAL - Waialae-Hawaii Kai Subarea</strong></td>
<td>4</td>
<td>4.752</td>
<td>1.100</td>
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</tbody>
</table>
STATE OF HAWAII  
COMMISSION ON WATER RESOURCE MANAGEMENT 
DEPARTMENT OF LAND AND NATURAL RESOURCES 
DIVISION OF WATER RESOURCE MANAGEMENT 

REGISTRATION OF WELL 
AND 
DECLARATION OF WATER USE 

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and file form with the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Phone 548-3948 or 548-7843 for assistance.

BATTERY OF WELLS: For a battery of wells, on the surface, in a tunnel, or in a shaft, submit a registration form for each well together with a single map or plot plan showing layout of wells.

### A. WELL OPERATOR

<table>
<thead>
<tr>
<th>Firm name:</th>
<th>QUEEN'S MEDICAL CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact person:</td>
<td>RICHARD MORGAN</td>
</tr>
<tr>
<td>Address:</td>
<td>P.O. Box 961</td>
</tr>
<tr>
<td>Zip:</td>
<td>96813</td>
</tr>
<tr>
<td>Phone:</td>
<td>547-4596</td>
</tr>
</tbody>
</table>

### B. OWNER OF WELL SITE

<table>
<thead>
<tr>
<th>Firm name:</th>
<th>QUEEN'S MEDICAL CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact person:</td>
<td>Rosalie Kasaba</td>
</tr>
<tr>
<td>Address:</td>
<td>1301 PUNCHBOWL STREET</td>
</tr>
<tr>
<td>Zip:</td>
<td>96813</td>
</tr>
<tr>
<td>Phone:</td>
<td>547-4266</td>
</tr>
</tbody>
</table>

### C. WELL LOCATION

| Tax Map Key: | 2:11:35-3 |
| Town, Place, District: | HONOLULU, HAWAII |

Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the well location.

### D. WELL DATA

For Drilled Wells, submit "as-built" drawing, driller's log, and pump test results, and complete items below. For Tunnels and Shafts, submit construction drawings, plot plan, or sketch map.

- **Year drilled or constructed:** 1958 (Pacific Drilling Co.)  
  - **Well was recased in Apr. 1981 by:** Roscoe Hosse Co.
- **Casing diameter:** 10 in.  
- **Solid casing depth (Below ground):** 356 ft.  
- **Perforated casing depth (Below ground):** 256 ft.  
- **Total depth of well:** 460 ft.

### E. INSTALLED PUMP DATA

- **Pump type:** □ Vertical shaft □ Submersible □ Other (specify): □ Centrifugal □ Other (specify): □ Electric
- **Power:** □ Diesel, 200 HP □ Gas, 100 HP □ Electric, 20 HP □ Other (specify): □
- **Pump capacity:** 750 gallons per minute
- **Pump installation contractor:** Doonwood Engineering Co.

... (continued over)
PEERLESS

20 H.P.
1450/1750 R.P.M.
40°C
3 P.H.
208-220/440 Volts
Con Duty
50/60 Cyc
50/25 Amp
Ser. # B4 203 BH
Frame 286 UP
F Code

750 GPM
8/8

WHILE YOU WERE OUT

DATE 8/8          TIME 3:30

TO: Mitchell

WANTED TO SEE YOU URGENT

21

of

547-4215

Message: Rich Morgan spoke w/ Scott Myhre. He will show you the meter. Call Scott Myhre to arrange day & time (547-4520) (Gail will call Scott to let him know you will be calling him).
MILLE 27
MILLET'S BUILD.
RAYNA BUILD.

CHECK FLOW NO. 7.

@ 9:00 A.M.
MEET
8-12-96

1. REVIEW
FIELD INSPECTION INFORMATION CHECKLIST  (Ver 4/3/91)

PART I: USE OF WATER  
Declarant’s File Reference: QUEEN’S MEDICAL

1. Tax Map Key where the water is used: 2-1-035:03
   Does the declarant own this land? Yes

2. What is the water used for? Municipal and irrigation of landscape (1-2 acres)
   If for irrigation, how many acres are being irrigated? by crop type? Landscaped areas, planters.
   If for livestock, how many and what kind? N/A
   If for drinking, at how many houses? N/A
   By how many people? N/A

3. Is the quantity of water use being measured? Yes
   If yes, document the location of the measurement point and method of measurement; also get use records if these were not submitted previously. Two Hersey meters

4. If this person takes from a multi-user pipe or ditch system? N/A
   How is the water taken from the system? N/A
   What is the capacity for taking (gpm)? N/A
   How often is it taken (used)? N/A

PART II: WATER SOURCE  
Well # 1851-54  Name: QUEEN’S HOSPITAL

1. Where does the water come from/what kind of source is this? Drilled well with a 10” dia. casing.

2. Show the source location on maps, determine latitude and longitude, and document the nature of source development by measurements, sketches, and photographs.
   How is the water taken? (1) 20 h.p. Peerless Centrifugal pump, 1450/1750 r.p.m., 3 phase, 208-220/440 volts, ser. # B4203BH.
   What is the capacity for taking (gpm)? 750 g.p.m.
   How often is it taken (used)? 24 hours/day

3. Tax Map Key at the source: 2-1-035:03
   Determine declarant’s relation to source.
   Does the declarant:
   1) Operate and maintain the source? Yes
   2) Own the land at the source? Yes
   3) Use the water from this source? Yes
   4) Own the land where the water is being used? Yes

4. Does any one else also use water from this source? No
   If yes, is their use included in this user’s declaration?
   Who are the other users? Did they file?

REMARKS: Scott Myhre (Utility Systems Manager), Gregory Zabinski (Utility Plant Supervisor).

VERIFIED BY: M.Ohye, L. Nakama   DATE: August 12, 1996
DECLARANT (FILE REF.): QUEEN'S MEDICAL                        DATE: 8-12-96

PRESENT: Scott Myhre (Manager), Gregory Zabinski (Supervisor), M.Ohye, L. Nakama.

LOCATION: TMK 2-1-035:03, Queen's Medical Center.

SOURCE(S): Drilled Well 1851-54

USE(S): Municipal, some irrigation of landscaped areas and planters.

FIELD NOTES: 9:00 a.m. - Met with Scott Myhre and Gregory Zabinski.

LOCATION-SOURCE: TMK: 2-1-035:03 Well 1851-54 is in the Paahana Building (Utilities Plant Bldg.) located near the corner of Miller/Lusitana St. and is situated in the SW corner of the basement.

SOURCE: Well 1851-54 was originally drilled and cased with a 14" dia. casing in 1958 by Layne Intl. Well was recased with 10" dia. casing in 1981 by Roscoe Moss Co. A 20 h.p. centrifugal pump with a capacity of 750 g.p.m. is currently installed on the well. This is the only pump that draws water from the well. Other pumps along the water system are used to boost water through the pipelines.

LOCATION-USE: TMK: 2-1-035:03 Well 1851-54 supplies water to the entire complex which includes the Hospital buildings, facilities, air conditioning, and fire protection, also some water is used for irrigation of landscaped areas and planters. (Irrigation use is very minimal, 1-2 acres.)

QUANTITY: Two Hersey flow meters measure the amount of water being used. Readings at time of inspection are: @ 9:10 a.m., Ewa side meter = 522968 x 100. Diamond head side meter = 181366 x 1000. Water use data are being submitted to the Commission. (Graph attached)

REMARKS: This water system has connections to the City's BWS water line for emergency use.
Queen's Hospital Pumpage
Well No. 1851-54

Date (latest data 7/96)

- monthly pumpage
- 12-MAV
- permitted allocation
March 16, 1981

Queen’s Medical Center
1301 Punchbowl Street
Honolulu, Hawaii 96813

On February 27, 1981, the Board of Land and Natural Resources designated the Honolulu and Waialua Districts as the Honolulu Ground Water Control Area and the Waialua Ground Water Control Area. By this action, the Department of Land and Natural Resources is now responsible for regulating all uses of ground water in these areas.

If you are currently using ground water from any well or spring source, you are required to declare such water use to the Department of Land and Natural Resources if you wish to continue your present use. Specifically, you must fill out, sign, and return the enclosed Declaration of Existing Water Withdrawal and Use form to the Department by June 4, 1981, in accordance with Regulation 9 of the Department of Land and Natural Resources.

According to our records, you have / well(s) located on your property (Tax Map Key / ). Please complete the enclosed form and return it as soon as possible to: Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

If you have any questions or need help in filling out the form, please call the Division of Water and Land Development at 548-7619. Thank you for your cooperation.

Very truly yours,

[Signature]

SUSSMU ONO
Chairman of the Board

Enc.
WELL INFORMATION SHEET

Instructions: The following information is currently on file at the Department of Land and Natural Resources, Division of Water and Land Development. If there are any changes, please make the necessary corrections and return to the Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

<table>
<thead>
<tr>
<th>Well Number:</th>
<th>1891-64</th>
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</thead>
<tbody>
<tr>
<td>Name or Location:</td>
<td>Queens Hospital</td>
</tr>
<tr>
<td>Owner or User:</td>
<td>Queens Hospital</td>
</tr>
<tr>
<td>Year drilled:</td>
<td>1958</td>
</tr>
<tr>
<td>Driller:</td>
<td>Pacific Drilling</td>
</tr>
<tr>
<td>Ground Surface Elevation in feet referenced to mean sea level:</td>
<td>34</td>
</tr>
<tr>
<td>Casing Diameter in inches:</td>
<td>14</td>
</tr>
<tr>
<td>Total depth of well in feet:</td>
<td>460</td>
</tr>
<tr>
<td>Casing depth in feet:</td>
<td>36</td>
</tr>
<tr>
<td>Major Use:</td>
<td>Domestic</td>
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<tr>
<td></td>
<td>Disposal</td>
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<tr>
<td>Static Water Level in feet:</td>
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<td>Chloride content of water in milligrams/liter:</td>
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<td>Installed pump capacity in million gallons per day:</td>
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<tr>
<td>Average annual draft in million gallons per day:</td>
<td>0.7</td>
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</table>
Mapped, edited, and published by the Geological Survey
Control by USGS, USGS, and Hawaiian State Survey
Selected hydrographic data compiled from USGS Charts 4109 (1965), 4131 (1967), and 4132 (1966).
This information is not intended for navigational purposes.
Polyphones on edge. Grid north at datum.
10,000-foot grid based on Hawaiian coordinate system. Zone 3.
1000-meter Universal Transverse Mercator grid ticks. Zone 4, shown in blue.
Legend indicates areas at which only landmark buildings are shown.
Well No. 1891-54