COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: RYAN 
DATE: 3-Mar-10 
SUSPENSE DATE: 10-Mar-10 

TO: INIT. TO: INIT. FOR: PLEASE:

FUJI, N. KUNIMURA, I. Approval See Me
NAKAMA, L. 3 Signature
UYENO, D. 1 Review & Comment
YODA, K. 
YOSHINAGA, M. 

1 HARDY, R. 
2 HOAGBIN, S. 
3 ICE, C. 
4 IMATA, R. 
3 KAWAHARA, K. 

WELL NUMBER 4158-14 
WELL NAME Kuilima 1 
WUP Number Old= 272 
New= 886 

☐ WELL CONSTRUCTION 
☐ PUMP INSTALLATION

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

1 TRANS. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAP
4 APPL. FORM (11 COPIES)
5 USGS MAPS (11 COPIES)
6 TAX MAPS (11 COPIES)
7 PARCEL OWNER VERIF.
8 CONTRACTOR VERIF. MLS PRINTOUT (source)
9 ALL INFO FILLED IN DCCA LICENSE SCREEN PRINTOUT
10 BACKGROUND CHECK
11 $25 FEE DEPOSIT SLIP
12 DHP/CDUP/SMA pre-screen SMA map printout http://gis.hicentral.com/website/parcelzoning/viewer.htm, or INGRID'S SMA/CD MAP)
(LUC map printout http://luc.state.hi.us/luc_maps.htm, or INGRID'S SMA/CD MAP)

FOLDER:
☐ MADE NEW FILE FOLDER, ATTACHED
☐ FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:

DATE ACTION

2/23/10 parcels on transfer correct

signature effective date of transfer
December 9, 2010

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Richard R. Reigels
Turtle Bay Resort LLC
c/o Stanford Carr Development

Dear Mr. Reigels:

Transfer of Water Use Permit (WUP No. 272 to WUP No. 886) for Well No. 4158-14
Koolauloa Ground-Water Management Area, Oahu

We have received your Request to Transfer Water Use Permit for the subject well. Please note that as part of the transfer process, we have assigned a new Water Use Permit Number (WUP No. 886) for this well. This is for record keeping purposes only and voids and supersedes the previous Water Use Permit Number (WUP No. 272). As provided by law, your notice of transfer simply notifies us of the transfer of the permit does not create any new rights and liabilities in favor of or against the transferee.

This letter transmits your water use permit for Kuilima 1 Well (Well No. 4158-14) for use of 0.302 million gallons per day (mgd) of water on a 12-month moving average basis that was approved by the Commission on Water Resource Management (Commission) on October 13, 1993. As part of the Commission's approval, the following special conditions were added and are part of your permit under Standard Permit Condition 19:

Special Conditions

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. The applicant shall obtain the current version of the Department of Health's Guidelines Applicable To Golf Courses in Hawai'i. 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).

3. 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.

4. The attached map shows the location of your end use.
Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form

Please be sure to read the conditions of your approved permit.

We draw your attention to two key conditions of your permit that require your response. First, you are required 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. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Koolauloa Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Ryan Imata of the Commission staff at

Sincerely,

WILLIAM J. AILA, JR.
Interim Chairperson

Attachments: WUR Form, map of end use
GROUND-WATER USE PERMIT
WUP NO. 886

PERMITTEE

Permittee/Water User: Turtle Bay Resort LLC
Address: c/o Stanford Carr Development

Landowner of Source: Turtle Bay Resort LLC
Address: c/o Stanford Carr Development

PERMITTED SOURCE INFORMATION

Island: Oahu
Water Management Area: Windward
Aquifer Sector: Koolauloa
Aquifer System: Koolauloa
System Sustainable Yield: 36
Well Name: Kuilima 1 Well
State Well No.: 4158-14

PERMITTED USE INFORMATION

Reasonable beneficial use: Golf Course Irrigation
Withdrawal (12 month moving ave.): 0.302 mgd
Location of water use: 5-6-003: 040 (por), 041 (por), 044 (por); 5-7-001: 001 (por), 016 (por), 033 (por) (see attached map)
State land use classification: Various
County zoning classification: Various

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
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 October 13, 1993 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.

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 yearly basis (attached).
11. This permit shall be subject to the Commission's periodic review of the Koolauloa 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 Koolauloa 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 the 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 use(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 conservation, 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 of 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 Koolauloa 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 are incorporated herein by reference.

[Signature]
WILLIAM J. AILA, JR., Interim Chairperson
Commission on Water Resource Management

Attachment
Assessed values and Building Details reflect tax year 2010 for Oahu, and 2009 for all other islands. Taxes reflect tax year 2009.

Search criteria: TMK Taxkey 1-5-6-3-44

<table>
<thead>
<tr>
<th>Taxkey</th>
<th>Subdiv/Condo Tnr</th>
<th>Address</th>
<th>Owner/Lessee</th>
<th>Bds</th>
<th>Bths</th>
<th>Land area</th>
<th>Liv area</th>
<th>Last Sale</th>
<th>Instr</th>
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<td>56-</td>
<td>TURTLE BAY</td>
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<td>0</td>
<td>89.91 ac</td>
<td>0</td>
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**State of Hawaii**  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
Department of Land and Natural Resources  

REQUEST TO TRANSFER WATER USE PERMIT  
[ ] Groundwater or [ ] Surface Water  

**Instructions:** Please print in ink or type and send completed application to the Commission on Water Resource Management. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 5115. For further information and updates to this application form, visit [http://www.hawai.gov/dlnr/cwrm](http://www.hawai.gov/dlnr/cwrm).

**CURRENT PERMIT HOLDER:**

<table>
<thead>
<tr>
<th>(a) PERMITTEE</th>
<th>(b) LANDOWNER OF SOURCE</th>
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</thead>
<tbody>
<tr>
<td>Firm/Name</td>
<td>Same</td>
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<tr>
<td>Contact Person</td>
<td>Same</td>
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<td>Address</td>
<td>Same</td>
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<tr>
<td>Phone</td>
<td>Fax</td>
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<td>E-mail</td>
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Signing below indicates that the signatories understand and have no objection to this water use permit transfer request.

<table>
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<tr>
<th>Signature</th>
<th>Date</th>
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<td>2/25/10</td>
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**PERMIT TO BE TRANSFERRED (CHECK ONE ONLY) [ ] IN ENTIRETY or [ ] IN PART BY _________ GPD TO:**

<table>
<thead>
<tr>
<th>(a) PERMITTEE</th>
<th>(b) LANDOWNER OF SOURCE</th>
</tr>
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<tbody>
<tr>
<td>Firm/Name</td>
<td>Same</td>
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<tr>
<td>Contact Person</td>
<td>Same</td>
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<tr>
<td>Address</td>
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<td>Phone</td>
<td>Fax</td>
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<td>E-mail</td>
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Signing below indicates that the signatories swear that: 1) the conditions of use of the transferred permit including place, quantity, and purpose of the use remain the same, and 2) they also understand that a new water use permit will be issued to document this transfer and the old water use permit and number will be void and superceded.

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<th>Signature</th>
<th>Date</th>
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<td>2/25/10</td>
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</table>

**WATER USE PERMIT TRANSFER INFORMATION**

<table>
<thead>
<tr>
<th>WATER USE PERMIT NO.: 272</th>
<th>EFFECTIVE DATE OF TRANSFER: 2/23/10</th>
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<tbody>
<tr>
<td>WELLSTREAM DIVERSION NAME AND STATE NUMBER: Kuilima 1 Well (State Well No. 4158-14)</td>
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<tr>
<td>T.M.K. AT SOURCE 1-5-6-003-044</td>
<td></td>
</tr>
<tr>
<td>END USE T.M.K. 1-5-6-003-por 040, por 041, por 044, por 001, por 016, por 033</td>
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WUP TRANSFER REQUEST FORM (10/21/2008)
26 February 2010

Mr. Ken Kawahara, Deputy Director
Commission on Water Resource Management

Re: Transfer of Water Use Permits Nos. 272, 772, and 773

Dear Mr. Kawahara:

Enclosed are completed Request to Transfer Water Use Permit Forms for Water Use Permit (WUP) No. 272 (State Well No. 4158-14), WUP No. 772 (State Well Nos. 4159-01 and 4159-02) and WUP No. 773 (State Well No. 4100-01). These permits have been transferred in conjunction with the conveyance of the lands containing the well sites as well as the areas on which the water is used.

The effective date of the transfer of the permits was February 23, 2010. Therefore, this notification is timely pursuant to Hawaii Revised Statutes § 174C-59 (90 days).

On January 13, 2010, our attorney, Yvonne Izu, met with Roy Hardy and Ryan Imata of your staff to discuss administrative errors in the WUP No. 272 and WUP No. 772 permit forms. Namely, the TMK numbers identified as the locations of use in both of these permits do not comport with approvals granted by the Water Commission. The End Use TMK information at the bottom of the transfer forms reflect the correct end use TMK information as concurred upon between Ms. Izu and your staff. We understand that your staff concurred that these are administrative errors that will be corrected upon issuance of permits to the transferees.

Should you have any questions regarding these transfers, please do not hesitate to call either Yvonne Izu at [phone number] or Randall Sakumoto, Esq.

Very truly yours,

Richard B. Riegels
Executive Vice President

Cc: Stanford Carr
    Yvonne Izu, Esq.
    Randall Sakumoto, Esq.

Attached: Requests to Transfer - Water Use Permits Nos. 272, 772, and 773
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR PERMIT ISSUANCE**

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<th>FROM: RYAN</th>
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<th>PLEASE:</th>
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<tr>
<td>BAUER, G.</td>
<td>CHING, F.</td>
<td>DANBARA, S.</td>
<td>FUJII, N.</td>
<td>GOODING, K.</td>
<td>KUNIMURA, I.</td>
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<td>HIRANO, E.</td>
<td>HIDA, D.</td>
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WELL NUMBER ____________ WELL NAME ________________________

☐ WELL CONSTRUCTION

**ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:**

1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 PUMP TEST
6 WCR FORM
7 USGS MAP
8 PARCEL CHECK
9 WELL CHECK PRINTOUT

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

☐ PUMP INSTALLATION

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT:**

1 COVER LETTER
2 PERMIT (2x)
3 WCR FORM
4 WUR FORM
5 DOH COMMENTS
6 LAND DIV. COMMENTS
7 USGS MAP
8 PARCEL CHECK
9 GLENN'S WORKSHEET

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY
APPLICATION FOR WATER USE PERMIT

[Blank lines]

PERMITTEE INFORMATION

1. (a) APPLICANT
   Firm/Name: Kuliima Resort Co.
   Contact Person: Norman Quon
   Tax Map Key: 5-6-03:44

   (b) LANDOWNER OF SOURCE
   Firm/Name: Kuliima Resort Co.
   Contact Person: Norman Quon

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Windward ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: Well No. 4158-14
   (b) PROPOSED (NEW) WELL/DIVERSION NAME: N/A
   (c) LOCATION: Address: Kahuku, Oahu
   Tax Map Key: 5-6-03:44
   (Attach a USGS map, scale 1" = 2000", and a property tax map showing source location referenced to established property boundaries.)

4. SOURCE TYPE (check one): Stream □ Basal □ Bike-confined □ Perched □ Caprock

5. METHOD OF TAKING WATER (check one): □ Artesian □ Well & Pump □ Diverted Surface □ Other (explain)

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: [Blank lines]
   (a) Proposed use of water is: □ Existing □ New □ Both existing & new uses
   (b) Tax Map Key: 5-6-03:44
   (If location of use is over multiple TMKs, please complete Table 1 on back of application)
   (c) Address: Kahuku, Oahu
   (d) Current Land Use District: □ Urban □ Agriculture □ Conservation □ Rural
   (e) Current County Zoning Code: P-3

7. QUANTITY OF WATER REQUESTED: 800,000 gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT: □ Flowmeter □ Open-pipe □ Well □ Office □ Other (explain)

9. QUALITY OF WATER REQUESTED: □ Fresh □ Brackish □ Salt □ Potable □ Non-Potable

10. PROPOSED USE: □ Municipal (including hotels, stores, etc.) □ Individual Domestic □ Irrigation
    □ Industrial □ Military □ Other (explain)

   For questions 12 & 13: If multiple TMKs are involved, please complete Table 1 on back of application.

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: N/A

12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP: 160 Turf (acres) Turf (crop)

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 Hours
   (daytime hours of operation, ex. 7 a.m. to 2 p.m.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
   (a) Impact on Sustainable yield (?):
   See Remarks, Explanations
   (b) Instream Flow Standards affected (?):
   None: closest stream in Kawela Str which is 8,000 feet away
   (c) Hawaiian Home Lands use affected (?):
   None
   (d) Other existing legal uses affected (?):
   None
   (e) Other (pending permits, EIS, etc.) (?):
   None

15. REMARKS, EXPLANATIONS: The results of a monitoring program for chloride concentrations of a nearby well (Kahuku Air Base, Well No. 4158-12) indicated
   (if more space is needed, continue on back side)

   Applicant (print): Kuliima Resort Co.
   Signature: [Signature]
   Date: 7/4/93

   Landowner (print): Kuliima Resort Co.
   Signature: [Signature]
   Date: 7/4/93

For Official Use Only:
Date Received: [Date]
Hydrologic Unit No.: [Number]
Date Accepted: [Date]
Diversion Works No.: [Number]
State Well No.: [Number]
5/19/93 WUPA Form
16. REMARKS, EXPLANATIONS (cont'd): no significant impact by the pumpage of Well No. 4158-14 pumps on the Kahuku Air Base well.

<table>
<thead>
<tr>
<th>TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER</th>
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<tbody>
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<td>PROJECT NAME</td>
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State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Honolulu, Hawaii

October 13, 1993

Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Water Use Permit Applications
Koolauloa Ground Water Management Area, Oahu

Applicant:  
(Various Well, See Exhibit 4).
Campbell Estate

Landowner:
Same

(Well No. 4158-14)
Kuilima Resort Co.

Same

(Well No. 3855-05)
R.E. White Jr.

Same

(Well No. 3654-05)
Warren Soh

Same

Background

Applications for water use permits in the Koolauloa Ground Water Management Area submitted to the Commission to date are shown in Exhibit 1. Exhibit 2 lists those completed applications scheduled for action on October 13, 1993. Specific information regarding the source, use, notification, objections, and field investigation(s) are described in Attachment A and the attached exhibits.

Analysis & Issues

Overall Koolauloa Ground Water Management Area Conditions

The major issue in the Koolauloa Ground Water Management Area is the potential overallocation situation given the number of water use permit applications for existing uses (Exhibit 1). The sustainable yield of the Koolauloa Aquifer System is 35 million gallons per day (mgd) but as of October 5, 1993 Exhibit 1 shows a total demand of 98.106 mgd. Of this total, only about 9.011 mgd is a more reasonable estimate of the existing demands on the aquifer and is calculated according to Table 1 as follows:
TABLE 1.
Calculation for Reasonable Estimate of Existing Uses

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity (mgd)</th>
</tr>
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<tbody>
<tr>
<td>Total from Exhibit 1.</td>
<td>98.106</td>
</tr>
<tr>
<td>Future use for BWS Kaipapu Well No. 3655-03.</td>
<td>-1.000</td>
</tr>
<tr>
<td>CWRM approval of existing use for Well No. 3654-02 on 9/1/93</td>
<td>-0.002</td>
</tr>
<tr>
<td>Returned applications for more information (doubtful use).</td>
<td>-0.052</td>
</tr>
<tr>
<td>Applications withdrawn due to non-use.</td>
<td>-0.061</td>
</tr>
<tr>
<td>Applications field investigated verified with no existing use.</td>
<td>-34.900</td>
</tr>
<tr>
<td>Applications for salt water wells (limited effect on aquifer).</td>
<td>-53.080</td>
</tr>
<tr>
<td>Reasonable estimate of existing aquifer uses from applications.</td>
<td>9.011</td>
</tr>
<tr>
<td><strong>Reasonable estimate of existing uses from applications.</strong></td>
<td><strong>35 mgd</strong></td>
</tr>
</tbody>
</table>

This perspective shows a much more moderate view of the potential for overpumpage as only approximately twenty-six percent (26%) of sustainable yield is directly impacted from present application information. Additionally, the 1992 draft of the Oahu Water Management Plan estimated 1990 actual use to be 13.6 mgd which would be well within the system's sustainable yield which probably incorporates some salt water use. Finally, staff estimates the 12 month moving average, as of August 1993, is 24.289 mgd based on water use reports submitted to the Commission which includes significant salt water pumpage. Therefore, short of a complete field verification and analysis of the potential existing uses and of their reasonable and beneficial use, there does not appear to be an existing overpumpage situation.

Given this status, and the complexity of the salt and freshwater aquaculture uses, staff needs more time to analyze the existing uses from Campbell Estate applications to make reasonable recommendations, but sees no reason to delay action on other smaller users in the management area.

1. **Campbell Estate Non-Existing Pumpage** - From the various field investigations listed in Exhibit 4 the following wells scheduled for action and found not to be in use or a recent discontinued use are: 3957-01 to 06, 4100-02, 4157-11, 4158-01 to 11, 4258-04, and 4258-09. Since these wells have not been pumped and in many cases later identified by the applicant for future uses they do not qualify as existing uses and should be denied at this time until all existing uses are accounted.

2. **Kuilima Resort Co.** - The applicant requests an allocation of 800,000 gpd of non-potable water from the Kuilima 1 Well (Well No. 4158-14) for irrigation of a new 160-acre golf course called the "Links at Kuilima". The source and use described in this permit application were registered and declared in May 1989. A field investigation on March 25, 1992 verified the existence of this declared water use and the source. The requested allocation of 800,000 gpd seems high. Using guidelines developed by the County, irrigation of a 160-acre golf course may require up to 640,000 gpd. The water needs are also supplemented with treated effluent from the resort's private treatment plant. Also, based on monthly water use data reported by the applicant, the actual 12-month moving average withdrawal from this source is 302,000 gpd as of July 1993. Finally, the "Turtle Bay Golf Course" located next to this new golf course irrigates 188 acres of turf and their 12-month moving average is 226,000 gpd although only about one-half of the acreage is irrigated intensely since only 9 holes are open for play. No specific objections have been filed but general objections by Native Hawaiian Advisory Council are found in Attachment C.

3. **R.E. White, Jr.** - The applicant requests an allocation of 87,140 gpd of fresh water from the White Well (Well No. 3855-05) for irrigation of nine (9) acres of bananas and the domestic needs of three (3) residences. The source and use
described in this permit application were registered and declared in May of 1989. A field investigation on September 1, 1993 verified the existence of the irrigation water use and also six (6) cottages serviced by the well were located. Of the six cottages, only two (2) are occupied on a regular basis.

The requested allocation of 87,140 gpd for irrigation of nine (9) acres of bananas seems excessive in light of the actual average withdrawal from this source, which is about 13,000 gpd (based on monthly data provided by the applicant for January 1988 through April 1992). Using the Oahu Water Requirements Forecast for Selected Crops, developed by the Department of Agriculture for the Oahu Water Management Plan, the irrigation requirement for nine (9) acres of bananas is estimated to be about 27,200 gpd.

This source is situated less than 2,000 feet inland from the shoreline near Laie Bay. No wells are located downgradient, but there are two other active wells located within one-eighth of a mile from this source. However, these uses have co-existed for a number of years, and the quantity of water required to continue this existing use is relatively small; therefore, these wells should not experience any impacts from continued withdrawals by the applicant. Refer to Attachment A for further discussion of other nearby wells.

Authorization to continue this reasonable and beneficial use of water should not result in unacceptable adverse impacts to other local wells, streams, and the Koolauloa Aquifer System. No specific objections to this application have been filed.

No specific objections have been filed but general objections by Native Hawaiian Advisory Council are found in Attachment C.

4. Warren Soh - This request is for an allocation of 500,000 gallons per day (gpd) from the Soh Well (Well No. 3654-05) for irrigation of one acre of mango, taro, and bananas, which seems excessive. A spring source was registered and use of water for irrigation of one acre of bananas and flowers was declared in May 1989. No wells were registered by the applicant. A field investigation on October 4, 1993 verified that the well has not been in use for some time; also, no agricultural activity was observed on the property. Therefore, it is assumed that this request is for a future, rather than existing, use of water. Because existing uses are still in the process of being established, this request for a permit for a future water use should not be granted at this time.

No specific objections have been filed but general objections by Native Hawaiian Advisory Council are found in Attachment C.

RECOMMENDATION

Staff recommends:

1. **Campbell Estate Fresh and Salt Water Uses** - The Commission defer action on Campbell Estate actual existing use applications listed in Exhibit 2 and not covered under Recommendation 2 to afford staff more time to make a comprehensive evaluation of the aquacultural needs of the individual operators.

2. **Campbell Estate Non-Existing Pumpage** - That the Commission deny without prejudice the issuance of a water use permits to Campbell Estate for Well Nos. 3957-01 to 06, 4100-02, 4157-11, 4158-01 to 11, 4258-04, and 4258-09 and their requested amounts shown in Exhibit 2 since these uses are for future use. The applicant may submit new permit applications once existing uses in the Koolauloa Aquifer System have been established.

3. **Kuilima Resort Co.** - The Commission approve the issuance of an interim water use permit to Kuilima Resort Co. for the reasonable and beneficial use of 302,000 gallons per day of non-potable water for use from the Kuilima 1 Well (Well No. 4158-14) for the irrigation of 160 acres of golf course, subject to the standard water use permit conditions listed in Attachment B and the following special conditions:
a. 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.

b. The issuance of the permit shall be withheld until the reservation of water
for the Dept. of Hawaiian Home Lands is set by rule. Until the
reservation issue is resolved, the applicant may continue this existing use
of water within the limits approved by the Commission.

4. R.E. White, Jr. - The Commission approve the issuance of an interim water use
permit to R.E. White, Jr. for the reasonable and beneficial use of 13,000 gallons
per day of fresh water for use from the White Well (Well No. 3855-05) for
agricultural irrigation of 9 acres, subject to the standard water use permit
conditions listed in Attachment B and the following special conditions:

a. 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.

b. The applicant may submit monthly measurements on a yearly basis.

c. 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 allocation 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.

d. The issuance of the permit shall be withheld until the reservation of water
for the Dept. of Hawaiian Home Lands is set by rule. Until the
reservation issue is resolved, the applicant may continue this existing use
of water within the limits approved by the Commission.

5. Warren Soh - The Commission deny without prejudice the issuance of a water
use permit to Warren Soh to use 500,000 gallons per day of fresh water for future
use from the Soh Well (Well No. 3654-05). The applicant may submit a new
permit application once existing uses in the Koolauloa Aquifer System have been
established.

Respectfully submitted,

RAE M. LOUI
Deputy Director

ATTACH.

APPROVED FOR SUBMITTAL:

KEITH W. AHUE, Chairperson

*Bottom of R.E. White - Come back

APPROVED AS COMMANDED.
MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: October 13, 1993
TIME: 9:00 a.m.
PLACE: Board Room
Kalanimoku Building

ROLL CALL: Chairperson Ahue called the meeting of the Commission on Water Resource Management to order at 9:09 a.m.

The following were in attendance:

MEMBERS: Mr. Keith Ahue
Mr. Richard Cox
Dr. John L. Lewin
Mr. Robert Nakata
Mr. J. Douglas Ing

EXCUSED: Mr. Guy Fujimura

STAFF: Ms. Rae Loui
Mr. Edwin Sakoda
Mr. Roy Hardy
Mr. Eric Hirano
Ms. Lenore Nakama
Ms. Sharon Kokubun

COUNSEL: Mr. William Tam

AGENDA

ITEM 1 MINUTES OF THE SEPTEMBER 15, 1993 MEETING

Unanimously approved (Cox/Nakata).
Staff recommended deletion of Recommendation 1b. regarding DHHL reservation. The applicant's representative asked to submit yearly water use reports.

Unanimously approved as amended to eliminate recommendation 16 and require yearly reporting in Standard Condition 11 (Lewin/Cox).

ITEM 4

WATER USE PERMIT APPLICATIONS, CAMPBELL ESTATE, KUILLIMA RESORT CO., R.E. WHITE, WARREN SOH, KOOLAULOA GROUND WATER MANAGEMENT AREA, OAHU

Staff recommended deletion of Recommendations 3b. and 4d. regarding reservation for DHHL.

Mr. Burkland, representing the applicant R.E. White, objected to the low water use figure recommended by staff. Mr. Hardy stated that the water use recommended allocation was based on water use reports submitted by Mr. White. He explained that this is an interim water use permit, subject to the five-year review and that one of the standard conditions is that a water meter be installed to verify what was reported.

Unanimously approved as amended with the deletion of Recommendations 3b and 4d (Nakata/Cox).

ITEM 5

WATER USE PERMIT APPLICATIONS, POAMOHO A WELL (WELL NO. 3205-02), NHAC WELL (WELL NO. 3407-02), WAIALUA GROUND WATER MANAGEMENT AREA, OAHU

Mr. Cox recommended that the following amendment be made for Recommendation 2 - NHAC Well:

"...for the reasonable and beneficial agriculture and aquaculture use of 200,000 gallons..."

Ms. Laura Thielen, representing Poamoho Ventures, described how they arrived at the amount of water requested for the Poamoho A Well and how the water would be used. Ms. Thielen also presented their agricultural plan.

Mr. Martin presented written and oral testimony on the NHAC Well (see Commission file) requesting that:

1) The well be named Lopez Well (after the landowner) rather than NHAC Well
2) Approval of the .75 mgd for 4.5 acres requested by NHAC rather than the .2 mgd as recommended by staff
3) Review Waialua Sugar's water use versus its allocated water use and revising their allocations and the water availability for the Waialua aquifer system

Additionally, NHAC questioned the validity of the flow measurements taken by the Honolulu Board of Water Supply in 1983. Although NHAC supports Poamoho Ventures water use request, Mr. Martin felt it unfair that they are granted 100% of its requested allocation (.6 mgd for 150 acres) and NHAC would be granted only 27% of its requested allocation (.2 mgd for 4.5 acres).
Hi Ryan – Yvonne and I would like to thank you for your prompt attention. Yvonne was informed by our client that ownership will be as follows:

A. Turtle Bay Resort, LLC
   1) Permittee under WUPs 272 and 773
   2) Landowner under WUPs 272

B. Turtle Bay Mauka Lands, LLC
   1) Permittee under WUP 772
   2) Landowner under WUPs 772 and 773

On the end use TMKs, the transfer requests will be prepared showing the following:

1. WUP 272 – TMKs 5-6-003-pors of 040, 041 and 044, and also TMK 5-7-001-pors of 001, 016 and 033 (same as the hatched area shown on the maps attached to the application).

2. WUP 772 – TMKs 5-7-001-pors 021 and 036 (same as the application, except for the addition of TMK 5-7-001-por 036 as it appears that TMK 5-7-001-021 has been subdivided).

3. WUP 773 – TMK 5-7-001-por 022 (same as the WUP).

Ryan, Yvonne mentioned that after closing, the new permittees will most likely be submitting requests to correct the end use TMKs. Please feel free to call Yvonne or me should you have any questions. Thanks again – we appreciate all the time that you put into this. Take care. jill
5-6-003:041
5-6-003:033 (small parcel, looks to be in the rough part of the course - unwatered?)
5-7-001:001 (weird triangle piece, doesn't seem to be in the play part of the course either)

and then the two weird parcels:
5-7-001:016 (por)
5-7-001:999 - this is the designation on the City website - this is also a partial and it seems to be in the play area

On the left golf course, it looks like the parcels are:

5-7-001:022
5-7-001:016 (por)
5-7-001:999? - same as above

Also, I was taking an educated guess (supplemented by golfer feedback), and it seems like the dividing line between the courses straddles over 5-7-001:016. I suppose the exact demarcation is not critical at this time, since we would only apply the division without acreage applied.

Thanks and let me know what you want to do.

Ryan

“Jill K. Veles” <jveles@...>
01/13/2010 04:26 PM

From: Ryan.R.Imata [mailto:Ryan.R.Imata]  
Sent: Wednesday, January 13, 2010 2:50 PM  
To: Jill K. Veles  
Subject: Re: Well 4157-04 Campbell Estate

Ryan – I believe there’s a copy of WUP 297 attached at the end of Brown and Caldwell’s report. I thought I had tagged it for copying but somewhere between Susan and I it fell through the cracks. My apologies for having to trouble you. Much appreciated. Take care. jill
Hi Ryan – I’m so sorry to trouble you but could I make arrangements with you to get a copy of WUP 297. Call me and I’ll run over to pick up the copy. Thanks a bunch. jill
Dear Mr. Adelman:

Approval of Water Use Permit (WUP No. 272) for Well No. 4158-14
Koolauloa Ground-Water Management Area, Oahu

This letter transmits your water use permit for Kuilima 1 Well (Well No. 4158-14) for use of 0.302 million gallons per day (mgd) of water on a 12-month moving average basis that was approved by the Commission on Water Resource Management (Commission) on October 13, 1993. As part of the Commission's approval, the following special conditions were added and are part of your permit under Standard Permit Condition 19:

**Special Conditions**

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. The applicant shall obtain the current version of the Department of Health's Guidelines Applicable To Golf Courses in Hawai'i. 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).

3. 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.

Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form

Please be sure to read the conditions of your approved permit.
We draw your attention to two key conditions of your permit that require your response. First, you are required 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. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Koolauloa Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Ryan Imata of the Commission staff at [number redacted].

Sincerely,

Peter T. Young
Chairperson

Attachments
GROUND-WATER USE PERMIT
WUP NO. 272

PERMITTEE

Permittee/Water User: Kuilima Resort Company D.B.A.
Address: Turtle Bay Golf

Landowner of Source

PERMITTED SOURCE INFORMATION

Island: Oahu
Water Management Area: Windward
Aquifer Sector: Koolauloa
Aquifer System: System Sustainable Yield 35
Well Name: Kuilima 1 Well
State Well No.: 4158-14

PERMITTED USE INFORMATION

Reasonable beneficial use: Irrigation
Withdrawal (12 month moving ave.): 0.302 mgd
Location of water use
   TMK #:
   State land use classification: AG
   County zoning classification: P-2

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
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 mean "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 October 13, 1993 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.

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).
11. This permit shall be subject to the Commission's periodic review of the Koolauloa 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 Koolauloa 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 the 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 use(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 conservation, 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 of 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 Koolauloa 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 are incorporated herein by reference.

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

Attachment
ROLL CALL: Chairperson Ahue called the meeting of the Commission on Water Resource Management to order at 9:09 a.m.

The following were in attendance:

MEMBERS: Mr. Keith Ahue  
Mr. Richard Cox  
Dr. John L Lewin  
Mr. Robert Nakata  
Mr. J. Douglas Ing

EXCUSED: Mr. Guy Fujimura

STAFF: Ms. Rae Loui  
Mr. Edwin Sakoda  
Mr. Roy Hardy  
Mr. Eric Hirano  
Ms. Lenore Nakama  
Ms. Sharon Kokubun

COUNSEL: Mr. William Tam

OTHERS: Winifred Miller  
Guy Nakamoto  
Creighton Mattoon  
Warren Iwasa  
Conrad Shiroma  
Dave Martin  
Wright Hiatt  
George Young  
Kent Smith  
Garrett Goo  
Chester Lao  
Norman Quon  
Edsel Yamada  
Reynolds Burkland  
Mr. Iida  
Kahalaomapuana Wasson  
Jim Anthony  
Karen Piltz  
Barry Ching  
Elizabeth Martin  
Wayne Akana  
Keith Krueger  
Laverne Higa  
Ruby & Gene Montogomery  
Laura Thielen  
Ken Ishizaki  
Peter Lenhart  
David Taogoshi  
Keith Haugen

All written testimonies submitted at the meeting are filed in the Commission office and are available for review by interested parties. Some items were taken out of sequence to accommodate requests by applicants or interested parties.

AGENDA 1

ITEM 1 MINUTES OF THE SEPTEMBER 15, 1993 MEETING

Unanimously approved (Cox/Nakata).
Staff recommended deletion of Recommendation 1b. regarding DHHL reservation. The applicant's representative asked to submit yearly water use reports.

Unanimously approved as amended to eliminate recommendation 16 and require yearly reporting in Standard Condition 11 (Lewin/Cox).

**ITEM 4**

**WATER USE PERMIT APPLICATIONS, CAMPBELL ESTATE, KULLIMA RESORT CO., R.E. WHITE, WARREN SOH, KOOLAULA GROUND WATER MANAGEMENT AREA, OAHU**

Staff recommended deletion of Recommendations 3b. and 4d. regarding reservation for DHHL.

Mr. Burkland, representing the applicant R.E. White, objected to the low water use figure recommended by staff. Mr. Hardy stated that the water use recommended allocation was based on water use reports submitted by Mr. White. He explained that this is an interim water use permit, subject to the five-year review and that one of the standard conditions is that a water meter be installed to verify what was reported.

Unanimously approved as amended with the deletion of Recommendations 3b and 4d (Nakata/Cox).

**ITEM 5**

**WATER USE PERMIT APPLICATIONS, POAMOHO A WELL (WELL NO. 3205-02), NHAC WELL (WELL NO. 3407-02), WAIALUA GROUND WATER MANAGEMENT AREA, OAHU**

Mr. Cox recommended that the following amendment be made for Recommendation 2 - NHAC Well:

"...for the reasonable and beneficial agriculture and aquaculture use of 200,000 gallons..."

Ms. Laura Thielen, representing Poamoho Ventures, described how they arrived at the amount of water requested for the Poamoho A Well and how the water would be used. Ms. Thielen also presented their agricultural plan.

Mr. Martin presented written and oral testimony on the NHAC Well (see Commission file) requesting that:

1) The well be named Lopez Well (after the landowner) rather than NHAC Well

2) Approval of the .75 mgd for 4.5 acres requested by NHAC rather than the .2 mgd as recommended by staff

3) Review Waialua Sugar's water use versus its allocated water use and revising their allocations and the water availability for the Waialua aquifer system

Additionally, NHAC questioned the validity of the flow measurements taken by the Honolulu Board of Water Supply in 1983. Although NHAC supports Poamoho Ventures water use request, Mr. Martin felt it unfair that they are granted 100% of its requested allocation (.6 mgd for 150 acres) and NHAC would be granted only 27% of its requested allocation (.2 mgd for 4.5 acres).
Mr. David Taogoshi of Poamoho Venture commented that they made modifications to their agricultural plans because of the amount of water available in the aquifer. Therefore, NHAC should also make modifications to their crop selections in consideration of the amount of water available.

Mr. Ing made the following recommendations:

1) Approval of .6 mgd for Poamoho Ventures
2) Approval of .2 mgd for NHAC Well, but after water use information is gathered they may return to the Commission to request additional usage
3) Approval for the NHAC Well to be renamed Lopez Well

Mr. Nakata suggested that staff re-look at the numbers for Waialua Sugar.

Unanimously approved with amendments (Ing/Nakata).

ITEM 6
ROYAL HAWAIIAN COUNTRY CLUB, WATER USE PERMIT APPLICATIONS, ROYAL HAWAIIAN 1, 2, 4, & 6 WELLS, WAIMANALO GROUND WATER MANAGEMENT AREAS, OAHU

Application withdrawn by the applicant.

ITEM 7
HEARING FOR REVOCATION OF WATER USE PERMIT, CITY & COUNTY OF HONOLULU, HAWAII MEAT CO. WELL, MOANALUA GROUND WATER MANAGEMENT AREA, OAHU

Unanimously approved (Nakata/Cox).

ADJOURNMENT
The meeting was adjourned at 3:00 p.m.

Respectfully submitted,

SHARON S. KOKUBUN, Secretary

APPROVED AS SUBMITTED:

RAE M. LOUI
Deputy Director
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Water Use Permit Applications
Koolauloa Ground Water Management Area, Oahu

Applicant:

(Various Well, See Exhibit 4).
Campbell Estate

(Well No. 4158-14)
Kuilima Resort Co.

(Well No. 3855-05)
R.E. White Jr.

(Well No. 3654-05)
Warren Soh

Landowner:

Same

Same

Same

Same

Background

Applications for water use permits in the Koolauloa Ground Water Management Area submitted to the Commission to date are shown in Exhibit 1. Exhibit 2 lists those completed applications scheduled for action on October 13, 1993. Specific information regarding the source, use, notification, objections, and field investigation(s) are described in Attachment A and the attached exhibits.

Analysis & Issues

Overall Koolauloa Ground Water Management Area Conditions

The major issue in the Koolauloa Ground Water Management Area is the potential overallocation situation given the number of water use permit applications for existing uses (Exhibit 1). The sustainable yield of the Koolauloa Aquifer System is 35 million gallons per day (mgd) but as of October 5, 1993 Exhibit 1 shows a total demand of 98.106 mgd. Of this total, only about 9.011 mgd is a more reasonable estimate of the existing demands on the aquifer and is calculated according to Table 1 as follows:
TABLE 1.
Calculation for Reasonable Estimate of Existing Uses

<table>
<thead>
<tr>
<th>Quantity (mgd)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>98.106</td>
<td>Total from Exhibit 1.</td>
</tr>
<tr>
<td>-1.000</td>
<td>Future use for BWS Kaipapau Well No. 3655-03.</td>
</tr>
<tr>
<td>-0.002</td>
<td>CWRM approval of existing use for Well No. 3654-02 on 9/1/93</td>
</tr>
<tr>
<td>-0.052</td>
<td>Returned applications for more information (doubtful use).</td>
</tr>
<tr>
<td>-0.061</td>
<td>Applications withdrawn due to non-use.</td>
</tr>
<tr>
<td>-34.900</td>
<td>Applications field investigated verified with no existing use.</td>
</tr>
<tr>
<td>-53.080</td>
<td>Applications for salt water wells (limited effect on aquifer).</td>
</tr>
<tr>
<td>9.011</td>
<td>Reasonable estimate of existing aquifer uses from applications.</td>
</tr>
</tbody>
</table>

This perspective shows a much more moderate view of the potential for overpumpage as only approximately twenty-six percent (26%) of sustainable yield is directly impacted from present application information. Additionally, the 1992 draft of the Oahu Water Management Plan estimated 1990 actual use to be 13.6 mgd which would be well within the system’s sustainable yield which probably incorporates some salt water use. Finally, staff estimates the 12 month moving average, as of August 1993, is 24.289 mgd based on water use reports submitted to the Commission which includes significant salt water pumpage. Therefore, short of a complete field verification and analysis of the potential existing uses and of their reasonable and beneficial use, there does not appear to be an existing overpumpage situation.

Given this status, and the complexity of the salt and fresh water aquaculture uses, staff needs more time to analyze the existing uses from Campbell Estate applications to make reasonable recommendations, but sees no reason to delay action on other smaller users in the management area.

1. **Campbell Estate Non-Existing Pumpage** - From the various field investigations listed in Exhibit 4 the following wells scheduled for action and found not to be in use or a recent discontinued use are: 3957-01 to 06, 4100-02, 4157-11, 4158-01 to 11, 4258-04, and 4258-09. Since these wells have not been pumped and in many cases later identified by the applicant for future uses they do not qualify as existing uses and should be denied at this time until all existing uses are accounted.

2. **Kuilima Resort Co.** - The applicant requests an allocation of 800,000 gpd of non-potable water from the Kuilima 1 Well (Well No. 4158-14) for irrigation of a new 160-acre golf course called the "Links at Kuilima". The source and use described in this permit application were registered and declared in May 1989. A field investigation on March 25, 1992 verified the existence of this declared water use and the source.

   The requested allocation of 800,000 gpd seems high. Using guidelines developed by the County, irrigation of a 160-acre golf course may require up to 640,000 gpd. The water needs are also supplemented with treated effluent from the resort’s private treatment plant. Also, based on monthly water use data reported by the applicant, the actual 12-month moving average withdrawal from this source is 302,000 gpd as of July 1993. Finally, the "Turtle Bay Golf Course" located next to this new golf course irrigates 188 acres of turf and their 12-month moving average is 226,000 gpd although only about one-half of the acreage is irrigated intensely since only 9 holes are open for play.

   No specific objections have been filed but general objections by Native Hawaiian Advisory Council are found in Attachment C.

3. **R.E. White, Jr.** - The applicant requests an allocation of 87,140 gpd of fresh water from the White Well (Well No. 3855-05) for irrigation of nine (9) acres of bananas and the domestic needs of three (3) residences. The source and use
described in this permit application were registered and declared in May of 1989. A field investigation on September 1, 1993 verified the existence of the irrigation water use and also six (6) cottages serviced by the well were located. Of the six cottages, only two (2) are occupied on a regular basis.

The requested allocation of 87,140 gpd for irrigation of nine (9) acres of bananas seems excessive in light of the actual average withdrawal from this source, which is about 13,000 gpd (based on monthly data provided by the applicant for January 1988 through April 1992). Using the Oahu Water Requirements Forecast for Selected Crops, developed by the Department of Agriculture for the Oahu Water Management Plan, the irrigation requirement for nine (9) acres of bananas is estimated to be about 27,200 gpd.

This source is situated less than 2,000 feet inland from the shoreline near Laie Bay. No wells are located downgradient, but there are two other active wells located within one-eighth of a mile from this source. However, these uses have co-existed for a number of years, and the quantity of water required to continue this existing use is relatively small; therefore, these wells should not experience any impacts from continued withdrawals by the applicant. Refer to Attachment A for further discussion of other nearby wells.

Authorization to continue this reasonable and beneficial use of water should not result in unacceptable adverse impacts to other local wells, streams, and the Koolauloa Aquifer System. No specific objections to this application have been filed.

No specific objections have been filed, but general objections by Native Hawaiian Advisory Council are found in Attachment C.

4. Warren Soh - This request is for an allocation of 500,000 gallons per day (gpd) from the Soh Well (Well No. 3654-05) for irrigation of one acre of mango, taro, and bananas, which seems excessive. A spring source was registered and use of water for irrigation of one acre of bananas and flowers was declared in May 1989. No wells were registered by the applicant. A field investigation on October 4, 1993 verified that the well has not been in use for some time; also, no agricultural activity was observed on the property. Therefore, it is assumed that this request is for a future, rather than existing, use of water. Because existing uses are still in the process of being established, this request for a permit for a future water use should not be granted at this time.

No specific objections have been filed, but general objections by Native Hawaiian Advisory Council are found in Attachment C.

**RECOMMENDATION**

Staff recommends:

1. **Campbell Estate Fresh and Salt Water Uses** - The Commission defer action on Campbell Estate actual existing use applications listed in Exhibit 2 and not covered under Recommendation 2 to afford staff more time to make a comprehensive evaluation of the aquacultural needs of the individual operators.

2. **Campbell Estate Non-Existing Pumpage** - That the Commission deny without prejudice the issuance of a water use permits to Campbell Estate for Well Nos. 3957-01 to 06, 4100-02, 4157-11, 4158-01 to 11, 4258-04, and 4258-09 and their requested amounts shown in Exhibit 2 since these uses are for future use. The applicant may submit new permit applications once existing uses in the Koolauloa Aquifer System have been established.

3. **Kuilima Resort Co.** - The Commission approve the issuance of an interim water use permit to Kuilima Resort Co. for the reasonable and beneficial use of 302,000 gallons per day of non-potable water for use from the Kuilima 1 Well (Well No. 4158-14) for the irrigation of 160 acres of golf course, subject to the standard water use permit conditions listed in Attachment B and the following special conditions:
Chairperson and Member
Commission on Water Resource Management

October 13, 1993

a. 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.

b. The issuance of the permit shall be withheld until the reservation of water
   for the Dept. of Hawaiian Home Lands is set by rule. Until the
   reservation issue is resolved, the applicant may continue this existing use
   of water within the limits approved by the Commission.

4. **R.E. White, Jr.** - The Commission approve the issuance of an interim water use
   permit to R.E. White, Jr. for the reasonable and beneficial use of 13,000 gallons
   per day of fresh water for use from the White Well (Well No. 3855-05) for
   agricultural irrigation of 9 acres, subject to the standard water use permit
   conditions listed in Attachment B and the following special conditions:

   a. 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.

   b. The applicant may submit monthly measurements on a yearly basis.

   c. 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 allocation 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.

   d. The issuance of the permit shall be withheld until the reservation of water
      for the Dept. of Hawaiian Home Lands is set by rule. Until the
      reservation issue is resolved, the applicant may continue this existing use
      of water within the limits approved by the Commission.

5. **Warren Soh** - The Commission deny without prejudice the issuance of a water
   use permit to Warren Soh to use 500,000 gallons per day of fresh water for future
   use from the Soh Well (Well No. 3654-05). The applicant may submit a new
   permit application once existing uses in the Koolauloa Aquifer System have been
   established.

Respectfully submitted,

[Signature]

RAE M. LOUI
Deputy Director

Attach.

APPROVED FOR SUBMITTAL:

[Signature]

KEITH W. AHUE, Chairperson

* Section on R.E. White - can come back

APPROVED as amended.
# WATER USE PERMIT DETAILED INFORMATION

## Source Information

### AQUIFER:
- **Koolauloa System, Windward Sector, Oahu**
  - Sustainable Yield: 35 mgd
  - Existing Water Use Permits: 0.002 mgd
  - Available Allocation: 35 mgd
  - Total of other pending allocations: 98.109 mgd

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<th>Bottom of Perforated</th>
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<th>Grouted Annulus Depth</th>
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## ATTACHMENT A
Use Information

Current 12-Month Moving Average Withdrawal: 24,289 gpd
(69% of SY)

See Exhibit 3 for individual applications use descriptions.

Nearby Surrounding Wells and Other Registered Ground Water Use

Information from the registration program indicates there are possibly 84 existing wells in the Koolauloa Aquifer System. Several of these wells have been initially field checked but many of the declarants, including the larger users, have not been completely field verified. Several are not in use or are rights claims. However, the Oahu Water Management Plan estimated that the existing withdrawals from the Koolauloa Aquifer System is 13.6 mgd as of 1990.

Specific well sites:

1. KUILIMA 1 Well- There are twenty-three (23) other wells within a mile of the well (see Exhibit 5A). Eighteen (18) of these wells are downgradient. Of these downgradient wells twelve (12) are in use but all are salt water wells which should not experience adverse affects.

2. SOH Well- There are twelve (12) other wells within a mile of the well (see Exhibit 5B). Seven (7) of these wells are currently in use. No wells are located downgradient.

3. WHITE Well - There are twenty-three (23) other wells within a mile of the well (see Exhibit 5C). Eighteen (18) of these wells are currently in use. No wells are located downgradient.

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Star-Bulletin according to Exhibit 2. Copies of the notice were sent to the Mayor’s office and the Board of Water Supply. Additional notice copies were sent to the County Council and Department of Water Supply. Copies of the completed application were sent to the Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, Aquatic Resources & Historic Preservation Divisions of the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted according to Exhibit 2.
Objections

The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission according to Exhibit 2.

To the best of staff’s knowledge there are no objectors who have property interest within the Koolauloa Aquifer System or who will be directly and immediately affected by the applications in this submittal. All objections and/or comments to the application are summarized as follows:

<table>
<thead>
<tr>
<th>Objector</th>
<th>Objection</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHAC</td>
<td>General process of water use permit applications. No specific objections to this application. See Attachment C.</td>
</tr>
<tr>
<td>DHHL</td>
<td>Comparison of actual existing uses to requested amounts should be made.</td>
</tr>
<tr>
<td>DAR</td>
<td>For Well No. 3654-05 &amp; 3855-05 there are the Maakua, Kaipapau, and Kaluanui streams which have native species. Any reduction in streamflow would be environmentally damaging to these species. However, existing uses should have already made their impact.</td>
</tr>
</tbody>
</table>

Field Investigation

Applications were investigated according to Exhibit 4.

ATTACHMENT A
STANDARD WATER USE PERMIT CONDITIONS

1. The ground water described in the water use permit may only be taken from the location described, used for the reasonable-beneficial use described, and at the location described above and in the attachments. Reasonable-beneficial use means "the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is not wasteful and is both reasonable and consistent with the state and county land use plans and the public interest." (HAR §13-171-2).

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 HAR §13-171-13 which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in section §13-171-2;
   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 174C-101(a), HRS.

4. The ground water use approved must not interfere with surface or ground water rights or reservations.

5. The ground water use approved 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 permit is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and staff submittal approved by the Commission at its October 13, 1993 meeting are incorporated into the permit by reference.

8. Any modification of the permit terms, conditions, or uses can only be made with the express written consent of the Commission on Water Resource Management.

9. The water use 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 water sources in quantity, quality, or both;
   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 Homes, 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. 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.

11. 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 the Commission's September 16, 1992 action on reporting requirements;

12. The water use permit shall be subject to the Commission's periodic review of the applicable aquifer's sustainable yield. The amount of ground water use authorized by the permit may be reduced by the Commission if the sustainable yield of the KOOLAU LOA Aquifer System, or relevant modified aquifer, is reduced;

13. The water use permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HAR §13-171-25 and the requirements of Chapter 174C, the Commission has the authority to allow the transfer of the permit and the use rights granted by the permit in a manner consistent with HAR §13-171-25. 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.

14. The use(s) authorized by law and by the water use permit do not constitute ownership rights.

15. The permittee shall request modification of the permit when necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.

16. The permittee shall prepare and submit a water shortage plan within 30 days of issuance of the permit to assist the Commission in fulfilling 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 Koolauloa Ground Water Management Area.

17. The water use permit granted shall be an interim water use permit, pursuant to HAR §13-171-21. The final determination of the water use quantity shall be made within five years of the filing of the application to continue the existing use.

18. The water use permit shall be issued only after AG review.
1993 September 29

State of Hawaii
Commission on Water Resource Management

OBJECTIONS AND COMMENTS ON APPLICATIONS FOR WATER USE PERMITS
Public Notice dated August 30, 1993
Send written objections by September 29, 1993

NHAC represents water source registrants, water use declarants, water use permit applicants, and others with property interest in land within the hydrologic unit of the source of water supply, as well as persons with non-property interests, all of who would be directly and immediately affected by the proposed water use.

GENERAL OBJECTIONS

We reiterate our general objections to current COWRM water use permit application processing and decisionmaking practices as previously submitted on numerous occasions (10/12/92, 10/21/92, 12/1/92, 6/22/93, & 7/8/93).

Campbell Estate proposes to continue a total of 23.225 mgd of existing uses, 7.0 of which involve seawater. This leaves 16.225 mgd of use from the basal aquifer, yet the May 1992 review draft of the Oahu Water Management Plan (p. 14) reports 1990 groundwater use of only 13.6 mgd. The 16.225 mgd of proposed use is about 46% of the 1992 revised sustainable yield of 35 mgd for the Koolauloa aquifer. Without better knowledge of existing, foreseeable, and potential competing applications for this yield, it is difficult to assess the propriety of allocating almost 50% of aquifer yield to a single applicant.

Many of the applications are for combined domestic and agricultural use. Quantification of the breakdown between these uses is essential at this stage of the permit review process so that existing acreage under cultivation, existing agricultural water use, crop water requirements, and future water allocations can be coherently analyzed.
SPECIFIC OBJECTIONS

Well 4057-01

The well site appears to be upgradient from and close to an unnamed spring. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for the spring, existing legal uses of the spring, and inchoate legal uses of the spring as authorized by Native Hawaiian custom and tradition.

The proposed use of potable water for pasture irrigation should be questioned until applicant shows evidence of the infeasibility of using alternative non-potable water sources.

Well 4057-04

While the public notice only lists Well 4057-04 as the well source, the application identifies 3 other wells that serve as sources for the Sugar Mill Pump battery. In order to preserve due process of all parties, the public notice for this application should be revised and re-published with a new deadline for written objections to clearly indicate that Wells 4057-09, -11, and -12 are also part of the application.

The well site appears to be upgradient from and close to the Ki'i National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge, existing legal uses of all refuge waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

The proposed use of potable water for agricultural irrigation should be questioned until applicant shows evidence of the infeasibility of using alternative non-potable water sources.
The proposed use of potable water for agricultural irrigation should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

Well 4057-06

While the public notice lists domestic service as an existing water use, the application shows that only water of non-potable quality is being requested for irrigation and other uses only, not for domestic uses. Which is correct?

Well 4057-07

The proposed use of potable water for agricultural irrigation should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

The well site appears to be upgradient from and close to an unnamed spring. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for the spring, existing legal uses of the spring, and inchoate legal uses of the spring as authorized by Native Hawaiian custom and tradition.

Well 4057-10

The proposed use of potable water for aquaculture should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

The well site appears to be upgradient from and close to an unnamed spring. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for the spring, existing legal uses of the spring, and inchoate legal uses of the spring as authorized by Native Hawaiian custom and tradition.

Well 4100-02

The proposed use of potable water for aquaculture should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

The apparent proximity of the well to a perennial Kawela stream tributary may indicate a potential restriction on use not identified in the application, including possible effects on interim instream flow standards, existing legal uses of the stream, and inchoate legal uses of the stream as authorized by Native Hawaiian custom and tradition.

Well 4157-04

The well site appears to be upgradient from and close to the Ki'i National Wildlife Refuge. Potential restrictions on the proposed
water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge, existing legal uses of all refuge waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4157-05 to -07

Potential restrictions on the proposed water use not identified in the application include possible effects on existing legal uses of all refuge waters and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4157-09

While we have no specific objections to the extraction of salt water for aquacultural use, we are concerned about the potential impacts of wastewater effluent discharge upon water sources and water uses in the area. These water quality concerns should be listed in the applications as potential restrictions on use.

Wells 4158-01 through -11

The well sites appear to be upgradient from and close to the Ki'i National Wildlife Refuge, Punamano spring, and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punamano spring, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4158-14

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4159-01

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.
Well 4159-02

While the public notice lists domestic service as an existing water use, the application shows that only water of non-potable quality is being requested for irrigation and military uses only, not for domestic uses. Which is correct? Note that the application for adjacent Well 4159-01 is for irrigation use of non-potable water.

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4258-04

The well site appears to be upgradient from and close to Punahoolapa and Punamano springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa and Punamano springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Mahalo,

David L. Martin, Water Claims Manager
pc: Campbell Estate
Kuilima Resort Co.
## Aquifer System: KOOLAUOLA

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### MAPA mdp

- **WATER USE PERMIT APPLICATION NOTICE STATUS REPORT 10/05/93**
- **ISLAND OF OAHU**

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**Exhibit 1**

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Aquifer System: KOOLAULOA

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103 Applications Totaling 96,109
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There are 61 MAPA scheduled for action on 10/13/93.

Statewide there are 61 applications scheduled for action.
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USE PERMIT APPLICATION USE STATUS REPORT

10/05/93

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AGENDA

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Aquifer System: KOOLAULOA

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SUPPLY 1 HOME IRRIGATE 1 ACRE BANANA, PAPAYA
DOMESTIC SERVICE TO 31 HOMES & MALAEKAHANA PARK
DOMESTIC' IRRIGATION FOR 80 ACRES OF VARIOUS CROP
DOMESTIC & IRRIGATION FOR 80 ACRES OF VARIOUS CROP
AQUACUL TURE FOR 60 ACRES OF PRAWNS
DOMESTIC' IRRIGATION FOR 80 ACRES OF VARIOUS CROP
DOMESTIC & IRRIGATION FOR 80 ACRES OF VARIOUS CROP
DOMESTIC' IRRIGATION FOR 80 ACRES OF VARIOUS CROP
IRRIGATION FOR 150 ACRES PASTURE AND CATTLE
DOMESTIC' IRR FOR 135 ACRES OF RANCHLAND & CATTLE
DOMESTIC' IRR OF 218 AC OF VARIOUS CROPS
DOMESTIC' IRR OF 40 AC VARIOUS CROPS
SERVICE TO'KAHUKU HIGH SCH AND TURF FARM (10 AC)
DOMESTIC & IRRIGATION FOR 120 ACRES OF VAR CROP
AQUACULTURE FOR 48 ACRES PRA~S
IRRIGATION FOR 160 ACRES OF A.PALMER GOLF COURSE
DOMESTIC & IRRIGATION FOR 40 ACRES OF VARIOUS CROP
6 MILITARY OFFICES, IRRIGATE 23 ACRES AQUACULTURE
DOMESTIC SERVICE TO 6 MILITARY ADMIN FACILITIES
MAINTENANCE OF HABITAT FOR ENDANGERED WATER BIRDS
MAINTENANCE OF HABITAT FOR ENDANGERED WATER BIRDS
MAINTENANCE OF HABITAT FOR ENDANGERED ~ATER BIRDS
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IRRIGATION NEEDS OF 300 ACRES OF SHRIMP AQUACULTUR
IRRIGATION NEEDS FOR XX ACRES OF OGO AQUACULTURE
IRRIGATION· NEEDS FOR XX ACRES OF SHRIMP AQUACULTUR
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IRRIGATION NEEDS FOR XX ACRES OF SHRIMP AQUACULTUR
IRRIGATION NEEDS FOR XX ACRES OF HATCHERY
IRRIGATION NEEDS FOR XX ACRES OF SHRIMP AQUACULTUR
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MUNICIPAL FOR 607 RES,BYUH,COMMERCIAL,LAIE SCHOOL
MUNICIPAL FOR 607 RES,BYUH,COMMERCIAL,LAIE SCHOOL
MUNICIPAL FOR 607 RES,BYUH,COMMERCIAL,LAIE SCHOOL
SUPPLY LAGOON'S AQUATIC LIFE, PROVIDE CIRCULATION

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<td>FISH, IRIGATE MANGO, Taro, BANANA</td>
<td>5-3-15:18</td>
<td>COUNTRY DIST</td>
<td>10/07/93</td>
<td>10/13/93</td>
<td>0.058</td>
</tr>
<tr>
<td>3854-02</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3854-03</td>
<td>Y</td>
<td>IRRIGATE 33 ACRES BANANAS, PAPAYAS, GARDEN CROPS</td>
<td>5-3-12:1</td>
<td>AG-1</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.108</td>
</tr>
<tr>
<td>3854-03</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3854-01</td>
<td>Y</td>
<td>IRRIGATE 33 ACRES BANANAS, PAPAYAS, GARDEN CROPS</td>
<td>5-3-12:1</td>
<td>AG-1</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.108</td>
</tr>
<tr>
<td>3854-05</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3854-02</td>
<td>Y</td>
<td>SUPPLY FOR LIVESTOCK</td>
<td>5-5-6:11</td>
<td>AG-2</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.009</td>
</tr>
<tr>
<td>3854-08</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3854-06</td>
<td>Y</td>
<td>IRRIGATE 51 ACRES OF GRASS</td>
<td>5-5-6:1</td>
<td>AG-2</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.167</td>
</tr>
<tr>
<td>3854-07</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3854-04</td>
<td>Y</td>
<td>IRRIGATE 39 ACRES BANANAS, PAPAYAS, GRASS</td>
<td>5-5-6:1</td>
<td>AG-2</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.128</td>
</tr>
<tr>
<td>3854-04</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3854-01</td>
<td>Y</td>
<td>SUPPLY 103 ACRES OF PRAWNS</td>
<td>5-5-5:1</td>
<td>AG-1 AND AG-2</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.475</td>
</tr>
<tr>
<td>3856-07</td>
<td>ZIONS SECURITIES CORP.</td>
<td>3856-04</td>
<td>Y</td>
<td>SUPPLY GRASS, CHICKEN AND EGG FARM NEEDS</td>
<td>5-5-5:1</td>
<td>AG-2</td>
<td>09/21/93</td>
<td>10/13/93</td>
<td>0.062</td>
</tr>
</tbody>
</table>

Aquifer System: KOOLAUOA

IRrigation of 9 acres of banana
Fish, irrigate mango, taro, banana
Irrigate 33 acres bananas, papayas, garden crops
Irrigate 33 acres bananas, papayas, garden crops
Supply for livestock
Irrigate 51 acres of grass
Irrigate 39 acres bananas, papayas, grass
Supply 103 acres of prawns
Supply chicken and egg farm needs

61 Applications Totaling 52.712
<table>
<thead>
<tr>
<th>WELL #</th>
<th>REPORT DONE</th>
<th>WELL NAME</th>
<th>IS WELL IN USE?</th>
<th>DATE INSPECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>3956-01</td>
<td>YES</td>
<td>Malawahana Dom Sys 363, Pump 7 Campbell Est. is opp of MALAWAHANA DOMESTIC WATER SY (fresh)</td>
<td>YES</td>
<td>5/21/93</td>
</tr>
<tr>
<td>3957-06</td>
<td>YES</td>
<td>Pump 3,17 Battery</td>
<td>NO-no pumps</td>
<td>5/28/93</td>
</tr>
<tr>
<td>3957-07</td>
<td>YES</td>
<td>Pump 6</td>
<td>YES</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4056-01 prev</td>
<td>YES</td>
<td>KAHANANAKOA WELL A.KAHANANAKOA RANCH 142 ACRES, ONLY IRRIGATE 30-50 ACRES, 65 HEAD LIVESTOCK</td>
<td>YES</td>
<td>10/8/90</td>
</tr>
<tr>
<td>4057-01 2,8,13</td>
<td>YES</td>
<td>KAHANU FARM ASSOC</td>
<td>YES</td>
<td>10/8/90</td>
</tr>
<tr>
<td>4057-03</td>
<td>YES</td>
<td>KAHANU MILL WELL 354 Kahanu Mill Campbell Estate not able to locate casing</td>
<td>YES, well 04 in use</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4057-04,09,11,12</td>
<td>YES</td>
<td>Pump 8 Southern Turf Nurseries</td>
<td>YES</td>
<td>5/28/93</td>
</tr>
<tr>
<td>4057-06</td>
<td>YES</td>
<td>Pump 12</td>
<td>NO-no updated users</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4057-07</td>
<td>YES</td>
<td>Pump 12-A KAHANU PRAWN WELL KAHANU PRAWN CO (Bruce Smith) anticipates using pump 3 later</td>
<td>YES</td>
<td>4/93</td>
</tr>
<tr>
<td>4150-01</td>
<td>YES</td>
<td>A PALMER GOLF (at KULIMA RES)-well owned by Campbell - (clarify 140 or 200 acres)</td>
<td>NO</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4150-02</td>
<td>YES</td>
<td>Unused well on Opana Rd, overgrown</td>
<td>NO</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4157-01</td>
<td>YES</td>
<td>346 Sealed in 1948</td>
<td>NO</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4157-02</td>
<td>YES</td>
<td>-</td>
<td>NO</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4157-03</td>
<td>YES</td>
<td>- Not: Amorent reports casing buried under roadway.</td>
<td>NO</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4157-04</td>
<td>YES</td>
<td>Pump 15 AMORENT (fresh water well pumped 24 hours/day for 35 prawn ponds, several bldgs)</td>
<td>YES</td>
<td>inspected 4/91 &amp; 5/21/93</td>
</tr>
<tr>
<td>4157-05,06,07</td>
<td>YES</td>
<td>Fish &amp; Wild 1,2,3 US FISH &amp; WILDLIFE - Three artesian wells, used as necessary to maintain water levels in wildlife refuge to promote good feeding and nesting environments for endangered birds. No meters, no pumps, flow controlled by valves HAUN HAN MAR ENTERPRISES AMORENT SALT WATER WELL (aka &quot;IKKO WELL&quot;)</td>
<td>YES</td>
<td>8/30/93</td>
</tr>
<tr>
<td>4157-08</td>
<td>YES</td>
<td>Haw's Mar Ent 1 HAWAIIAN MARINE ENTERPRISES</td>
<td>YES (salt)</td>
<td>5/28/93</td>
</tr>
<tr>
<td>4157-09</td>
<td>YES</td>
<td>Amor Ikkod salt AMORENT SALT WATER WELL (aka &quot;IKKO WELL&quot;)</td>
<td>YES (salt)</td>
<td>5/28/93</td>
</tr>
<tr>
<td>4157-10</td>
<td>YES</td>
<td>Haw's Mar Ent 2 HAWAIIAN MARINE ENTERPRISES</td>
<td>YES (salt)</td>
<td>5/28/93</td>
</tr>
<tr>
<td>4157-11</td>
<td>YES</td>
<td>Pac Sea Farms 3 PACIFIC SEA FARMS</td>
<td>NO (salt)</td>
<td>6/8/93</td>
</tr>
<tr>
<td>4158-01-11</td>
<td>YES</td>
<td>PUMP # 5</td>
<td>NO-no pumps</td>
<td>5/28/93</td>
</tr>
<tr>
<td>4158-12,13</td>
<td>YES</td>
<td>KAHANU AIRBASE Dom KAHANU AIRDASE DOMESTIC SYSTEM, 15 service connections, 75 people</td>
<td>YES</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4158-14</td>
<td>YES</td>
<td>Kulima Resort owns</td>
<td>YES</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4158-09</td>
<td>YES</td>
<td>Pump 2 Campbell Estate is operator/truck farmers are users</td>
<td>NO</td>
<td>5/21/93</td>
</tr>
<tr>
<td>4159-01</td>
<td>YES</td>
<td>PURAHANO WELL US ARMY operates for Air Force - current users only 2 Kulaena Houses</td>
<td>YES</td>
<td>9/1/93</td>
</tr>
<tr>
<td>4159-02</td>
<td>YES</td>
<td>Pac Sea Farms 1 PAC SEA FARMS</td>
<td>YES (salt)</td>
<td>6/8/93</td>
</tr>
<tr>
<td>4159-03</td>
<td>YES</td>
<td>Pac Sea Farms 2 PAC SEA FARMS</td>
<td>YES as backup (salt)</td>
<td>6/8/93</td>
</tr>
<tr>
<td>4159-04</td>
<td>YES</td>
<td>Amor RCA fresh AMORENT</td>
<td>NO (fresh)</td>
<td>5/28 &amp; 6/8/93</td>
</tr>
<tr>
<td>4159-05</td>
<td>YES</td>
<td>Aura Marine</td>
<td>NO</td>
<td>6/8/93</td>
</tr>
<tr>
<td>4159-06</td>
<td>YES</td>
<td>HI AQUACULTURE 1 Recently leased to HI Aquaculture Inc. Facilities not built yet.</td>
<td>NO</td>
<td>5/28 &amp; 6/4/993</td>
</tr>
<tr>
<td>4159-07</td>
<td>YES</td>
<td>HI AQUACULTURE 2 Recently leased to HI Aquaculture Inc. Facilities not built yet.</td>
<td>NO</td>
<td>5/28 &amp; 6/4/993</td>
</tr>
<tr>
<td>4159-08</td>
<td>YES</td>
<td>Amor RCA salt 1 AMORENT</td>
<td>NO</td>
<td>5/28 &amp; 6/4/993</td>
</tr>
<tr>
<td>4159-09</td>
<td>YES</td>
<td>Pac Sea Farms 4 PAC SEA FARMS</td>
<td>NO (salt)</td>
<td>5/28 &amp; 6/4/993</td>
</tr>
<tr>
<td>4159-10</td>
<td>YES</td>
<td>Pac Sea Farms 5 PAC SEA FARMS</td>
<td>NO</td>
<td>5/28 &amp; 6/4/993</td>
</tr>
<tr>
<td>4159-12</td>
<td>YES</td>
<td>Amor Pact 1 AMORENT</td>
<td>YES (salt)</td>
<td>5/28 &amp; 6/4/993</td>
</tr>
<tr>
<td>4159-13</td>
<td>YES</td>
<td>Amor Pact 2 AMORENT</td>
<td>YES as backup (salt)</td>
<td>5/28 &amp; 6/8/93</td>
</tr>
<tr>
<td>4159-15</td>
<td>YES</td>
<td>Amor Pact 3 AMORENT</td>
<td>NO (salt)</td>
<td>5/28 &amp; 6/8/93</td>
</tr>
<tr>
<td>4159-16</td>
<td>YES</td>
<td>Amor Pact 4 AMORENT</td>
<td>NO (salt)</td>
<td>5/28 &amp; 6/8/93</td>
</tr>
<tr>
<td>4159-17</td>
<td>YES</td>
<td>Amor Pact 5 AMORENT</td>
<td>NO (salt)</td>
<td>5/28 &amp; 6/8/93</td>
</tr>
</tbody>
</table>

9/22/93
Exhibit 5B
DECLARANT/SOURCE FILE/CROSS REFERENCES

DECLARANT: A Palmer Golf Course
SOURCE FILE #/STR TITLE/FILE NAME: Kuilima Res

SEE OTHER DECLARATIONS FOR SAME SOURCE/SAME PARCEL:
Kuilima owns golf course, A Palmer Golf manages it

Also see Well files for 4100-01 and 4158-14
They use two water sources (5/83)
Well 4100-01 and 4158-14 and report pumpage monthly.
MEMORANDUM

FILE REF.: KUILIMA RESORT (owner) and A PALMER GOLF (management firm)

WELL: State Well # 4158-14

DATE: October 4, 1993

FROM: Susan K. Swanson, CWRM

Well 4158-14 supplies water for 160 acres of the newer golf course, "The Links at Kuliima", an Arnold Palmer Golf-managed facility. Kuliima Resort owns the two adjoining golf courses and the resort. The old 18 hole golf course that Kuliima Resort owns is named "The Turtle Bay Golf Course" which is irrigated by another well, 4100-01, (that well is owned by Campbell Estate.)

Well 4158-14 was inspected on 3/25/92 by M. Ohye and Y. Shiroma and photographed in 5/92 by Glenn Bauer of our staff. (See memo in File Ref: A PALMER GOLF.) As built plans are on file in the State Well file.

This well was drilled in February, 1990 by Roscoe Moss Co. to a total depth of 135'. The well is a 12" diameter, cased well installed with a 10 hp, 700 gpm, Peerless Vertical Turbine pump. The outflow line is 8" with an 8" water specialties meter is installed on the pipeline. Subsequent photos, taken 5/15/92 are in the well file.

While in the vicinity, I photographed the use area of Well 4158-14, the new 18 hole A Palmer Golf Course, called "The Links at Kuliima". Water from well 4158-14 is mixed with effluent from the sewage treatment facility on the mauka side of Kam Hwy and stored in "G-2", a 10 acre pond on the new golf course. The mixed water is used to irrigate the new Kuliima Golf Course. A golf course employee, Milton Caulford, estimated their pumpage from this well at 200,000 to 300,000 gpd. I spoke with Mike Honma, Golf Course Superintendent, he gave me the information listed adjacent to the pumpage figures.

Pumpage reports on file have recently been corrected from previous figures which reflected mixed water with effluent.

Several factors affect the amounts of water required for the new golf course in addition to season and weather. The golf course completed it's "growing in period" approximately one year ago. Water use is typically much greater during the 18 month golf course construction and growing in period. (Some water from Pump 2, well 4159-01 was also used during the growing in period.) The sewage treatment plant effluent started being used on the golf course approx. nine months ago, requiring less water from well 4158-14. Raw Pumpage data for State Well 4158-14 is listed below:

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Gallons</th>
<th>GPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/19/93 to 9/21/93</td>
<td>5,335,000</td>
<td>156,911 gpd</td>
</tr>
<tr>
<td>7/14/93 to 8/18/93</td>
<td>9,648,000</td>
<td>(36 days) 268,000 gpd</td>
</tr>
<tr>
<td>6/17/93 to 7/13/93</td>
<td>11,090,000</td>
<td></td>
</tr>
<tr>
<td>5/13/93 to 6/16/93</td>
<td>15,979,000</td>
<td>(35 days) 456,543 gpd</td>
</tr>
<tr>
<td>4/15/93 to 5/12/93</td>
<td>9,572,000</td>
<td>(28 days) 341,857 gpd</td>
</tr>
<tr>
<td>3/10/93 to 4/14/93</td>
<td>9,836,000</td>
<td></td>
</tr>
<tr>
<td>2/22/93 to 3/9/93</td>
<td>1,616,000</td>
<td>(16 days) 101,000 gpd</td>
</tr>
<tr>
<td>1/20/93 to 2/21/93</td>
<td>247,000</td>
<td>(33 days) 7,485 gpd</td>
</tr>
<tr>
<td>12/2/92 to 1/19/93</td>
<td>18,000</td>
<td>- approx. time sewage effluent started being used.</td>
</tr>
<tr>
<td>11/14/92 to 12/1/92</td>
<td>105,000</td>
<td></td>
</tr>
<tr>
<td>10/13/92 to 11/13/92</td>
<td>923,000</td>
<td>(32 days) 28,843 gpd</td>
</tr>
<tr>
<td>9/11/92 to 10/12/92</td>
<td>26,328,000</td>
<td>(32 days) 822,750 gpd-new golf course opened for business</td>
</tr>
<tr>
<td>7/4/92 to 9/10/02</td>
<td>23,317,000</td>
<td>- near end of 18 month &quot;growing in&quot; period</td>
</tr>
</tbody>
</table>

A GWMZ permit application has been filed by Kuliima Resort, requesting 800,000 gallons per day to irrigate 160 acres of golf course. This figure appears high.
APPLICATION FOR WATER USE PERMIT

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT
Ground Water or Surface Water

PERMITTEE INFORMATION
1. (a) APPLICANT
   Firm/Name: Kualima Resort Co.
   Contact Person: Norman Quon

   (b) LANDOWNER OF SOURCE
   Firm/Name: Kualima Resort Co.
   Contact Person: Norman Quon

SOURCE INFORMATION
2. WATER MANAGEMENT AREA:
   Windward
   ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER:
   Well No. 4158-14

   (b) PROPOSED (NEW) WELL/DIVERSION NAME:
   N/A

   (c) LOCATION:
   Address: Kualima, Oahu
   Tax Map Key: 5-6-03-44

   (Attach a USGS map, scale 1" = 2000', and a property tax map showing source location referenced to established property boundaries.)

4. SOURCE TYPE (check one):
   Stream □ Basal □ Diike-confined □ Perched □ Caprock

5. METHOD OF TAKING WATER (check one):
   Artesian □ Well & Pump □ Diverted Surface □ Other (explain)

USE INFORMATION
6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Proposed use of water is:
   □ Existing □ New □ Both existing & new uses

   (b) Tax Map Key: 5-6-03-44
   (Attach location of use is over multiple TMKs, please complete Table 1 on back of application)

   (c) Address: Kualima, Oahu

   (d) Current Land Use District:
   □ Urban □ Agriculture □ Conservation □ Rural

   (e) Current County Zoning Code:
   P-2

7. QUANTITY OF WATER REQUESTED: 800,000 gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   □ Flowmeter □ Open-pipe □ Well □ Orifice □ Other (explain)

9. QUALITY OF WATER REQUESTED:
   □ Fresh □ Brackish □ Salt □ Potable □ Non-Potable

10. PROPOSED USE:
    □ Municipal (including hotels, stores, etc.) □ Industrial □ Irrigation
        □ Individual Domestic □ Non-Potable
        □ Other (explain)

For questions 12 & 13: If multiple TMKs are involved, please complete Table 1 on back of application.

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: N/A

12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP:
    160 Turf (acres)

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:
    24 Hours (daytime hour of operation, ex. 7 a.m. to 2 p.m.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
    (a) Impact on Sustainable yield (?):
    (b) Instream Flow Standards affected (?):
    (c) Hawaiian Home Lands use affected (?):
    (d) Other existing legal uses affected (?):
    (e) Other (pending permits, EIS, etc.) (?):

15. REMARKS, EXPLANATIONS: The results of a monitoring program for chloride concentrations of a nearby well (Kahuku Air Base, Well No. 4158-12) indicated
    if more space is needed, continue on back side

NOTE: Signing below indicates the applicant understands that, if a water use permit is granted by the Commission on Water Resource Management, a permit is subject to prior existing permitted uses, changes in sustainable yields and instream flow standards, reserved uses or defined by the Commission, and Hawaiian Home Lands future uses. In addition, applicant understands that, upon permit approval, a water shortage plan must be submitted should the Commission so require.

Applicant (print) Kualima Resort Co. Landowner (print) Kualima Resort Co.
Signature: [Signature] [Signature]
Date: 7/9/93 Date: 7/9/93

For Official Use Only:
Date Received: Hydrologic Unit No.
Date Accepted: Division Works No.
State Water No.

5/19/93 WUPA Form
MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land-Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
          Water Use Permit Application
          Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuilima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [Contact Information]

Response: Contact person: ___________________________ Phone: ______________________

(✓) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: __________________________________________ Date: _________________________
The Honorable Keith W. Ahue  
Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  

Dear Mr. Ahue:  

Withdrawal of Objections  

The Department of Hawaiian Home Lands has been in a position to raise objections to various applications for water use permits, particularly in Windward O'ahu, on the basis that water reservations were yet required to meet statutory obligations to Hawaiian home lands.  

Please be advised that as the proposed water reservations in O'ahu and Moloka'i water management areas are finalized, our objections for this reason are thereby withdrawn.  

Warmest aloha,  

Hoaliku L. Drake, Chairman  
Hawaiian Homes Commission  

HLD: BH: ci/1608L.77
1993 September 29

State of Hawaii
Commission on Water Resource Management

OBJECTIONS AND COMMENTS ON APPLICATIONS FOR WATER USE PERMITS
Public Notice dated August 30, 1993
Send written objections by September 29, 1993

NHAC represents water source registrants, water use declarants, water use permit applicants, and others with property interest in land within the hydrologic unit of the source of water supply, as well as persons with non-property interests, all of who would be directly and immediately affected by the proposed water use.

GENERAL OBJECTIONS

We reiterate our general objections to current COWRM water use permit application processing and decisionmaking practices as previously submitted on numerous occasions (10/12/92, 10/21/92, 12/1/92, 6/22/93, & 7/8/93).

Campbell Estate proposes to continue a total of 23.225 mgd of existing uses, 7.0 of which involve seawater. This leaves 16.225 mgd of use from the basal aquifer, yet the May 1992 review draft of the Oahu Water Management Plan (p. 14) reports 1990 groundwater use of only 13.6 mgd. The 16.225 mgd of proposed use is about 46% of the 1992 revised sustainable yield of 35 mgd for the Koolauloa aquifer. Without better knowledge of existing, foreseeable, and potential competing applications for this yield, it is difficult to assess the propriety of allocating almost 50% of aquifer yield to a single applicant.

Many of the applications are for combined domestic and agricultural use. Quantification of the breakdown between these uses is essential at this stage of the permit review process so that existing acreage under cultivation, existing agricultural water use, crop water requirements, and future water allocations can be coherently analyzed.
SPECIFIC OBJECTIONS

Well 4057-01

The well site appears to be upgradient from and close to an unnamed spring. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for the spring, existing legal uses of the spring, and inchoate legal uses of the spring as authorized by Native Hawaiian custom and tradition.

The proposed use of potable water for pasture irrigation should be questioned until applicant shows evidence of the infeasibility of using alternative non-potable water sources.

Well 4057-01

While the public notice only lists Well 4057-01 as the well source, the application identifies 4 other wells that serve as sources for the Pump 1 battery. In order to preserve due process of all parties, the public notice for this application should be revised and re-published with a new deadline for written objections to clearly indicate that Wells 4057-02, -08, -13, and -14 are also part of the application.

The well site appears to be upgradient from and close to the Ki'i National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge, existing legal uses of all refuge waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

The proposed use of potable water for agricultural irrigation should be questioned until applicant shows evidence of the infeasibility of using alternative non-potable water sources.

Well 4057-04

While the public notice only lists Well 4057-04 as the well source, the application identifies 3 other wells that serve as sources for the Sugar Mill Pump battery. In order to preserve due process of all parties, the public notice for this application should be revised and re-published with a new deadline for written objections to clearly indicate that Wells 4057-09, -11, and -12 are also part of the application.

The well site appears to be upgradient from and close to the Ki'i National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge, existing legal uses of all refuge waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.
The proposed use of potable water for agricultural irrigation should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

Well 4057-06

While the public notice lists domestic service as an existing water use, the application shows that only water of non-potable quality is being requested for irrigation and other uses only, not for domestic uses. Which is correct?

Well 4057-07

The proposed use of potable water for agricultural irrigation should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

The well site appears to be upgradient from and close to an unnamed spring. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for the spring, existing legal uses of the spring, and inchoate legal uses of the spring as authorized by Native Hawaiian custom and tradition.

Well 4057-10

The proposed use of potable water for aquaculture should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

The well site appears to be upgradient from and close to an unnamed spring. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for the spring, existing legal uses of the spring, and inchoate legal uses of the spring as authorized by Native Hawaiian custom and tradition.

Well 4100-02

The proposed use of potable water for aquaculture should be questioned until applicant shows evidence of the infeasability of using alternative non-potable water sources.

The apparent proximity of the well to a perennial Kawela stream tributary may indicate a potential restriction on use not identified in the application, including possible effects on interim instream flow standards, existing legal uses of the stream, and inchoate legal uses of the stream as authorized by Native Hawaiian custom and tradition.

Well 4157-04

The well site appears to be upgradient from and close to the Ki'i National Wildlife Refuge. Potential restrictions on the proposed
water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge, existing legal uses of all refuge waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4157-05 to -07

Potential restrictions on the proposed water use not identified in the application include possible effects on existing legal uses of all refuge waters and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4157-09

While we have no specific objections to the extraction of salt water for aquacultural use, we are concerned about the potential impacts of wastewater effluent discharge upon water sources and water uses in the area. These water quality concerns should be listed in the applications as potential restrictions on use.

Wells 4158-01 through -11

The well sites appear to be upgradient from and close to the Ki'i National Wildlife Refuge, Punamano spring, and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuges and for Punamano spring, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4158-14

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4159-01

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.
Well 4159-02

While the public notice lists domestic service as an existing water use, the application shows that only water of non-potable quality is being requested for irrigation and military uses only, not for domestic uses. Which is correct? Note that the application for adjacent Well 4159-01 is for irrigation use of non-potable water.

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Well 4258-04

The well site appears to be upgradient from and close to Punahoolapa and Punamano springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa and Punamano springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

Mahalo,

David L. Martin, Water Claims Manager

pc: Campbell Estate
   Kuilima Resort Co.
1992 October 12

State of Hawaii Commission on Water Resource Management

COMMENTS ON APPLICATIONS FOR WATER USE
1. HAWAIIAN ELECTRIC COMPANY WAIAU TUNNEL
2. KAIPAPAU WELL
3. ALL SUBSEQUENT WATER USE APPLICATIONS FOR PEARL HARBOR WATER MANAGEMENT AREA, WINDWARD OAHU WATER MANAGEMENT AREA, AND MOLOKAI WATER MANAGEMENT AREA

Native Hawaiian Advisory Council, Inc. (NHAC) represents persons with property interests in lands within the hydrologic units of the sources of water supply and/or who will be directly and immediately affected by the proposed water use. Furthermore, NHAC advocates the enforcement of constitutional, statutory, and common laws which require consideration and accommodation of various appurtenant, riparian, correlative, and Hawaiian water rights, as well as other Hawaiian rights, in the Water Commission's (COWRM) allocation process.

NHAC strongly objects to the wording of the legal notices you have published with respect to who may file written objections or comments. One does not have to prove they will be "immediately affected" by a potentially adverse action in order to meet standing requirements. Therefore, the language of the legal notices is misleading and will have an unwarranted chilling effect on public response and participation in the water use permitting proceedings.

Neither the Water Code nor its rules specifically address the question of standing for filing written objections or comments on applications for water use. Under the Administrative Procedure Act (HAPA) standing has been interpreted very broadly. Furthermore, COWRM has not yet finalized its procedures for processing water use permits in newly designated water management areas. NHAC is quite concerned that COWRM appears to be establishing narrow parameters for standing, as evidenced by these legal notices. This arguably constitutes rulemaking which has not been duly undertaken according to procedures required under HRS 91.

Because water resources have been defined as being owned by the people of the State of Hawai‘i in McBryde and Repuh all people have property interests in the water supply and may be admitted to any and all proceedings involving its disposition, regulation, and management. NHAC requests that you modify all future legal notices
on water use permit applications to reflect this concern.

NHAC objects to COWRM's apparent plan to process water use permits applications on a first-come, first-serve basis. In order to fulfill the legislative intent of water management area designation, a comprehensive view of existing, planned, and proposed water uses and water rights in each hydrologic unit is required. COWRM should merely collect applications during the one-year post-designation application period. Then after the application period is closed, and surveys of water rights and reserved water uses are completed, COWRM can assess and evaluate each application with regard to competing applications, reserved water uses, water rights, and the overall water situation in each hydrologic unit. Without such a process, COWRM will not be able to meet Water Code requirements for evaluating competing uses within the framework of the "reasonable and beneficial" standard and other legally-imposed constraints.

In the case of Pearl Harbor Water Management Area, COWRM has identified a new cushion of water which can be allocated. Staff has received over 80 applications for these approximately 10 mgd of allocations. There is no way that the current first-come, first-serve processing of applications can equitably resolve this situation. A finite application period for these allocations should be established, after which all applications received can be comprehensively processed.

We, therefore, state our overall objection to current COWRM procedures and policies regarding water use permit application processing, in a large part because they do not yet exist. We reserve the right to submit specific objections to proposed permits at later dates, since at present there is insufficient information about the overall context of such permits to allow a fair and informed assessment.

NHAC requests that COWRM postpone decision-making on all water use permit applications for the above-discussed Water Management Areas until after the application period has closed and the necessary assessments of water rights and reserved water uses have been completed.

Mahalo,

David L. Martin, Vice-President
1992 October 21
Hand-Delivered

State of Hawaii
Commission on Water Resource Management

COMMENTS ON APPLICATIONS FOR WATER USE—WAHIAWA WATER MANAGEMENT AREA

1. DPW, USASCH Well Nos. 2901-02 and/or 04
2. All (Future/Subsequent) Applications for Wahiawa GWMA

Dear Commissioners:

Native Hawaiian Advisory Council, Inc. (NHAC) represents persons with property interests in lands within the hydrologic units of the sources of water supply and/or who will be directly and immediately affected by the proposed water use. Furthermore, NHAC advocates the enforcement of constitutional, statutory, and common laws which require consideration and accommodation of various appurtenant, riparian, correlative, and Hawaiian water rights, as well as other Hawaiian rights, in the Water Commission's (COWRM) allocation process.

NHAC requests clarification of COWRM's referencing the applications listed above as being within the Wahiawa Ground Water Management Area, Oahu. This is the first time we have seen such a reference. Has there been a decision to break the Pearl Harbor Water Management area into sectors? This will have broad implications which merit public discussion and which must meet other rule-making requirements.

NHAC objects to COWRM's apparent plan to process water use permits applications on a first-come, first-served basis. In order to fulfill the legislative intent of water management area designation, a comprehensive view of existing, planned, and proposed water uses and water rights in each hydrologic unit is required. COWRM should merely collect applications during finite application periods. Then after each application period is closed, and surveys of water rights and reserved water uses are completed, COWRM can assess and evaluate each application with regard to competing applications, reserved water uses, water rights, and the overall water situation in each hydrologic unit. Without such a
Commission on Water Resource Mgmt.
RE: Comments on Applications for Water Use
October 21, 1992
Page 2

process, COWRM will not be able to meet Water Code requirements for evaluating competing uses within the framework of the "reasonable and beneficial" standard and other legally-imposed constraints.

In the case of Pearl Harbor Water Management Area, COWRM has identified a new cushion of water which can be allocated. Staff has received over 80 applications for these approximately 10 mgd of allocations. There is no way that the current first-come, first-served processing of applications can equitably resolve this situation. A finite application period for these allocations should be established, after which all applications received can be comprehensively processed.

We, therefore, state our overall objection to current COWRM procedures and policies regarding water use permit application processing, in a large part, because they do not yet exist. We reserve the right to submit specific objections to proposed permits at later dates, since at present there is insufficient information about the overall context of such permits to allow a fair and informed assessment.

NHAC requests that COWRM postpone decision making on all water use permit applications for the above-discussed Water Management Areas until after the application period has closed and the necessary assessments of water rights and reserved water uses have been completed.

Mahalo,

David X. Martin
David L. Martin, Vice-President

DLM/DCP:tr
1992 December 1

State of Hawaii Commission on Water Resource Management

Attn: Rae M. Loui
 Deputy Director

Re: OBJECTIONS TO WATER USE PERMIT APPLICATIONS ALL GROUND WATER MANAGEMENT AREAS STATEWIDE AND RESPONSE TO PUBLIC NOTICES AND TO COWRM LETTER OF NOVEMBER 17, 1992

Dear Ms. Loui:

In studying Hawaii Administrative Rules (HAR) Title 13, Chapter 171, we find no explicit or implicit language supporting your contention that processing water use permits as NHAC previously suggested is inconsistent with these rules or would require rulemaking. We would appreciate some clarification on this point as it seems inconsistent with the fact the Pearl Harbor WMA is now being handled in a manner similar to our suggestions.

Two distinct classes of WMAs will emerge if you proceed on a first-come, first-served basis in some WMAs and with a comprehensive management review of all uses and applications in other WMAs. Then the determination of whether competing WUPAs exceed the available supply becomes a second tier of the designation process. NHAC believes such a management regime requires rulemaking. Granting WUPAs on a first-come, first-served basis will circumvent a number of the conditions for a Water Use Permit particularly if specific reservations for Hawaiian Homelands beneficiaries are not previously implemented and allocations to county boards of water supply for municipal purposes are not established.

COWRM appears not to be in compliance with HAR 13-171-11(b), which implies that COWRM will determine water supply allocated to the county boards of water supply in each water management area. These gross allocations to the counties, as well as gross reservations to Hawaiian Home Lands (required under Act 325), must be defined prior to any new water use permitting to other parties.

While NHAC recognizes there is a rule that COWRM act upon permit applications within 90 or 180 days (HAR 13-171-19(c)) we do not see this as a constraint to the approach we are suggesting. COWRM
records over the last 5.5 years shows that "action" includes
deferral of decision making until information needs are met, as
well as categorization of applications to facilitate future
decision making.

While COWRM, staff, and the public have participated in discussions
about water use permit application processing, there have been no
formal declarations of COWRM permit application processing policy.
It appears that COWRM staff and NHAC are advocating different
interpretations of the Administrative Rules governing the water use
permitting process, and that perhaps public hearings are needed to
help the Commissioners decide what kind of interpretation best
serves the purposes of the Water Code and the public interest.

Native Hawaiian Advisory Council (NHAC) requests COWRM defers
decision making on water use permit applications until the
following issues are resolved:


2. Allocation of water to county municipal purposes.

3. Implementation of water use permit application processing
methodologies that avoid the continuation of first-come, first-
serve permitting. First-come, first-serve water use permit
processing contradicts the very heart of the intent of water
management area designation. We cannot have comprehensive water
resource management without comprehensive evaluation of Water use
scenarios.

Sincerely,

/5/

David L. Martin

DLM:cln

pc: Water Commissioners
  Department of Hawaiian Home Lands
  County Boards of Water Supply
  Office of Hawaiian Affairs
  Ka Lahui Hawai‘i
  Native Hawaiian Legal Corp.
1993 June 22

State of Hawaii
Commission on Water Resource Management

OBJECTIONS TO AND COMMENTS ON WATER USE PERMIT APPLICATIONS
RESPONSE TO PUBLIC NOTICES DATED MAY 24 AND JUNE 27, 1993

These objections incorporate our previously submitted general objections to water use permit application processing (letters of October 12 & 21 and December 1, 1992).

We would like to ask if all water use declarants, water source registrants, and water use permit applicants in the affected areas have been served direct notice of the pending applications and the deadline for filing objections? Without such notice, these persons cannot be expected to have timely knowledge of pending applications, much less file timely objections. The Water Commission, through its Nakata Subcommittee, has acknowledged this reality and recommended implementation of a process for direct notification of affected parties.

NHAC specifically objects to the permit application filed by Grace Pacific Corp. We contend that use of 170,000 gpd of potable water for industrial washing and dust control is not a reasonable and beneficial use of water, and expect that the applicant will provide further information about the availability or nonavailability of nonpotable water and/or further details about the necessity of potable water use. We further request that this available water resource be placed in reserve for Hawaiian Home Lands since no water from this aquifer was allocated to DHHL in the Water Commission's June 2 reservation decision.

Mahalo,

David L. Martin, Water Claims Manager
State of Hawaii
Commission on Water Resource Management
1993 June 22
Page 2

pc w/enc: Mahealani Ranch
Ellen M. Osborne
Thomas N. Matayoshi
Honolulu Board of Water Supply
The Oceanic Institute
Kamehameha Schools
Grace-Pacific, Inc.
Chairperson Hoaliku Drake, DHHL

enc: Letters of October 12 & 21 and December 1, 1992 from
NHAC to COWRM
1993 July 8

TO: State of Hawaii Commission on Water Resource Management

SUBJECT: Comments on Water Use Permit Applications

Kawela Plantation Wells (various numbers)
Honolulu Board of Water Supply Kuou III Well No. 2348-06
DLNR Dowald Waiawa 1-6 Wells (various numbers)

and any other water use permit applications with comments due July 8 and 9, 1993.

GENERAL OBJECTIONS

We reiterate our general objections to current COWRM water use permit application processing and decisionmaking practices as previously submitted on numerous occasions (10/12/92, 10/21/92, 12/1/92, & 6/22/93).

In addition, we are increasingly concerned about the lack of clear guidelines for timing, sequencing, and coordinating COWRM permitting processes with environmental review processes conducted under other authorities (including HRS 343, BLNR Conservation District Use permitting, DOH 401 and NPDES, and County grading and drainage ordinances). This is discussed more fully within the context of specific objections to the Kuou Well III application below.

SPECIFIC OBJECTIONS

1. Kawela Plantation Wells (All)

The permit application information distributed by COWRM for comment should also include the results of COWRM's field verification of declared water uses and should summarize the monthly water use reports submitted over the last six years for comparison of existing uses with quantities of water requested.

2. Kawela Plantation Breadfruit Well No. 0456-04
   Kawela Plantation Ag Well No. 0457-04

NHAC objects to the proposed use of potable water for landscape irrigation. Applicant should provide assessments of alternative water source availability and plans for minimizing landscape irrigation requirements before permit application processing proceeds. The "reasonable and beneficial" nature of the proposed
water uses is suspect until these assessments and plans are reviewed and until the proposed water uses are evaluated within the context of all other existing, planned, proposed, and reserved water uses.

The Ag Well (No. 0457-04) is not listed in the July 14, 1992 COWRM Ground Water Index and Summary, but does appear to be a declared use in COWRM Circular C-123 of September 1992 (listing 5 wells for Kawela Plantation).

When was the declaration of water use filed for Well No. 0457-04? If the declared use began after the implementation of the State Water Code, when were well construction and pump installation permits issued?

3. Honolulu Board of Water Supply Kuou Well j No. 2348-06

NHAC objects to further processing of this permit application until the Environmental Assessment (EA) process for the proposed project is completed. Today is the deadline for submitting comments on the Draft EA (DEA) for the exploratory well, after which the Final EA must be published with a subsequent waiting period of thirty days during which the Final EA may be contested.

BWS states in that DEA that "Production well development will be subject to the environmental review process as stipulated in Chapter 343, Hawaii Revised Statutes, and Chapter 200 of the State Department of Health Regulations." In response to this, we wrote:

Does BWS intend to prepare another EA for its Production Well at Kuou Well Site III? Will this EA address a broad range of environmental impacts stemming from both the general allocation of water to BWS from the Koolaupoko Ground Water Management Area and the specifics of extracting that allocation from the aquifer at the proposed site? Since BWS already applied to the Commission on Water Resource Management (COWRM) for a Water Use Permit, we objected to that application on the grounds that the environmental review process for the allocation has not been completed. We object to this DEA because it fails to address the allocation and extraction impacts in the comprehensive manner required to inform COWRM water use permit decisionmaking. Also note that COWRM has recently taken a position that permit applications are not complete and cannot be taken up for decisionmaking until environmental review processes are completed.

There is huge confusion and problems with the current timing, sequence, and coordination of environmental review processes for both exploratory and production wells (including HRS 343 processes, Conservation district use permitting, and DOH processes) and COWRM permitting processes (water use, well construction, and pump installation). The DEA should explain the BWS view and those of other agencies concerning the timing, sequence, and coordination of these processes. This
would provide a starting point for working with all parties to integrate the processes for the greatest mutual benefit.

Similarly, we now ask COWRM to explain its view and how it perceives that of other agencies with regard to these same issues.

NHAC also objects to further processing of this application until water reservations to Hawaiian Home Lands from the designated windward aquifers are completed. We recommend that this application be consolidated with other BWS applications so that the bulk allocation requested by BWS from Koolaupoko and BWS plans for distributing that allocation are more clearly understood.

4. DLNR Dowald Waiawa Wells 1-6 (All)

NHAC requests additional information and extended review for these proposed uses. We have not yet received the permit applications and other supporting documentation needed to sort out the following issues:

a. COWRM minutes of June 2, 1993 meeting are confusing, and the presently remaining available allocation in the Waipahu-Waiawa system is unclear. Allocation of 2.0127 mgd to BWS on behalf of HFDC was approved (page 9). Was the 5.093 mgd allocation to BWS recommended in the staff submittal (page 4 number 4.) also approved? If so, does the 5.093 mgd allocation include the 2.0127 for HFDC?

b. We need more information and more time to research the land ownership and water rights issues raised by the Federal transfer to the State of the Waiawa lands where the proposed sources are located.

c. We need assurances that DLNR plans to operate these systems as State water systems and does not plan to dedicate them to BWS.

d. We need to know how DOWALD has responded to COWRM concerns about the specifications for the proposed wells and their potential impact upon aquifer dynamics and existing groundwater uses.

e. We need to know how COWRM plans to integrate environmental review processes under other authorities with its own permitting processes (see above discussion of Kuou Well III application).

Based on the information now available, NHAC raises the following specific objections to the applications, and reserves the right to file additional specific objections as information becomes available:

a. Many of the State projects listed (Exhibit 6 of COWRM submittal of 6/2/92) propose using potable water for landscape irrigation of public facilities. Applicant should provide assessments of alternative water source availability and plans for
minimizing landscape irrigation requirements before permit application processing proceeds. The "reasonable and beneficial" nature of the proposed water uses is suspect until these assessments and plans are reviewed and until the proposed water uses are evaluated within the context of all other existing, planned, proposed, and reserved water uses.

b. There may be insufficient available allocation to meet DOWALD's quantity of use requested.

c. DOWALD's requested uses compete with other requested uses, thus it seems that public hearings are required.

d. Most of the State projects listed in the previous COWRM submittal are not listed in the current version of the State Water Projects Plan.

ADDITIONAL INFORMATION/EXTENDED REVIEW REQUESTED

NHAC has not yet received copies of the permit applications filed for DLNR DOWALD Waiawa 1-6 Wells. We request that this information be sent and the review period extended so that we can more closely analyze these extremely significant applications.

In our review of the Star-Bulletin for June 18, 1993, we did not find public notice of the Honolulu Board of Water Supply water use permit application for Kuou III in the legal notice section or elsewhere. Thus we are unable to ascertain whether or not any other water use permit applications were publicly noticed at that time. If so, we request that you transmit copies of these applications and extend the associated review period.
Mahalo

David L. Martin, Water Claims Manager

pc: Kawela Plantation Homeowner's Association
   Molokai Working Group for COWRM
   Honolulu Board of Water Supply
   DLNR DOVALD
   Water Commissioners
   Water Code Review Commission and Commissioners
   Ka Lahui Hawai'i
   Hawaiian Homes Commission
   Office of Hawaiian Affairs
   Native Hawaiian Legal Corp.
water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge, existing legal uses of all refuge waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

**Well 4157-05 to -07**

Potential restrictions on the proposed water use not identified in the application include possible effects on existing legal uses of all refuge waters and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

**Well 4157-09**

While we have no specific objections to the extraction of salt water for aquacultural use, we are concerned about the potential impacts of wastewater effluent discharge upon water sources and water uses in the area. These water quality concerns should be listed in the applications as potential restrictions on use.

**Wells 4158-01 through -11**

The well sites appear to be upgradient from and close to the Ki'i National Wildlife Refuge, Punamano spring, and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuges and for Punamano spring, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

**Well 4158-14**

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.

**Well 4159-01**

The well site appears to be upgradient from and close to Punahoolapa springs and Punamano National Wildlife Refuge. Potential restrictions on the proposed water use not identified in the application include possible effects on interim instream flow standards for any springs within the refuge and for Punahoolapa springs, existing legal uses of all refuge and spring waters, and inchoate legal uses of these waters as authorized by Native Hawaiian custom and tradition.
Mr. Keith Ahue, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii

Dear Mr. Ahue:

Subject: Your Letters of September 9, 1993 on Water Use Permits for Campbell Estate in the Koolauloa Groundwater Management Area, Windward Oahu: Well No. 4056-01; Well No. 4057-01; Well No. 4057-04; Well No. 4057-06; Well No. 4057-07; Well No. 4057-10; Well No. 4100-01; Well No. 4100-02; Well No. 4157-04; Well No. 4157-05; Well No. 4157-06; Well No. 4157-07; Well No. 4157-09; Well No. 4158-01 through 11; Well No. 4158-14; Well No. 4159-01; and Well No. 4159-02

Thank you for the opportunity to comment on these water use permits for Campbell Estate in the Kahuku area. We have no objections to issuance of permits for these existing uses. We feel, however, that the requested amounts of water for some wells are overstated and should be adjusted based on the actual amounts used and in accordance with the sustainable yield, especially when other well owners such as the Board of Water Supply are considered. The requested sum of 14.7+ mgd already exceeds the sustainable yield from the basal aquifer.

In the interests of preserving the best quality water for domestic consumption, however, the operators of the golf course using Well No. 4100-01 should use an alternative source of lesser quality water for irrigation. This action would be in accordance with the Board of Water Supply Rules and Regulations requiring golf courses to use nonpotable sources for irrigation where possible.

We return for your information the completed forms.

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer

Attachment
MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
Department of Hawaiian Home Lands

Dr. John C. Lewin, M.D., Director
Department of Health

Mr. Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs

Mr. Kazu Hayashida, Manager & Chief Engineer
Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kualima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at

Attachment(s)
Memorandum to:
Mrs. Hoaliku L. Drake
Dr. John C. Lewin
Mr. Clayton H.W. Hee
Mr. Kazu Hayashida

Page 2

Response: Contact person: Herbert H. Minakami Phone: 

( ) We have no comments
( ) We have no objections
(x) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: KAZU HAYASHIDA
Manager and Chief Engineer

Date: 9/23/93
MEMORANDUM

TO: Aquatic Resources
Forestry and Wildlife
Historic Preservation
Land Management
Natural Area Reserve System
Office of Conservation and Environmental Affairs
State Parks
Water and Land Development
Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuilima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at

Response: Contact person: [Redacted] Phone: [Redacted]
( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: [Signature] Date: 9/7/93

The subject well site is not located within the Conservation District.
September 23, 1993

Mr. Keith Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Ahue,

Subject: Your Letter of September 9, 1993 on Water Use Permits for Campbell Estate in the Koolauloa Groundwater Management Area, Windward Oahu: Well No. 4056-01; Well No. 4057-01; Well No. 4057-04; Well No. 4057-06; Well No. 4057-07; Well No. 4057-10; Well No. 4100-01; Well No. 4100-02; Well No. 4157-04; Well No. 4157-05; Well No. 4157-06; Well No. 4157-07; Well No. 4157-09; Well No. 4158-01 through 11; Well No. 4158-14; Well No. 4159-01; Well No. 4159-02; Well No. 4258-04

Thank you for the opportunity to comment on these water use permits. We have no objections to issuance of permits for these existing uses. However, the amounts of water requested, for some wells, are overstated and should be adjusted based on the actual amounts used and the applicable sustainable yields.

In the interest of preserving the best quality water for potable use, the operators of the golf course using Well No. 4100-01 should investigate the use of nonpotable water for irrigation. This action would be in accordance with the Board of Water Supply Rules and Regulations requiring golf courses to use nonpotable sources for irrigation where possible.

Warm personal regards.

Sincerely,

FFF:js

cc: Jeremy Harris, Managing Director
MEMORANDUM

TO: Rae M. Loui, Deputy Director
Commission on Water Resource Management

FROM: Don Hibbard, Administrator
Historic Preservation Division

SUBJECT: Application for Water Use Permit, Ko‘olau’ola Ground Water Management Area, O‘ahu
Kuilima Resort Co. for Well No. 4158-14
Kahuku, Ko‘olau’ola, O‘ahu
TMK 5-6-03:044

September 17, 1993

Thank you for the opportunity to review this project. The applicant proposes to use water from an existing source. Since an approved permit will not authorize any ground disturbing activities we believe that there will be "no effect" on historic sites.

EJ:jt
Mr. Norman Quon
Kuilima Resort Co.

Dear Mr. Quon:

Application for a Water Use Permit
Koolauloa Ground Water Management Area, Oahu

We acknowledge receipt, on July 12, 1993, of your completed water use permit application for the Kuilima Well (Well No. 4158-14). You can expect your application to be processed within ninety (90) days from the date of receipt unless there are objections to your application.

Previously, this application was submitted to us by the Estate of James Campbell. We have contacted Campbell Estate and verified that your application supersedes their application for the same well source.

We will be sending you a copy of the public notice for your application and any further information regarding the status of your application. In addition, we may need to visit and verify your proposed water source and use sites if we have not done so already under our registration program.

If you have any questions, please contact Roy Hardy at 587-0274 or Lenore Nakama at [redacted]

Sincerely,

RAE M. LOUI
Deputy Director

RH:ko

c: Mr. Jim Menor
Campbell Estate
MEMORANDUM

TO: Aquatic Resources
   Forestry and Wildlife
   Historic Preservation
   Land Management
   Natural Area Reserve System
   Office of Conservation and Environmental Affairs
   State Parks
   Water and Land Development
   Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
          Water Use Permit Application
          Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuilima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at 587-0274 or Lenore Nakama at 237-7078.

LN:ko
Attachment(s)

Response: Contact person: ____________________________ Phone: ________________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: ____________________________ Date: ________________
MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
   Department of Hawaiian Home Lands

Dr. John C. Lewin, M.D., Director
   Department of Health

Mr. Clayton H. W. Hee, Chairperson
   Office of Hawaiian Affairs

Mr. Kazu Hayashida, Manager & Chief Engineer
   Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
   Commission on Water Resource Management

SUBJECT: Water Use Permit Application
   Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuilima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at

Attachment(s)
Memorandum to:
Mrs. Hoaliku L. Drake
Dr. John C. Lewin
Mr. Clayton H.W. Hee
Mr. Kazu Hayashida

Page 2

Response: Contact person: ___________________________ Phone: ________________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: ___________________________________________ Date: ________________
Honorable Frank F. Fasi, Mayor  
City & County of Honolulu  
City Hall  

Attn: Mr. Jeremy Harris

Dear Mayor Fasi:

Notice of an Application for a Water Use Permit  
Koolauloa Ground Water Management Area, Oahu

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-171-17(a), we are sending you a copy of the public notice for the water use permit application for the Kuilima Resort Co. for Well No. 4158-14, which will be published in the Honolulu Star Bulletin.

In addition, Section 13-171-13(b) of our Administrative Rules states:

"Within sixty days after receipt of notice of a permit application, the county shall inform the commission if the proposed use is inconsistent with the county land use plans and policies."

We have attached a copy of the application for your review and would appreciate receiving your comments, within the next sixty (60) days, on whether this water use is consistent with county plans and policies.

Very truly yours,

[Signature]

KEITH W. AHUE

Attach.
PUBLIC NOTICE

Applications for Water Use Permits
Ground Water Management Areas

Applications for the following water use permits have been received and are hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

Well 4056-01 (Well No. 4056-01)
Applicant: Campbell Estate

Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well 4056-01, Kahuku, Oahu at Tax Map Key: 5-6-6:6
Quantity Requested: 1,000,000 gallons per day
Existing Water Use: Domestic service and irrigation of 135 acres of ranch lands for cattle
Place of Water Use: Kahuku at Tax Map Key: 5-6-6:6

Pump 1 (Well No. 4057-01)
Applicant: Campbell Estate

Date Completed Application Received: June 19, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 1, Well No. 4057-01, Kahuku, Oahu at Tax Map Key: 5-6-6:19
Quantity Requested: 1,500,000 gallons per day
Existing Water Use: Domestic service and irrigation of 218 acres of various crops
Place of Water Use: Kahuku at Tax Map Key: 5-6-6:19

Sugar Mill Pump (Well No. 4057-04)
Applicant: Campbell Estate

Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Sugar Mill Pump, Well No. 4057-04, Kahuku Sugar Mill, Oahu at Tax Map Key: 5-6-2:17
Quantity Requested: 500,000 gallons per day
Existing Water Use: Domestic service and irrigation of 40 acres various crops
Place of Water Use: Kahuku at Tax Map Key: 5-6-2:0

(more)
Pump 8 (Well No. 4057-06)
Applicant: Campbell Estate
Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 8, Well No. 4057-06, Kahuku, Oahu at Tax Map Key: 5-6-6:18
Quantity Requested: 500,000 gallons per day
Existing Water Use: Domestic service to Kahuku High School and 10-acre turf farm
Place of Water Use: Kahuku at Tax Map Key: 5-6-6:18

Pump 12 (Well No. 4057-07)
Applicant: Campbell Estate
Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 12, Well No. 4057-07, Kahuku, Oahu at Tax Map Key: 5-6-6:18
Quantity Requested: 2,000,000 gallons per day
Existing Water Use: Domestic service and irrigation of 120 acres various crops
Place of Water Use: Kahuku at Tax Map Key: 5-6-6:18

Pump 12-A (Well No. 4057-10)
Applicant: Campbell Estate
Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 12-A, Well No. 4057-10, Kahuku, Oahu at Tax Map Key: 5-6-6:18
Quantity Requested: 1,500,000 gallons per day
Existing Water Use: Aquaculture for 48 acres of prawns
Place of Water Use: Kahuku at Tax Map Key: 5-6-6:6

Well No. 338 (Well No. 4100-01)
Applicant: Campbell Estate
Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 338, Well No. 4100-01, Kahuku, Oahu at Tax Map Key: 5-7-1:21
Quantity Requested: 800,000 gallons per day
Existing Water Use: Serves 160-acre golf course
Place of Water Use: Kahuku at Tax Map Key: 5-7-1:22

(more)
Kawela Well (Well No. 4100-02)

Applicant: Campbell Estate

Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Kawela Well, Well No. 4100-02, Kawela, Oahu at Tax Map Key: 5-7-1:21
Quantity Requested: 1,000,000 gallons per day
Existing Water Use: Domestic service and irrigation of 40 acres of various crops
Place of Water Use: Kawela at Tax Map Key: 5-7-1:21

Pump 15 (Well No. 4157-04)

Applicant: Campbell Estate

Date Completed Application Received: June 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 15, Well No. 4157-04, Kahuku Aquafarm - Kamehameha Hwy, Oahu at Tax Map Key: 5-6-2:1
Quantity Requested: 30,000 gallons per day
Existing Water Use: Domestic service to 6 military administrative facilities
Place of Water Use: Kahuku Army training area at Tax Map Key: 5-6-8:2

Well No. 4157-05

Applicant: Campbell Estate

Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 4157-05, Kahuku, Oahu at Tax Map Key: 5-6-2:1
Quantity Requested: 82,410 gallons per day
Existing Water Use: Maintenance of habitat for endangered water birds
Place of Water Use: James C. Campbell NWR - Kii Unit at Tax Map Key: 5-6-2:0

Well No. 4157-06

Applicant: Campbell Estate

Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 4157-06, Kahuku, Oahu at Tax Map Key: 5-6-2:1
Quantity Requested: 105,572 gallons per day
Existing Water Use: Maintenance of habitat for endangered water birds
Place of Water Use: James C. Campbell NWR - Kii Unit at Tax Map Key: 5-6-2:0

(more)
Well No. 4157-07
Applicant: Campbell Estate
Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 4157-07, Kahuku, Oahu at Tax Map Key: 5-6-2:1
Quantity Requested: 106,791 gallons per day
Existing Water Use: Maintenance of habitat for endangered water birds
Place of Water Use: James C. Campbell NWR - Kii Unit at Tax Map Key: 5-6-2:0

Well No. 4157-09
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 4157-09, Kahuku, Oahu at Tax Map Key: 5-6-2:7
Quantity Requested: 7,000,000 gallons per day
Existing Water Use: Aquaculture for 300 acres of shrimp
Place of Water Use: Kahuku at Tax Map Key: 5-6-2:1

Pump 5 (Well Nos. 4158-01 through -11)
Applicant: Campbell Estate
Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 5, Well Nos. 4158-01 through -11, Kahuku, Oahu at Tax Map Key: 5-6-5:7
Quantity Requested: 1,500,000 gallons per day
Existing Water Use: Irrigation of 688 acres of various crops in State Agricultural Park
Place of Water Use: Kahuku at Tax Map Key: 5-6-5:7

Well No. 4158-14
Applicant: Kuilima Resort Co.
Date Completed Application Received: July 12, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 4158-14, Kahuku, Oahu at Tax Map Key: 5-6-3:44
Quantity Requested: 800,000 gallons per day
Existing Water Use: Service to 160-acre golf course
Place of Water Use: Kahuku at Tax Map Key: 5-6-3:40

(more)
Pump 2 (Well No. 4159-01)
Applicant: Campbell Estate
Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 2, Well No. 4159-01, Kahuku, Oahu at Tax Map Key: 5-6-3:43
Quantity Requested: 3,000,000 gallons per day
Existing Water Use: Irrigation for over 250 acres of various crops
Place of Water Use: Kahuku at Tax Map Key: 5-7-1:21

Punamano Pump 2 (Well No. 4159-02)
Applicant: Campbell Estate
Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Punamano Pump 2, Well No. 4159-02, Kahuku, Oahu at Tax Map Key: 5-6-3:43
Quantity Requested: 1,500,000 gallons per day
Existing Water Use: Domestic service to two military administrative facilities and irrigation of 75-acre pasture
Place of Water Use: Punamano Air Force Station and pasture at Tax Map Key: 5-6-5:0

Well No. 4258-04
Applicant: Campbell Estate
Date Completed Application Received: June 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Well No. 4258-04, Kahuku-RCA Building, Oahu at Tax Map Key: 5-6-3:32
Quantity Requested: 300,000 gallons per day
Existing Water Use: Fish hatchery
Place of Water Use: Kahuku-RCA Building at Tax Map Key: 5-6-3:32

(more)
Written objections or comments on the applications for water use permits may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use, or any other interested person. Written objections shall: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permits. Send written objections by September 29, 1993 to 1) the Commission on Water Resource Management, [redacted], and 2) a copy of the objection letter(s) to the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

KEITH W. AHUE
Chairperson

Dated: AUG 30 1993

Publish in: Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993
MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
          Water Use Permit Application
          Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Koolulma Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993, and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at

LN:ko
Attachment(s)

Response: Contact person: ___________________________ Phone: ___________________________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: ___________________________ Date: ___________________________
TO:

Aquatic Resources
Forestry and Wildlife
Historic Preservation
Land Management
Natural Area Reserve System
Office of Conservation and Environmental Affairs
State Parks
Water and Land Development
Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments

Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuilima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at 587-0274 or Lenore Nakama at 587-0218.

LN:ko
Attachment(s)

Response: Contact person: 

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: 

Phone: 

Date: 9/15/93
MEMORANDUM

TO: Aquatic Resources
     Forestry and Wildlife
     Historic Preservation
     Land Management
     Natural Area Reserve System
     Office of Conservation and Environmental Affairs
     State Parks
     Water and Land Development
     Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
         Water Use Permit Application
         Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuilima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at

Response: Contact person: Gordon Akita Phone: [Redacted]

☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: [Redacted] Date: 9/1/93
MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments

Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Kuliima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted].

Response: Contact person: __________________________ Phone: __________________________

☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: _______________ Date: SEP 20 1993
Oahu District Office has no objection provided that the applicant obtain the required Federal, State and County permits.

Should you have any questions, please call John Dooooling at [redacted]
MEMORANDUM

FROM: Rae M. Loui, Deputy Director

TO: Aquatic Resources
Forestry and Wildlife
Historic Preservation
Land Management
Natural Area Reserve System
Office of Conservation and Environmental Affairs
State Parks
Water and Land Development
Other Interested Parties

SUBJECT: Request for Comments
Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Koolima Resort Co. for Well No. 4158-14. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 8, 1993 and September 15, 1993.

We would appreciate your review of the attached application and please return this form by September 29, 1993.

If you have any questions regarding this application, please contact Roy Hardy at

Response: Contact person: Gordon Akita Phone: [Redacted]

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: MANABU TAGOMORI Date: 9/1/93

WE WOULD APPRECIATE YOUR REVIEW OF THE ATTACHED APPLICATION AND PLEASE RETURN THIS FORM BY SEPTEMBER 29, 1993.

IF YOU HAVE ANY QUESTIONS REGARDING THIS APPLICATION, PLEASE CONTACT ROY HARDY AT

Response: Contact person: _________________________ Phone: _________________________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: _________________________ Date: 9/10/93
MEMORANDUM

TO: Rae M. Loui, Deputy Director
Commission on Water Resource Management

FROM: Henry Sakuda, Administrator
Division of Aquatic Resources

SUBJECT: Comments on water use permit application for Kuilima Resort Co. for Well No. 4158-14 in the Koolauloa Ground Water Management Area, Oahu

The application is for an existing well at low elevation between Kamehameha Highway and Kahuku Point. Approximately 800,000 gallons of non-potable basal water will be pumped daily for turf irrigation. Given the location of the well and the water source, there is little likelihood that it will reduce surface water habitat for native aquatic species. We have no objections from the aquatic biological resources standpoint.
Ms. Donna Goth
The Estate of James Campbell

Dear Ms. Goth:

Application for a Water Use Permit
Koolauloa Ground Water Management Area, Oahu

We are returning your application for water use permit as it has been superseded by the application from Kullima Resort Co. for the same source. Therefore, your application for this source is void.

If you have any questions, please contact Roy Hardy at [redacted].

Sincerely,

RAE M. LOUI
Deputy Director

RH:ko
c: Norman Quon
APPLICATION FOR WATER USE PERMIT

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT

☐ Ground Water  or  ☐ Surface Water

1. (a) APPLICANT
   Firm/Name  The Estate of James Campbell
   Contact Person  Donna Goth

(b) LANDOWNER
   Firm/Name  The Estate of James Campbell
   Contact Person  Donna Goth

2. WATER MANAGEMENT AREA:  Windward Oahu/Koolauloa
   ISLAND:  Oahu

3. (a) EXISTING SOURCE NAME AND STATE NUMBER:
   Water  No. 4158-14
   (well or stream diversion name/number)

(b) PROPOSED (NEW) SOURCE NAME:
   None

4. SOURCE LOCATION:  Address  Kahuku
   Tax Map Key  5-6-03:40  44
   (Attach a USGS map, scale 1"=2000', and a property tax map showing source location referenced to established property boundaries.)

5. SOURCE TYPE (check one):
   ☐ Stream  ☐ Basin  ☐ Confined  ☐ Perched  ☐ Caprock

6. METHOD OF TAKING WATER (check one):
   ☐ Artesian Flow  ☐ Well & Pump  ☐ Diverted Surface Flow  ☐ Other (explain)

7. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Address  Kahuku
   Tax Map Key  5-6-03:40  44
   (b) Land Use District (check one):
      ☐ Urban  ☐ Agriculture  ☐ Conservation  ☐ Rural
   (c) County Zoning (describe):

8. QUANTITY OF WATER REQUESTED:  800,000 gallons per day

9. METHOD OF MEASUREMENT:
   ☐ Flowmeter  ☐ Open-pipe  ☐ Weir  ☐ Office  ☐ Other (explain)

10. QUALITY OF WATER REQUESTED:
    ☐ Fresh  ☐ Brackish  ☐ Salt  ☐ Potable  ☐ Non-Potable

11. PROPOSED USE:
    ☐ Municipal (including hotels, stores, etc.)  ☐ Domestic (individual, noncommercial, etc.)
    ☐ Irrigation  ☐ Industrial  ☐ Military  ☐ Other (explain)

   Golf Course

2. TOTAL ACRES PROPOSED FOR IRRIGATION AND TYPE OF CROP:
   160  Golf
   (acre) (crop)

4. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:
   24 hours per day
   (Indicate hours of operation)

5. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON USE:
   (a) Impact on Sustainable yield (?):
      Unknown
   (b) Permanent or Interim
      Instream Flow Standards affected (?):
      None
   (c) Hawaiian Home Land Uses affected (?):
      None
   (d) Other existing legal uses affected (?):
      None
   (e) Other:

6. REMARKS, EXPLANATIONS:

   (If more space is needed, continue on back side)

Signed below indicates that the applicant understands that, if a water use permit is granted by the Commission on Water Resource Management, a permit is subject and existing permitted uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Land future etc. in addition, applicant understands that, upon permit being issued, a water shortage plan must be submitted should the Commission require one.

Applicant (print)  The Estate of James Campbell
Signature  ____________________________  Date  6/3/1993

Landowner (print)  The Estate of James Campbell
Signature  ____________________________  Date  6/3/1993

For Official Use Only:
Date Received  
Date Approved  
Diversion Work No.  
Hydrologic Unit No.  
Notice Dates:  
Public:  

Mr. Norman Quon
Kuilima Resort Co.

Dear Mr. Quon:

Application for a Water Use Permit
Koolauloa Ground Water Management Area, Oahu

We acknowledge receipt, on July 12, 1993, of your completed water use permit application for the Kuilima Well (Well No. 4158-14). You can expect your application to be processed within ninety (90) days from the date of receipt unless there are objections to your application.

Previously, this application was submitted to us by the Estate of James Campbell. We have contacted Campbell Estate and verified that your application supersedes their application for the same well source.

We will be sending you a copy of the public notice for your application and any further information regarding the status of your application. In addition, we may need to visit and verify your proposed water source and use sites if we have not done so already under our registration program.

If you have any questions, please contact Roy Hardy at [redacted] or Lenore Nakama at [redacted].

Sincerely,

RAE M. LOUI
Deputy Director

RH:ko
c: Mr. Jim Menor
Ms. Donna Goth
Campbell Estate
Ms. Donna Goth  
Campbell Estate  

Dear Ms. Goth:

Applications for a Water Use Permit  
Koolauloa Ground Water Management Area, Oahu  

We acknowledge receipt, on June 17, 1993, of your completed water use permit applications for the following wells:

- Pump 2 (Well No. 4159-01)  
- Pump 5 (Well No. 4158-01 to 11)  
- Pump 6 (Well No. 3957-07)  
- Pump 8 (Well No. 4057-06)  
- Well No. 338 (Well No. 4100-01)  
- Well No. 4158-14  
- Well No. 4258-04  
- Well No. 4157-05  
- Well No. 4157-06  
- Well No. 4157-07  
- Malaekahana Well (Well No. 3956-01)  
- Pump 3 (Well No. 3957-01)  
- Pump 12 (Well No. 4057-07)  
- Pump 15 (Well No. 4157-04)  
- Pump 1 (Well No. 4057-01)  
- Pump 12A (Well No. 4057-10)  
- Pump 3A (Well No. 3957-03)  
- Sugar Mill Pump (Well No. 4057-04)  
- Pump 15 (Well No. 4157-04)  
- Well 4056-01 (Well No. 4056-01)  
- Kawela Well (Well No. 4100-02)  

We also acknowledge receipt of your water use permit application for Air Base Pump (Well Nos. 4158-12 & 13). However, this application is incomplete. Please specify the Tax Map Key portion(s) at which the water is to be used. In addition, please provide an estimate of the number of acres that will be used for aquacultural operations.
The applications for Well Nos. 3957-01, 4057-07, 4157-04, 4057-01, 4057-10, 4158-12 & 13, 3957-03, 4057-04, 4157-04, 4056-01, and 4100-02 indicate that some water will be used for domestic purposes; please provide an estimate of the number of units to be served by each well. Also, potable water is being requested for irrigation and aquaculture. Would brackish and/or fresh/non-potable water, respectively, suffice for these uses?

Lastly, two separate applications were submitted for Pump 15 (Well No. 4157-04). We recommend that the applications be combined because, even though the end-uses may differ, Campbell Estates is the applicant for both. Also, your reporting of monthly water use would be facilitated by not having to individually meter each end-user if you combine the applications.

Upon receipt of the requested information for the Air Base Pump (Well Nos. 4158-12 & 13), we will continue to process the application. We will send you a copy of the public notices and any further information regarding your applications’ status. In addition, we may need to visit and verify your proposed water sources and use sites if we have not done so already under our registration program.

If you have any questions, please contact Roy Hardy at [contact information].

Sincerely,

RAE M. LOUI
Deputy Director

LN:ko
Encl.
**TWENTY FIVE AND 00/100 DOLLARS**

PAY TO THE ORDER OF

DEPARTMENT OF LAND AND NATURAL RESOURCES

Submitted to pay on 7/9/93
July 9, 1993

Department of Land and Natural Resources
Commission on Water Resource Management

Gentlemen:

Re: Well No. 4158-14, TMK 5-6-03:40, 44, Kahuku, Oahu

An application for a ground water permit for this well has been applied for by The Estate of James Campbell. This application supercedes that application. Should there be any questions regarding Campbell Estate’s prior application, please call James Menor of the Campbell Estate at [redacted]

Sincerely yours,

Norman Y. Quon
General Manager

cc: James Menor
Mr. Roy Hardy  
State of Hawaii  
Commission on Water Resource Management  
Department of Land and Natural Resources  

Dear Mr. Hardy:

Application for Water Use  
Permits - Non-Potable Water

Enclosed are 11 applications for water use permits for the following wells, along with a $25 filing fee for each application.

- Pump 2 - 4159-01  
- Well 338
- Pump 2 - 4159-02  
- Well 4158-14
- Pump 5  
- RCA 4258-04
- Pump 6  
- Well 4157-05
- Pump 8  
- Well 4157-06
- Well 4157-07

If you need additional information, please give me a call at [redacted].

Sincerely,

James E. Menor  
Administrator,  
Natural Resources

Enclosures
THE ESTATE OF JAMES CAMPBELL
HONOLULU, HAWAII

THE ESTATE OF JAMES CAMPBELL
JAMES CAMPBELL BUILDING

DATE
JUN 10 93

CHECK NO.

AMOUNT

Twenty Five DOLLARS

TO THE ORDER OF
Department of Land & Natural Resources
Commission on Water Resource Management

VOID AFTER 90 DAYS

gave to Kay 6/24/93
APPLICATION FOR WATER USE PERMIT

PERMITTEE INFORMATION

1. (a) APPLICANT
   Firm/Name: Kuliima Resort Co.
   Contact Person: Norman Quon

(b) LANDOWNER OF SOURCE
   Firm/Name: Kuliima Resort Co.
   Contact Person: Norman Quon

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Windward
   ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: Well No. 4158-14
   (b) PROPOSED (NEW) WELL/DIVERSION NAME: N/A
   (c) LOCATION: Address: Kahuku, Oahu
       Tax Map Key: 5-6-03:44
       (Attach a USGS map, scale 1" = 2000', and a property tax map showing source location referenced to established property boundaries.)

4. SOURCE TYPE (check one): Stream  □  Basal  □  Dike-confined  □  Perched  □  Caprock
   (If possible, show on same maps as source location. Otherwise, attach similar maps)

5. METHOD OF TAKING WATER (check one): Artesian  □  Well & Pump  □  Diverted Surface  □  Other (explain)

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Proposed use of water is:  □  Existing  □  New  □  Both existing & new uses
   (b) Tax Map Key: 5-6-03:44
   (c) Address: Kahuku, Oahu
   (d) Current Land Use District: □  Urban  □  Agriculture  □  Conservation  □  Rural
   (e) Current County Zoning Code: P-2

7. QUANTITY OF WATER REQUESTED: 800,000 gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT: □ Flowmeter  □  Open-pipe  □  Weir  □  Orifice  □  Other (explain)

9. QUALITY OF WATER REQUESTED: □  Fresh  □  Brackish  □  Salt  □  Potable  □  Non-Potable
   □  Industrial  □  Military  □  Other (explain)

10. PROPOSED USE: □  Municipal (including hotels, stores, etc.)  □  Industrial  □  Irrigation
    □  Rural (a) □  Individual Domestic  □  Military
    □  Commercial  □  Other (explain)

For questions 12 & 13: If multiple TMKs are involved, please complete Table 1 on back of application.

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: N/A
12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP: 160 Turf
    (acres) (crop)
13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 Hours
    (daytime hours of operation, ex. 7 a.m. to 2 p.m.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
    (a) Impact on Sustainable yield (?): See Remarks. Explanations
    (b) Instream Flow Standards affected (?): None
    (c) Hawaiian Home Lands use affected (?): None
    (d) Other existing legal uses affected (?): None
    (e) Other (pending permits, EIS, etc.) (?): None

15. REMARKS, EXPLANATIONS: The results of a monitoring program for chloride concentrations of a nearby well (Kahuku Air Base, Well No. 4158-12) indicated
    (more space is needed, continue on back side)

NOTE: Signing below indicates that the applicant understands that, if a water use permit is granted by the Commission on Water Resource Management, a permit is subject to prior existing permitted use, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses. In addition, applicant understands that, upon permit approval, a water shortage plan must be submitted should the Commission require one.

Applicant (print) Kuliima Resort Co.
Signature
Date 7/9/93

Landowner (print) Kuliima Resort Co.
Signature
Date 7/9/93

For Official Use Only:
Date Received
Hydrologic Unit No.
Diversion Works No.
State Well No.

5/19/93 WUPA Form
16. REMARKS, EXPLANATIONS (cont'd): no significant impact by the pumpage of Well No. 4158-14 pumps on the Kahuku Air Base well.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>TMK</th>
<th>CURRENT COUNTY ZONING CODE</th>
<th>UNITS OR NET ACRES</th>
<th>GPD/UNIT OR GPD/ACRE</th>
<th>TOTAL GPD</th>
<th>% OF TOTAL TO BE USED OVER NEXT 4 YEARS</th>
</tr>
</thead>
</table>

TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT

- Ground Water or - Surface Water

1. (a) APPLICANT

   Firm/Name: The Estate of James Campbell
   Contact Person: Donna Goth
   Phone: [Redacted]

2. WATER MANAGEMENT AREA: Windward Oahu/Koolauloa
   ISLAND: Oahu

3. (a) EXISTING SOURCE NAME AND STATE NUMBER:

   Well No. 4158-14
   (well or stream diversion name/number)

(b) PROPOSED (NEW) SOURCE NAME:

   None

4. SOURCE LOCATION: Address: Kahuku

   Tax Map Key 5-6-03:46 44
   (Attach a USGS map, scale 1"=2000, and a property tax map showing source location referenced to established property boundaries.)

5. SOURCE TYPE (check one):

   - Stream
   - Base
   - Dike-confined
   - Perched
   - Caprock

6. METHOD OF TAKING WATER (check one):

   - Artesian Flow
   - Well & Pump
   - Diversified Surface Flow
   - Other (explain)

7. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)

   (a) Address: Kahuku
   (b) Land Use District (check one):
       - Urban
       - Agriculture
       - Conservation
       - Rural
   (c) County Zoning (describe): Golf Course

8. QUANTITY OF WATER REQUESTED: 800,000 gallons per day

9. METHOD OF MEASUREMENT:

   - Flowmeter
   - Open-pipe
   - Well
   - Office
   - Other (explain)

10. QUALITY OF WATER REQUESTED:

    - Flow
    - Brackish
    - Salt
    - Potable
    - Non-Potable

11. PROPOSED USE:

    - Municipal (including hotels, stores, etc.)
    - Domestic (individual, noncommercial, etc.)
    - Irrigation
    - Industrial
    - Military
    - Other (explain)

12. NUMBER AND TYPE OF UNITS TO BE SERVED (explain):

    Golf Course

13. TOTAL ACRES PROPOSED FOR IRRIGATION AND TYPE OF CROP:

    160 Golf

14. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:

    24 hours per day

15. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON USE:

    (a) Impact on Sustainable yield (?):
        Unknown
    (b) Permanent or Interim
        None
    (c) Hawaiian Home Land uses affected (?):
        None
    (d) Other existing legal uses affected (?):
        None
    (e) Other:

16. REMARKS, EXPLANATIONS:

(If more space is needed, continue on back side)

OTE: Signing below indicates that the applicant understands that, if a water use permit is granted by the Commission on Water Resource Management, a permit is subject to and existing permitted uses, changes in sustainable yield and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses. In addition, applications understands that, upon permit approval, a water shortage plan must be submitted should the Commission require one.

Applicant (print):
The Estate of James Campbell

Signature:
[Redacted]
Date: [Redacted]

Landowner (print):
The Estate of James Campbell

Signature:
[Redacted]
Date: [Redacted]
WATER USE PERMIT NO. 272

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: Kuilima Resort Co.

Landowner of Source: Kuilima Resort Co.

Permitted Withdrawal Rate: 0.302 mgd (Based upon a 12-month moving average)

Water Management Area: Ko’olauloa

Island: Oahu

Aquifer Sector/System: Windward/Ko’olauloa

System Sustainable Yield: 35 mgd

Water Type: Non-Potable

Original CWRM Date: September 13th, 1993

Standard Conditions: 1-19

Special Conditions: 1-2, 100

Water Source

State Well Number(s): 4158-14

Well Name: Kuilima 1

Water Source TMK Number(s): 1st Division, 5-6-003:044

State Land Use Classification(s): Agriculture

County Zoning Classification(s): AG-2/P-2/Resort

Geographical Coordinates: Latitude 21° 41’ 42.0” North
Longitude 157° 58’ 40.3” West

End Use

End Use TMK Number(s): 1st Division, 5-6-003:040, 5-6-003:041, 5-6-003:044, 5-7-001:016

State Land Use Classification(s): Agriculture/Urban/Conservation

County Zoning Classification(s): AG-2/P-1/P-2/Resort
Beneficial Use Explanation: Use for irrigation of approximately 160 acres of golf course

Background Information

State Well No. 4158-14 was originally governed by a water use permit owned by Campbell Estate. In late 1993, the permit was superseded by Water Use Permit 272, which is owned by Kuilima Resort Company.

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 0.302 mgd since that time. Reference the permit file for additional information on reporting history.

Water Use Permit 272 was approved during the September 13th, 1993 Commission on Water Resource Management meeting. This water source has been in use for approximately 15 years by Kuilima Resort Co., with Campbell estate utilizing it prior to that. Standard conditions 1-19 and special conditions 1-2 & 100 are the governing conditions for this water use permit. A complete list of all standard and special conditions is given in the final summary report to the Legislature for this 20-year Water Use Permit Review.

Field Investigation Information

Contact: Mike Honma
Site Address:Brown and Caldwell conducted a field investigation on February 11th, 2008 from 10:30 a.m. until 11:45 p.m. with an associate of Mr. Mike Honma. 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 Turtle Bay Resort. 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. 272

State Well No. 4158-14 is located on TMK parcel 5-6-003:044 at 21° 41' 42.0" N, 157° 58' 40.3" W, with a real time accuracy of ± 14 feet. Water is drawn from the well, metered, and sent to a holding pond via an underground pipe. A pump house adjacent to the pond draws the water.
from the pond and distributes it into the golf course irrigation system for use on TMK parcels 5-6-003:040, 5-6-003:041, 5-6-003:044, and 5-7-001:016. There were no instances of water loss observed at the pump, pond, or pump house locations. The entire system from pumping to distribution is operated automatically. 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 being used on TMK 5-7-001:016, which is not listed on the permit. Water use is currently being reporting on a monthly basis with no recent evidence of overpumpage violations.

The following are a list of standard condition(s) that the permittee is found to be in non-compliance with:

(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 use 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).

Since water is being used on an unpermitted TMK, the permittee is found to be in violation of Standard Condition (1).

(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.

Since no salinity reports are being submitted to the Commission, the permittee is found to be in violation of Standard Condition (10).

Recommendations

- Update the Commission's electronic database with the following:
  - Add TMK 5-7-001:016 as an end use location
  - Create memo field entry noting field investigation on 2/11/08
- Address violation of Standard Condition (1) regarding water use on a non-permitted TMK.
- Address violation of Standard Condition (10) regarding non-reporting of salinity levels.
20-Year Water Use Permit Review
Water Use Permit No. 272

APPENDIX

Field Investigation Photographs
Figure 1 – State Well No. 4158-14

Figure 2 – Functional flowmeter
Figure 3 – Holding pond for pumped water

Figure 4 – Irrigation system distribution pumps
Figure 5 – Controls for water distribution system
Water Use Permit Survey
(Please complete one survey form for each WUP)

WUP Number: 272
Well Number(s): 448-14

Contact Information (of the person who will be present at site visit):
Name: MIKE HONMA
Phone (for phone interview): [Redacted]
Best time to reach for phone interview: 9:00 AM MON - FRI.

Property Information (of the water use/well location):
Address: [Redacted]
Well Location TMK (list all if multiple wells present): 5-6-00B:040
Water Use TMK (list all if used on multiple lots): 5-6-00B:040

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"): USE FOR TURTLE BAY GOLF COURSE

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

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

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): TUE Time: 9:00 am ☑ 12:00 pm ☐ 3:00 pm ☐
Option #2 Date (M-F): WED Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐
Option #3 Date (M-F): THURS 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:

For Official Use Only
Received: 12/11/07 Information Updated: 12/11/07 Phone Interview Complete: ______
Notes/Comments: ____________________________
## Phone Interview

<table>
<thead>
<tr>
<th>WUP Number: 272</th>
<th>Well Number(s): 4153-14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contact Name</strong>: Mike Honma</td>
<td><strong>Phone Number</strong>: [redacted]</td>
</tr>
<tr>
<td><strong>Attempt #1</strong>: Date/Time: 2/7/08 (9:20 am)</td>
<td><strong>Result</strong>: Left Message</td>
</tr>
<tr>
<td><strong>Attempt #2</strong>: Date/Time: N/A</td>
<td><strong>Result</strong>: N/A</td>
</tr>
<tr>
<td><strong>Well Location TMK(s)</strong>: 5-6-003; 040</td>
<td><strong>Water Use TMK(s)</strong>: 5-6-003; 040</td>
</tr>
<tr>
<td><strong>Water Source Address</strong>: [redacted]</td>
<td><strong>Notes/Comments</strong>: Use for Turtle Bay Golf Course</td>
</tr>
<tr>
<td><strong>Currently using water source?</strong></td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td><strong>How often is the water source being used?</strong></td>
<td>Daily ☐ Weekly ☐ Monthly ☐</td>
</tr>
<tr>
<td><strong>How long have you been using this water source?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Has there been any rezoning of the water source/water use properties?</strong></td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td><strong>Have you reported the rezoning to the State?</strong></td>
<td>Yes ☐ No ☐ N/A ☐</td>
</tr>
<tr>
<td><strong>If no, explain:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Scheduled field investigation day/time</strong>: 2/11/08 @ 10:00 am.</td>
<td></td>
</tr>
<tr>
<td><strong>Notes (Special directions, site conditions, potential hazards, general notes, etc.):</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **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 you do not 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. |

---

**Interviewed By:** M.S.  
**Date:** 2/7/08  
**Time:** 11:30 am.
Field Investigation Checklist

WUP Number: 272  Well Number(s): 4156.14

Water Source
Well Location TMK(s): 5-6-003:044
Well Head GPS Coordinates: Latitude: 21° 41'.420" N Longitude: 157° 56'.10.3"
Well Type: Well Pump

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: Located in underground box adjacent to the well.

Water Use
Water Use TMK(s): 5-6-003:040, 041, 044, 5-7-001:016

What is the water being used for?  Golf Course Irrigation

Is the water being used within the permitted boundaries?  Yes ☑  No ☐
If no, explain: See comments for more info.
Reference permit file for TMK maps

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: Used on more TMK's than listed in the permit

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

General Notes/Comments: End use TMK's include: 5-6-003:040, 5-6-003:044, 5-7-001:016

Investigated By: M.S.  Date: 2/1/26  Time: 11:30 AM
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, 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 HAWAII” 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 Waieele 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.
Dear Mr. Adelman:

Approval of Water Use Permit (WUP No. 272) for Well No. 4158-14
Koolauloa Ground-Water Management Area, Oahu

This letter transmits your water use permit for Kuilima 1 Well (Well No.4158-14) for use of 0.302 million gallons per day (mgd) of water on a 12-month moving average basis that was approved by the Commission on Water Resource Management (Commission) on October 13, 1993. As part of the Commission’s approval, the following special conditions were added and are part of your permit under Standard Permit Condition 19:

**Special Conditions**

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. 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 [Contact Information] (Honolulu).

3. 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.

Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form

Please be sure to read the conditions of your approved permit.
We draw your attention to two key conditions of your permit that require your response. First, you are required 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. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Koolauloa Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Ryan Imata of the Commission staff at [Redacted]

Sincerely,

W. Roy Handy

Peter T. Young
Chairperson

Attachments
PERMITTEE

Permittee/Water User: Kuilima Resort Company D.B.A.
Address: Turtle Bay Golf

Landowner of Source: Same

PERMITTED SOURCE INFORMATION

Island: Oahu

Water Management Area
Aquifer Sector: Windward
Aquifer System: Koolauloa
System Sustainable Yield: 35

Well Name: Kuilima 1 Well
State Well No.: 4158-14

PERMITTED USE INFORMATION

Reasonable beneficial use: Irrigation

Withdrawal (12 month moving ave.): 0.302 mgd

Location of water use
TMK #: 5-6-003: 040
State land use classification: AG
County zoning classification: P-2

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
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 October 13, 1993 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.

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).
11. This permit shall be subject to the Commission's periodic review of the Koolauloa 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 Koolauloa 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 the 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 use(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 conservation, 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 of 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 Koolauloa 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 are incorporated herein by reference.

W. Roy Young, Chairperson
Commission on Water Resource Management

Attachment
May 21, 1992

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resources Management

Attention: Mr. Ed Sakoda

Subject: Kahuku-Kuilima Resort Well - Well No. 4158-14 Kahuku, Oahu

Dear Ed:

Mr. Yoshie Shiroma of your staff, during a recent field visit to Kuilima, requested a set of as-built plans of the Kuilima Resort Well (Well No. 4158-14). Please find enclosed a set of as-built plans on the specified well.

Should you or your staff have further questions, please do not hesitate to call me at

Sincerely,
KLUILIMA DEVELOPMENT COMPANY

Eric S. Takamura, Ph.D., PE
Assistant General Manager
I have drafted a letter to Mike Lonma requesting 'As-Built' plans, water use discharge records, etc., for well #16-126. Also, I called him to question about the pump installed at pump #2 site.

Acrea Marine, Inc. Complaint files are also enclosed with this. A Palmer Golf, etc., declaration, this requires a response.
OPERATION BRANCH

Commission on Water Resource Management

FROM: ______________
DATE: 4/15
FILE IN: ____________

TO: ________________
INIT: ________________

PLEASE: ________________

REMARKS: please type draft letter for Ed's review & comment

FOR YOUR: ________________

Y. SHIROMA
F. Ching
R. Jinnai
M. Ohye
I. Kunimura
S. Swanson
R. LOUI
S. Kokubun
G. MATSUMOTO
E. SAKODA

Approved
Signature
Information

Yoshi - in checking
From the file (4158-14) - seems they have provided most, if not all the information we asked for. Letter not necessary?
April 15, 1992

Mr. Mike Honma
Arnold Palmer Golf Management Co.

Dear Mr. Honma:

Request for Well No. 4148-14 Completion Report

Thank you for your cooperation in providing staff assistance on March 25, 1992 to field inspect Well No. 4158-14 located in por. of Kahuku, Koolaualoa, Oahu, and identified by Tax Map Key: 5-6-03:44.

We understand that the well was successfully drilled, tested, developed and subsequently, water withdrawals for golf course irrigation began August 1991.

As a requirement by conditions issued with approvals for the well construction permit, please submit the completion report together with additional information listed belows.

1. Pump installation "as built" plans
2. Pump test results
3. Salinity test results

Please submit your monthly water use from Well No. 4158-14 to us on the enclosed forms.

Should you have any questions concerning this matter, please contact Mr. Ed Sakoda of the Regulation Branch at

Sincerely,

RAE M LOUI
Deputy Director

YS:ko
Enc. (Monthly Water Use Form)

c: Eric Takamura, Kuliima Resort Dev.
    Sam Keala, Campbell Estate
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of March, 1993

3 / 1 / 93 to 3 / 31 / 93
(Month / Day / Year) (Month / Day / Year)

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to Division of Water Resource Management. A separate form is available for reporting of surface water use.


Island: Oahu

Water Use Quantity reported in Gallons (Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-2 Irrigation Well</td>
<td>4158-14</td>
<td>13,450,000</td>
<td>Metered</td>
</tr>
</tbody>
</table>

Additional information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

Submitted by (print) Mike Honma
Signature

Title Superintendent
Date 4/7/93
FIELD MEMORANDUM

DECLARANT (File Reference)  A. Palmer Golf

DATE  March 25, 1992

PRESENT  Milton Caulford & Jim Camit, Kuilima Resort Development

LOCATION  Kahuku, Koolauloa, Oahu  TMK: 5-6-03-40 & 44

SOURCE(S)  Well No. 4158-14 and Spring Source at Pump No. 2 site.

USE(S)  Golf Course Irrigation

FIELD NOTES  On March 25, 1992, Mitchell Ohye and I met with Messrs. Milton Caulford, Kuilima Resort Field Supervisor, and Jim Camit, Golf Course Irrigation Serviceman, at 11:40 a.m., near Marconi Road and Kam Highway intersection in Kahuku, to field inspect the recently installed pump at Well No. 4158-14.

The well used for the new golf course irrigation is located makai of Kamehameha Highway about 500' west of Marconi Road. GPS coordinate location of the well is: 21° 41' 57.2" lat., 157° 58' 47.9" long.

The nameplate data on the electric pump are as follows:

U.S. Motors - Peerless Pump
S/N 9148655
10 H.P. Pump @ 1740 RPM
Power: 230/460 V
8" Discharge Assembly Unit
Date: 1/28/91

Mr. Camit said, the pump and discharge assembly unit was installed by Roscoe Moss Co. in late summer 1991 and has been in operation since September 1991. Hand written recordings of discharges are taken by Mr. Camit, but have not formally submitted to DWRM. I asked Mr. Caulford to submit the monthly discharge records to our office. Also requested, submission of a pump installation completion report, "as-built" construction plans, and chloride/drawdown readings. Meter reading of the subject well was 41,592,000 gallons on date of inspection.

Following Well No. 4158-14 inspection, I requested an inspection of conditions at Pump #2 site. Pump #2 site which formerly served irrigation to Kahuku Sugar Co. is registered by Amorient and previously field inspected by DWRM field staff on April 17, 1991.
The site is located about 0.3 miles west of Well No. 4158-14 on the makai side of Kamehameha Highway, consists of a partially rock-lined wall open channel about 20' wide x 100' long. Water is fed into the channel by a spring source which collects into a 30' x 30' concrete-lined sump from which two pumps were noted. Amorient's pump, and a new pump recently installed by Kuilima Resort Development was observed. Kuilima Resort does not have a pump installation permit for the new pump. When questioned about the water use, Mr. Caulford stated that the pump from this source is used as a back-up irrigation for the golf course.

A close-up inspection of the pump was not possible because a colony of bees nested near the base of the pump.

Field inspection concluded at 12:35 p.m.
FIELD INSPECTION INFORMATION CHECKLIST
(Ver 4/3/91)

PART I: USE OF WATER
Declarant’s File Reference: PALMER GOLF

1. Tax Map Key where the water is used: 5 - 6 - 03 : 40444. Does the declarant own this land? No. If not, who does? JAS. CAMPBELL EST. (PRUDENTIAL INS. CO. OF AMERICA

2. What is the water used for? GOLF COURSE IRRIGATION
If for irrigation, how many acres are being irrigated by crop type? Approx. 170 AC.
If for livestock, how many and what kind? N/A
If for drinking, at how many houses? N/A by how many people?

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. (SEE FIELD MEMORANDUM)

4. If this person takes from a multi-user pipe or ditch system:
   How is the water taken from the system? WELL SOURCE
   What is the capacity for taking (gpm)? 700
   How often is it taken (used)? DAILY

PART II: WATER SOURCE
Source #: WELL NO. 4158-H Name: 

1. Where does the water come from / what kind of source is this? WELL (GROUND WATER)

Types of sources include:
1) Wells (drilled, dug, tunnel)
2) Diversions (ditch, pipe, pump, or livestock from a stream, spring, swamp, pond)
3) Multi-source systems. (Declared use cannot be traced to a single well or diversion)
   NOTE: If a multi-user system: take from pipe or ditch (need to determine whether this is a multi-source or single-source system before the data can be input to the computer
4) Instream (i.e., crops planted along water edge)

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? ELECTRIC PUMP
   What is the capacity for taking (gpm)? 700
   How often is it taken (used)? DAILY

3. Tax Map Key at the source: 5 - 6 - 03 : 44. Determine declarant’s relation to source. Does the declarant:
   1) Operate and maintain the source? Yes. If not, who does?
   2) Own the land at the source? No. If not, who does? (PRUDENTIAL INS CO.
   3) Use the water from this source? Yes. If not, who does?
   4) Own the land where the water is being used? No.
   5) None of the above? If so, why did they file?

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? N/A

VERIFIED BY: YOSHI SHIROMA, MITCHELL OHVE DATE: 3/25/92
**DRILLER'S REPORT**

**DESCRIPTION**

Date of report: March 1, 1990  
Person filing report: L.H. Runnels

WELL

A. OWNER: Kuilima Development  
NAME: Kuilima Well 4158-14  
ISLAND: Oahu

B. GENERAL LOCATION: Kuilima

C. DRILLING COMPANY: ROSCOE MOSS COMPANY

D. TYPE OF RIG: 601

E. ELEVATION, msl: Top of drilling platform: 9.5 ft.  
Bench mark and method used to determine height of drilling platform above ground surface: 0 ft. elevation.

F. HOLE SIZE:
   - 24 in. dia. to 8 ft. below drilling platform.
   - 16 in. dia. to 79 ft. below drilling platform.
   - 12 in. dia. to 135 ft. below drilling platform.

G. CASING INSTALLED:
   - 12 in. I.D. x 312 in. wall solid section to 79 ft. below drilling platform.
   - in. I.D. x in. wall perforated section to ft. below drilling platform.
   - Type of perforation: None

H. ANNULUS: Grouted 0 ft. to 79 ft. below drilling platform.

Gravel packed ft. to ft. below drilling platform.

**HYDROLOGY**

I. PERMANENT PUMP INSTALLATION:
   - Pump type, make, serial no.:  
     - Capacity: g.p.m.
   - Motor type, H.P., voltage, r.p.m.:  
   - Depth of pump intake setting: ft. below which elevation is ft.
   - Depth of bottom of airline: ft. below which elevation is ft.

**SUBSURFACE FORMATION**

K. INITIAL WATER LEVEL: 8.5 ft. below drilling platform.  
Date of measurement: Jan 9, 1990

L. PUMPING TESTS:
   - Reference point (R.P.) used:  
     - which elevation is ft.
   - Start water level: Ground level below R. P.
   - End water level: Ground level ft. below R. P.
   - Depth of well: 100 ft. below R. P.

<table>
<thead>
<tr>
<th>Depth of well</th>
<th>Rate (gpm)</th>
<th>Draw-down (ft.)</th>
<th>Temp. °F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Draw-down (ft.)</th>
<th>Temp. °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   | Start water level: Ground level ft. below R. P. |
   | End water level: Ground level ft. below R. P. |
   | Depth of well: 135 ft. below R. P. |

M. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 9</td>
<td>Brown Clay</td>
<td></td>
</tr>
<tr>
<td>9 to 19</td>
<td>Coral</td>
<td></td>
</tr>
<tr>
<td>19 to 26</td>
<td>Boulder &amp; Coral</td>
<td></td>
</tr>
<tr>
<td>26 to 40</td>
<td>Brown Clay</td>
<td></td>
</tr>
<tr>
<td>40 to 58</td>
<td>Gray mud rock &amp; gravel</td>
<td></td>
</tr>
<tr>
<td>58 to 70</td>
<td>Brown Clay &amp; rock</td>
<td></td>
</tr>
<tr>
<td>70 to 74</td>
<td>Hard red clay</td>
<td></td>
</tr>
<tr>
<td>74 to 94</td>
<td>Rock broken</td>
<td></td>
</tr>
<tr>
<td>94 to 100</td>
<td>Hard rock</td>
<td></td>
</tr>
<tr>
<td>100 to 106</td>
<td>Red Cinders</td>
<td></td>
</tr>
<tr>
<td>106 to 121</td>
<td>Med. rock</td>
<td></td>
</tr>
</tbody>
</table>

N. REMARKS:

**INSTRUCTIONS:** Send three (3) copies to: Manager-Chief Engineer, Division of Water and Land Development, P. O. Box 373, Honolulu, Hawaii 96809.


**FOR OFFICIAL USE**

Latitude: 21° 41' 53"
Longitude: 157° 58' 51"
Well No.: 4158-14
KUIlimA REsORt COmPANY

Well 4158-14 (G-2) Kahuku-KuiliMA ReSOrt

Well 4158-14 Flow meter & Totalizer
March 12, 1992

State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resources Management

Attention: Mr. Ed Sakoda

Subject: Kahuku-Kuilima Resort Well - Well No. 4158-14 Kahuku, Oahu

Dear Ed:

In accordance with the Pump Installation Permit issued to Kuilima Resort Company (KRC), please find enclosed the chloride monitoring results collected from the Kahuku Airbase Well No. 4158-12 for the month of February 1992. The result show that the chloride concentration was 101 mg/L. The attached table presents the monitoring results that have been collected thus far.

Also, please find enclosed the approximate monthly water usage from Well No. 4158-12 and Well No. 4158-14 for the period between January 2, 1992 through February 11, 1992.

Please call me should you require further clarification or questions on the subject material.

Sincerely,
KUILIMA DEVELOPMENT COMPANY

[Signature]
Eric S. Takamura
Assistant General Manager
TO: EST Environmental Consultants

SAMPLES OF: Well water

RECEIPT DATE: 2/11/92

SAMPLED: 2/11/92

JOB: 651

DATE: 2/19/92

PAGE: 1 OF 1

ATTN: Eric Takamura

LOG NO.: 5494

Analysis Date/Analyst: 2/19

Measurement: Chloride (mg/L)

Sample Name:

W - 23 101
## Monthly Ground Water Use Report

**Month of** JAN. 1992

**Instructions:** Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, A separate form is available for reporting of surface water use. Phone for assistance if required.

**Water User:** Campbell Estate  
**District:** Kahuku  
**Island:** Oahu

**Water Use Quantity reported in** Gallons  
(Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kahuku Air base Well</td>
<td>4158-12</td>
<td>21,738</td>
<td>In-line Totalizer</td>
</tr>
</tbody>
</table>

**Additional Information:** (Water level, chlorides, temperature, pump condition, change in use, etc.)

Water use from 1/1/92 through 2/11/92 - 40 days

Submitted by (print) **Eric S. Takamura**  
Signature **Eric S. Takamura**

**Title** Assistant General Manager  
**Date** 3/12/92
### MONTHLY GROUND WATER USE REPORT

Month of **Jan.**, 1992

**INSTRUCTIONS:** Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management. A separate form is available for reporting surface water use. Phone (808) 586-0222 for assistance if required.

Water User: **Kuilima Rent**  
District: **Kahuku**  
Island: **Oahu**

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuilima Rent Well</td>
<td>4158-14</td>
<td>10,619,000</td>
<td>In-Line Totalizer</td>
</tr>
</tbody>
</table>

**Additional Information:** (Water level, chlorides, temperature, pump condition, change in use, etc.)

Water use from 1/2/92 through 2/1/92 - 40 days.

Submitted by (print) **Eric S. Takamura**  
Signature **Eric S. Takamura**  
Title **Assistant General Manager**  
Date **3/12/92**
October 29, 1991

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resources Management

Attention: Mr. Ed Sakoda

Subject: Kahuku-Kuilima Resort Well - Well No. 4158-14 Kahuku, Oahu

Dear Ed:

In accordance with the Pump Installation Permit issued to Kuilima Resort Company (KRC), please find enclosed the weekly analysis on chlorides taken from the Kahuku Airbase Well No. 4158-12. Weekly sampling began with the collection of the first sample on July 16, 1991. The most recent analytical result was for the sample collected on October 22, 1991.

The G-2 Well's (Well No. 4158-14) construction was completed on August 21, 1991. Start-up and actual production began on August 26, 1991. Cumulative withdrawal of water between August 26, 1991 and September 30, 1991 was 6,135,000 gallons.

The Kahuku Airbase Well No. 4158-12 monthly withdrawal (for the period of September 3, 1991 thru October 1, 1991) was 51,757 gallons.

I would like to arrange a meeting with you at your earliest convenience. Please call me at [redacted] to arrange such a meeting, or if you require further clarification on the subject material.

Sincerely,

KUILIMA DEVELOPMENT COMPANY

Eric S. Takamura
Assistant General Manager
### Chloride Monitoring
**Well No. 4158-12**
**Kahukyu Airbase Well**

<table>
<thead>
<tr>
<th>Date</th>
<th>Sample Number</th>
<th>Chlorides (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/16/91</td>
<td>W-1</td>
<td>99</td>
</tr>
<tr>
<td>7/23/91</td>
<td>W-2</td>
<td>102</td>
</tr>
<tr>
<td>7/30/91</td>
<td>W-3</td>
<td>118</td>
</tr>
<tr>
<td>8/06/91</td>
<td>W-4</td>
<td>118</td>
</tr>
<tr>
<td>8/13/91</td>
<td>W-5</td>
<td>116</td>
</tr>
<tr>
<td>8/20/91</td>
<td>W-6</td>
<td>113</td>
</tr>
<tr>
<td>8/26/91</td>
<td></td>
<td>G-2 Well (Well No. 4258-14) production initiated.</td>
</tr>
<tr>
<td>8/27/91</td>
<td>W-7</td>
<td>108</td>
</tr>
<tr>
<td>9/03/91</td>
<td>W-8</td>
<td>114</td>
</tr>
<tr>
<td>9/10/91</td>
<td>W-9</td>
<td>115</td>
</tr>
<tr>
<td>9/17/91</td>
<td>W-10</td>
<td>115</td>
</tr>
<tr>
<td>9/24/91</td>
<td>W-11</td>
<td>115</td>
</tr>
<tr>
<td>10/01/91</td>
<td>W-12</td>
<td>105</td>
</tr>
<tr>
<td>10/08/91</td>
<td>W-13</td>
<td>112</td>
</tr>
<tr>
<td>10/15/91</td>
<td>W-14</td>
<td>106</td>
</tr>
<tr>
<td>10/22/91</td>
<td>W-15</td>
<td>109</td>
</tr>
</tbody>
</table>
TO: EST
ATTN: Eric Takamura

SAMPLES OF: Well water
SAMPELED: 9/10, 9/17/91

RECEIPT DATE: 9/10, 9/17/91
LOG NO.: 5253, 5268

<table>
<thead>
<tr>
<th>Measurement:</th>
<th>Chlorides (mg Cl/L)</th>
<th>Analysis Date/ Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-9</td>
<td>115</td>
<td>9/18 cl</td>
</tr>
<tr>
<td>W-10</td>
<td>115</td>
<td>9/18 cl</td>
</tr>
</tbody>
</table>
TO: EST  
SAMPLES OF: Well water  
RECEIPT DATE: 9/24, 10/8, 10/22/91  

ATTN: Eric Takamura  
SAMPLED: 9/24, 10/1, 10/8, 10/15, 10/22/91  
LOG NO.: 5280, 5303, 5304, 5326  

<table>
<thead>
<tr>
<th>Measurement: (Unit)</th>
<th>Chlorides (mg Cl/L)</th>
<th>Analysis Date/ Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-11</td>
<td>115</td>
<td>10/3 cl</td>
</tr>
<tr>
<td>W-12</td>
<td>105</td>
<td>10/24 klm</td>
</tr>
<tr>
<td>W-13</td>
<td>112</td>
<td>10/24 klm</td>
</tr>
<tr>
<td>W-14</td>
<td>106</td>
<td>10/24 klm</td>
</tr>
<tr>
<td>W-15</td>
<td>109</td>
<td>10/24 klm</td>
</tr>
</tbody>
</table>
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of September, 1999

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management. A separate form is available for reporting of surface water use. Phone (Honolulu) for assistance if required.

Water User: Campbell Estate  District: Kahuku  Island: Oahu

Water Use Quantity reported in Gallons (Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kahuku Airbase Well</td>
<td>4158-12</td>
<td>52</td>
<td>Totalizer (in-line)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51,757</td>
<td></td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

Submitted by (print) Eric S. Takamura  Title Assistant General Manager
Signature Eric S. Takamura  Date October 29, 1991
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of September, 1991

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, State of Hawaii, 1350 Punchbowl Street, Honolulu, Hawaii 96813. A separate form is available for reporting of surface water use. Phone (808) 586-1520 for assistance if needed.

Water User: Kuilima Resort District: Kaua'i Island: Oahu

Water Use Quantity reported in Gallons (Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuilima Resort</td>
<td>4158-14</td>
<td>8,135,000</td>
<td>Tefalizer - (in-line)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

Submitted by (print) Eric S. Takamura
Signature Eric S. Takamura
Title Assistant General Manager
Date Oct. 29, 1991
CHLORIDES AT KAHUUKU AIRBASE WELL AND AVERAGE PUMPAGE AT KUILIMA

CHLORIDE (PPM)

DATE OF SAMPLE

AVERAGE PUMPAGE (MGD)

--- WELL 4158-12 CL --- PUMPAGE
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: ___________ DATE: ___________ FILE IN: ___________

TO: INITIAL: PLEASE: REMARKS:

- G. AKITA
- L. Nanbu
- E. Sakoda
- G. Matsumoto
- E. Lau
- L. Chang
- Y. Shiroma
- Glenn
- Paul
- M. TAGOMORI
- S. Kokubun

See Me
- Take Action By
- Route to Your Branch
- Review & Comment
- Draft Reply
- Acknowledge Receipt
- Xerox __ copies
- File
- Mail

FOR YOUR:

- Approval
- Signature
- Information

Looks ok - monthly

chlorides for next 8 months.

Gloan - please plot
pumpage vs chlorides,

Lau 6/
January 21, 1991

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resources Management

Attention: Mr. Ed Sakoda

Subject: Kahuku-Kuilima Resort Well - Well No. 4158-14 Kahuku, Oahu

Dear Ed:

In accordance with the Pump Installation Permit issued to Kuilima Resort Company (KRC), please find enclosed the chloride monitoring results collected from the Kahuku Airbase Well No. 4158-12. Data collected to date include six (6) weekly samples prior to production, fourteen (14) weekly samples following the start-up of Well 4158-14, and two (2) once a month samples collected on December 3, 1991 and January 2, 1992. From the results obtained to date, it appears that the average chloride concentration of water collected from Well No. 4158-12 is in the range of 110 mg/l to 120 mg/l. The results also show that the withdrawal of water from Well No. 4158-14 has not affected Well No. 4158-12 water quality with respect to Chloride concentration. The attached table presents the monitoring results that have been collected thus far.

Also, please find enclosed the approximate monthly water usage from Well No. 4158-12 and Well No. 4158-14 on stationary Mr. Glenn Bauer provided to Kuilima.

Please call me should you require further clarification or questions on the subject material.

Sincerely,
KUILIMA DEVELOPMENT COMPANY

Eric S. Takamura
Assistant General Manager
**Chloride Monitoring**  
**Well No. 4158-12**  
**Kahuku Airbase Well**

<table>
<thead>
<tr>
<th>Date</th>
<th>Sample Number</th>
<th>Chlorides (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/16/91</td>
<td>W-1</td>
<td>99</td>
</tr>
<tr>
<td>7/23/91</td>
<td>W-2</td>
<td>102</td>
</tr>
<tr>
<td>7/30/91</td>
<td>W-3</td>
<td>118</td>
</tr>
<tr>
<td>8/06/91</td>
<td>W-4</td>
<td>118</td>
</tr>
<tr>
<td>8/13/91</td>
<td>W-5</td>
<td>116</td>
</tr>
<tr>
<td>8/20/91</td>
<td>W-6</td>
<td>113</td>
</tr>
<tr>
<td>8/26/91</td>
<td>G-2 Well (Well No. 4258-14) production initiated.</td>
<td></td>
</tr>
<tr>
<td>8/27/91</td>
<td>W-7</td>
<td>108</td>
</tr>
<tr>
<td>9/03/91</td>
<td>W-8</td>
<td>114</td>
</tr>
<tr>
<td>9/10/91</td>
<td>W-9</td>
<td>115</td>
</tr>
<tr>
<td>9/17/91</td>
<td>W-10</td>
<td>115</td>
</tr>
<tr>
<td>9/24/91</td>
<td>W-11</td>
<td>115</td>
</tr>
<tr>
<td>10/01/91</td>
<td>W-12</td>
<td>105</td>
</tr>
<tr>
<td>10/08/91</td>
<td>W-13</td>
<td>112</td>
</tr>
<tr>
<td>10/15/91</td>
<td>W-14</td>
<td>106</td>
</tr>
<tr>
<td>10/22/91</td>
<td>W-15</td>
<td>109</td>
</tr>
<tr>
<td>10/29/91</td>
<td>W-16</td>
<td>106</td>
</tr>
<tr>
<td>11/5/91</td>
<td>W-17</td>
<td>105</td>
</tr>
</tbody>
</table>
Chloride Monitoring  
Well No. 4158-12  
Kahuku Airbase Well

<table>
<thead>
<tr>
<th>DATE</th>
<th>SAMPLE NUMBER</th>
<th>CHLORIDES (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/12/91</td>
<td>W-18</td>
<td>122</td>
</tr>
<tr>
<td>11/19/91</td>
<td>W-19</td>
<td>110</td>
</tr>
<tr>
<td>11/26/91</td>
<td>W-20</td>
<td>103</td>
</tr>
</tbody>
</table>

End of Twelve (12) week operational monitoring.

Begin once a month sampling.

<table>
<thead>
<tr>
<th>DATE</th>
<th>SAMPLE NUMBER</th>
<th>CHLORIDES (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/3/91</td>
<td>W-21</td>
<td>105</td>
</tr>
<tr>
<td>1/2/92</td>
<td>W-22</td>
<td>113</td>
</tr>
</tbody>
</table>
TO: EST

SAMPLES OF: Well water

ATTN: Eric Takamura

SAMPLED: 10/29/91, 11/5/91, 11/12/91, 11/19/91

RECEIPT DATE: 11/5/91, 11/20/91

LOG NO.: 5356, 5357, 5384

<table>
<thead>
<tr>
<th>Measurement (Unit)</th>
<th>Chlorides (mg Cl/L)</th>
<th>Analysis Date/Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-16</td>
<td>106</td>
<td>11/12 er</td>
</tr>
<tr>
<td>W-17</td>
<td>105</td>
<td>11/12 er</td>
</tr>
<tr>
<td>W-18</td>
<td>122</td>
<td>12/2 df</td>
</tr>
<tr>
<td>W-19</td>
<td>110</td>
<td>12/2/df</td>
</tr>
</tbody>
</table>
TO: EST
SAMPLES OF: Well water
RECEIPT DATE: 12/6/91

ATTN: Eric Takamura
SAMPLED: 11/26/91, 12/3/91
LOG NO.: 5401

JOB NO.: 651
DATE: 12/10/91
PAGE: 1 OF 1

<table>
<thead>
<tr>
<th>Measurement: (Unit)</th>
<th>Chlorides (mg Cl/L)</th>
<th>Analysis Date/ Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-20</td>
<td>103</td>
<td>12/10 klm</td>
</tr>
<tr>
<td>W-21</td>
<td>105</td>
<td>12/10 klm</td>
</tr>
</tbody>
</table>
TO: EST
SAMPLES OF: Well water
RECEIPT DATE: 1/2/92

ATTN: Eric Takamura
SAMPLED: 1/2/92
LOG NO.: 5439

<table>
<thead>
<tr>
<th>Measurement: Chlorides</th>
<th>Analysis Date/ Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Unit)</td>
<td>(mg Cl/L)</td>
</tr>
<tr>
<td>Sample Name:</td>
<td></td>
</tr>
<tr>
<td>W-22</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>1/5 cl</td>
</tr>
</tbody>
</table>
STATE OF HAWAII  
COMMISSION ON WATER RESOURCE MANAGEMENT  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF WATER RESOURCE MANAGEMENT  

MONTHLY GROUND WATER USE REPORT  
Month of October, 1991

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, State of Hawaii, 1150 Punchbowl Street, Honolulu, HI 96813. A separate form is available for reporting of surface water use. Phone 808-587-1761 for assistance if required.

Water User: Campbell Estate  
District: Kahuku  
Island: Oahu

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kahuku Airbase Well</td>
<td>458-12</td>
<td>37,463</td>
<td>Totalizer (In-line)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

For period of 10/1/91 - 10/29/91

Submitted by (print) Eric S. Takamura  
Signature Eric S. Takamura  
Title Assistant General Manager  
Date 11/15/92
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of November, 1991

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, Honolulu for assistance if required.

Water User: Campbell Estate   District: Kahuku   Island: Oahu

Water Use Quantity reported in (Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kahuku Air base Well</td>
<td>4158-12</td>
<td>28,000</td>
<td>Totalizer (In-line)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

For Period 10/29/91 - 12/3/91

Submitted by (print) Eric S. Takamura   Title Assistant General Manager
Signature Eric S. Takamura   Date 1/15/92
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of December, 1991

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, [insert address]. A separate form is available for reporting of surface water use. Phone [insert phone number] for assistance if required.

Water User: Campbell Estate  
District: Kahuku  
Island: Oahu

Water Use Quantity reported in (Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kahuku Airbase Well</td>
<td>4158-12</td>
<td>9,094</td>
<td>Totalizer (In-line)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

For period of 12/3/91 - 1/2/92

Submitted by (print) Eric S. Takamura  
Signature Eric S. Takamura  
Title Assistant General Manager  
Date 1/15/92
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of **October**, 1991

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, Department of Land and Natural Resources, P.O. Box 8269, Honolulu, Hawaii 96812 for assistance if required.

**Water User:** Kuilima Resort  
**District:** Kahuku  
**Island:** Oahu

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuilima Resort Well</td>
<td>4158-14</td>
<td>3,185,000</td>
<td>Totalizer (In-Line)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

For period of 10/01/91 - 10/31/91

Submitted by (print) **Eric S. Takamura**  
**Title** Assistant General Manager

Signature **Eric S. Takamura**  
**Date** 1/15/92
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of November, 1991

INSTRUCTIONS: Complete this form to report total monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, 1000 Punchbowl St., Honolulu, HI 96813. A separate form is available for reporting of surface water use. Phone 808-792-2756 (Honolulu) for assistance if required.

Water User: Kuilima Resort     District: Kahuku     Island: Oahu

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuilima Resort Well</td>
<td>4158-14</td>
<td>5,080,000</td>
<td>Totalizer (In. lne)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

For Period 10/25/91 - 12/3/91

Submitted by (print) Eric S. Takamura     Title Assistant General Manager
Signature Eric S. Takamura     Date 11/15/91
STATE OF HAWAI'I
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

MONTHLY GROUND WATER USE REPORT

Month of December, 1991

INSTRUCTIONS: Complete this form to report monthly ground water use from each of your well sources, and mail to: Division of Water Resource Management, A separate form is available for reporting of surface water use. Phone for assistance if required.

Water User: Kuhina Resort  District: Kahuku  Island: Oahu

Water Use Quantity reported in ___________________________ (Units of Measurement)

<table>
<thead>
<tr>
<th>Well Name</th>
<th>State Well No.</th>
<th>Water Use Quantity</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuhina Resort</td>
<td>158-14</td>
<td>4,372,000</td>
<td>Totalizer (In-line)</td>
</tr>
</tbody>
</table>

Additional Information: (Water level, chlorides, temperature, pump condition, change in use, etc.)

For Period of 12/3/91 - 1/2/92

Submitted by (print) Eric S. Takamura  Title Assistant General Manager

Signature Eric S. Takamura  Date 1/15/92
FROM: Ed

TO: E. SAKODA

INITIAL: F. Ching

DATE: 1-15-91

FILE IN: Kutilma Well (4158-14)

PLEASE:

REMARKS:

Call from Bob St. John of Oahu Construction notifying us that they will be starting work on installing the pump. Pump Installation Permit issued 9-17-90.
MEMORANDUM

To: Richard Cox, Commissioner
Commission on Water Resource Management

From: Manabu Tagomori
Deputy Director

Subject: Kahuku-Kuilima Resort Well Pump Installation Permit

At the September Commission meeting on Maui you asked about the status of the pump installation permit for the Kahuku-Kuilima Resort Well (Well No. 4158-14). As directed by the Commission, staff worked with the applicant and Campbell Estate to develop language in the permit suitable to meet the concerns of the Commission regarding the possibility of the new well adversely affecting the Kahuku Air Base Well. Condition 3.d. of the permit (enclosed) was agreed upon, approved by the Chairperson, and issued on September 17, 1990.

ES:bm
Enc.
PUMP INSTALLATION PERMIT

for

Kahuku-Kuilima Resort Well
Well No. 4158-14
Kahuku, Oahu

TO: Kuilima Resort Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install a 700 gallons per minute pump into Kahuku-Kuilima Resort Well (Well No. 4158-14) for golf course irrigation use is approved, subject to the following conditions:

1. The Division of Water Resource Management (DWRM), Geology-Hydrology Section, shall be notified at 548-7543, before any work covered by this permit commences.

2. The proposed use shall not adversely affect existing legal uses in the area.

3. The applicant shall comply with the following monitor plan:

a. Obtain weekly water samples for chloride analysis from the Kahuku Airbase Well (Well No. 4158-12), starting at least four weeks prior to startup of the new well, to obtain baseline data.

b. Continue weekly sampling following startup of the well for 12 weeks. If it is determined that there is a rise in chlorides due to pumpage of the new well, sampling shall continue on a weekly basis. If there are no indications of a rise in chlorides, sampling shall continue on a monthly basis for an additional 8 months.
c. The applicant shall collect all samples, have them analyzed by a commercial laboratory, and submit the results to the Commission staff. Details of the monitoring program shall be coordinated with the Commission staff.

d. Should the Kahuku Airbase Well be adversely affected by Well No. 4158-14, pumpage from the proposed well shall be reduced or other mitigative measures taken. Any reduction in pumpage or other mitigative actions taken shall be determined by the Commission staff in consultation with the staff of the Department of Health's Drinking Water Branch, and approved by the Chairperson.

4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. This 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 shall be completed within two years of the date of issuance.

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management

SEP 17 1990
Date of Issuance

cc: USGS
Department of Health
Drinking Water Branch
Ground Water Protection Program
Honolulu Board of Water Supply
The Estate of James Campbell
EDP Hawaii Inc
July 25, 1990

Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

RESUBMITTAL
Kuilima Resort Company
Application for a Pump Installation Permit
Kahuku-Kuilima Resort Well, Kahuku, Oahu

Applicant: Kuilima Resort Company
Landowner: Same

Action Requested: Permission to install a 700 gallons per minute (gpm) pump into Kahuku-Kuilima Resort Well (Well No. 4158-14) for golf course irrigation.

Proposed Amount of Withdrawal: 1,000,000 gallons per day.

Well Description:

Ground elevation: 9.8± ft.
Casing diameter: 12-inch
Solid casing depth: 79 ft.
Open hole: 56 ft.
Total depth: 135 ft.
Pump Capacity: 700 gpm

Analysis: The well will develop water from a fresh basal aquifer. Use of the well may adversely affect existing wells in the area. Of particular concern is the effect on Well No. 4158-12, located 1,800 feet mauka of the well, which supplies potable water to the Kahuku Air Base Water System No. 315, operated by Campbell Estate and regulated under the Department of Health's Drinking Water Branch.

Water Availability: The well is located in the Windward Sector, Koolauloa System of Oahu, according to the latest work in conjunction with the Hawaii Water Plan. Sustainable yield is estimated at 35 mgd. Present use in the sector is approximately 14 mgd.

RECOMMENDATION:

That the Commission approve the issuance of a pump installation permit for Kahuku-Kuilima Resort Well, subject to the following conditions:

(1) The proposed use shall not adversely affect existing legal uses in the area.
Chairperson and Members
Commission on Water Resource Management

July 25, 1990

(2) The applicant shall comply with the following monitor plan:

a. Obtain weekly water samples for chloride analysis from the Kahuku Airbase Well (Well No. 4158-12), starting at least four weeks prior to startup of the new well, to obtain baseline data.

b. Continue weekly sampling following startup of the well for 12 weeks. If it is determined that there is a rise in chlorides due to pumpage of the new well, sampling shall continue on a weekly basis. If there are no indications of a rise in chlorides, sampling shall continue on a monthly basis for an additional 8 months.

c. Should there be any apparent adverse effects, a reduction of pumpage from the proposed well, or other mitigative measures, shall be negotiated between Kuilima Development Company and Campbell Estate.

d. The applicant shall collect all samples, have them analyzed by a commercial laboratory, and submit them to the Commission staff. Details of the monitoring program shall be coordinated with the Commission staff.

(3) The applicant shall comply with all applicable laws, rules, and ordinances.

(4) 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 shall be completed within two years of the date of issuance.

Respectfully submitted,

MANABU TAGOMORI
Deputy Director

APPROVAL FOR SUBMITTAL:

WILLIAM W. PATY, Chairperson
Kuilima Resort Company

Dear Kuilima Resort Company:

The Commission on Water Resource Management deferred your application for a well construction permit for Kahuku-Kuilima Resort Well (Well No. 4158-14) at its meeting on June 27, 1990, because of questions raised during the meeting concerning the use of potable-quality water for golf course irrigation. The Commissioners would like a chance to discuss with the applicant the possible use of alternate sources of water supply for golf course irrigation.

Your application will be acted upon at the Commission's next scheduled meeting on July 18, 1990, at 2:00 p.m., in the State Office Building, Hilo, Hawaii.

Please call Ed Sakoda at [redacted] if you have any questions.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

ES:mh
**CHECKLIST**

- WELL CONSTRUCTION PERMIT
- **PUMP INSTALLATION PERMIT**

**WELL NAME or LOCATION:** Kabuku-Kuilima Resort Well

**WELL NUMBER:** 4158-14

**OWNER or OPERATOR:** Kuilima Resort Co.

---

| Date application received: | 3-29-90 |
| Date acknowledged receipt/request more info: |  |
| Date application accepted: |  |
| Suspense date (90 days): |  |
| Date filing fee deposited: | @ 4-11-90 |

**Application sent to following:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Date sent</th>
<th>Comments received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Health</td>
<td>4-18-90</td>
<td>5-18-90</td>
</tr>
<tr>
<td>County water board/dept</td>
<td>4-16-90</td>
<td>4-30-90</td>
</tr>
<tr>
<td>Koolaua NB No.28</td>
<td>4-27-90</td>
<td></td>
</tr>
</tbody>
</table>

| Date agenda due: |  |
| Date submittal due: |  |
| Date submittal sent to applicant: | DEFERRED 6-27-90 |

| Date application approved or disapproved: |  |
| Date applicant notified of decision: |  |

**REMARKS:** Deferred — why not using non-potable
Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii

June 27, 1990

Gentlemen:

Kuilima Resort Company  
Application for a Pump Installation Permit  
Kahuku-Kuilima Resort Well, Kahuku, Oahu

Applicant: Kuilima Resort Company  
Landowner: Same

Action Requested: Permission to install a 700 gallons per minute (gpm) pump into Kahuku-Kuilima Resort Well (Well No. 4158-14) for golf course irrigation.

Proposed Amount of Withdrawal: 1,000,000 gallons per day.

Well Description:

Ground elevation: 9.8 ± ft.  
Casing diameter: 12-inch  
Solid casing depth: 79 ft.  
Open hole: 56 ft.  
Total depth: 135 ft.  
Pump Capacity: 700 gpm

Analysis: The well will develop water from a fresh basal aquifer. Use of the well may adversely affect existing wells in the area. Of particular concern is the effect on Well No. 4158-12, located 1,800 feet mauka of the well, which supplies potable water to the Kahuku Air Base Water System No. 315, operated by Campbell Estate and regulated under the Department of Health's Drinking Water Branch.

Water Availability: The well is located in the Windward Sector, Koolauloa System of Oahu, according to the latest work in conjunction with the Hawaii Water Plan. Sustainable yield is estimated at 35 mgd. Present use in the sector is approximately 14 mgd.

RECOMMENDATION:

That the Commission approve the issuance of a pump installation permit for Kahuku-Kuilima Resort Well, subject to the following conditions:

(1) The proposed use shall not adversely affect existing legal uses in the area.

Dover

ITEM 11
(2) The applicant shall comply with the following monitor plan:

a. Obtain weekly water samples for chloride analysis from the Kahuku Airbase Well (Well No. 4158-12), starting at least four weeks prior to startup of the new well, to obtain baseline data.

b. Continue weekly sampling following startup of the well for 12 weeks. If it is determined that there is a rise in chlorides due to pumpage of the new well, sampling shall continue on a weekly basis. If there are no indications of a rise in chlorides, sampling shall continue on a monthly basis for an additional 8 months.

c. Should there be any apparent adverse effects, a reduction of pumpage from the proposed well, or other mitigative measures, shall be negotiated between Kuilima Development Company and Campbell Estate.

d. The applicant shall collect all samples, have them analyzed by a commercial laboratory, and submit the results to the Commission staff. Details of the monitoring program shall be coordinated with the Commission staff.

(3) The applicant shall comply with all applicable laws, rules, and ordinances.

(4) 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 shall be completed within two years of the date of issuance.

Respectfully submitted,

MANABU TAGOMORI
Deputy Director

ATTACH.

APPROVAL FOR SUBMITTAL:

WILLIAM W. PATY, Chairperson
Kuilima Resort Company

Dear Kuilima Resort Company:

The Commission on Water Resource Management will be acting on your permit application for a Pump Installation Permit at its meeting on June 27, 1990, at 2:00 p.m., in the Kalanimoku Building, Board Room 130, Honolulu, Hawaii.

Your application will be included on the agenda as Item 11 (enclosed).

You or your representative are invited to attend the meeting.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:bm
Enc.
May 2, 1990

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Paty:

Subject: WELL CONSTRUCTION PERMIT APPLICATION
KAHU-KUILIMA RESORT WELL
STATE WELL NO. 4158-14
KAHU-K, OAHU

Thank you for the opportunity to review and comment on the subject application. We have examined the application and have the following comments to offer:

1. The application indicates that the proposed well will be limited to golf course irrigation. Thus, the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems," will not be applicable. However, in the event that the proposed uses were to change, please inform the Safe Drinking Water Branch.

2. The proposed well is situated above the Underground Injection Control (UIC) line. Land areas above the UIC line are considered to contain underground sources of drinking water. Thus, it is essential that the well be designed and constructed to prevent the possibility of groundwater contamination. For example, the well should have a concrete well pad and full grouting to prevent seepage or floodwaters from migrating down the well shaft.

3. The operation of the proposed Kuilima well should not be allowed to adversely affect the water quality of nearby drinking water wells. Our records indicate that the proposed well will be located approximately 2,000 feet downstream of the Kahuku Airbase system well (State well no. 4158-12).
The Honorable William W. Paty
Page 2
May 2, 1990

If you should have any questions, please contact the Safe Drinking Water Branch at [redacted].

Very truly yours,

[Signature]

JOHN C. LEWIN, M.D.
Director of Health

cc: Norman Quon
Kuillima Resort Company
Pauahi Tower
[redacted]
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: M. TAGOMORI

TO: INITIAL: 

PLEASE: See Me

Take Action By

Route to Your Branch

Review & Comment

Draft Reply

Acknowledgment Receipt

Xerox ___ copies

File

Mail

For Information

S. Kokubun

L. Nanbu

F. Ching

L. Choo

REMARKS: Bilig me

Monkeys
Mr. Manabu Tagomori, Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii

Dear Mr. Tagomori:

Subject: Well Construction Permit for Hawaii Kai Golf Course, TMK: 3-9-10:06, and Pump Installation Permit for Well at Kuilima Resort Golf Course, TMK: 5-1-03: 44

Thank you for the opportunity to comment on the applications. We have no objections to the issuance of a permit to drill a well at Hawaii Kai Golf Course to develop brackish water for irrigation. However, the Kuilima Golf Course well may compete with the State's proposed Kahuku Agricultural Park for the area's remaining developable basal water resources. We understand that instead of encountering brackish water for golf course irrigation, the well water met potable standards for salinity at 162 ppm chloride. If the permit is approved, then the proposed agricultural park should cut back its water requirement to prevent pumpages from exceeding the sustainable yield of the groundwater basin.

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer

170 ppm (ARCO Lab)
Chairperson and Members
Koolauloa Neighborhood Board No. 28
c/o Hauula Satellite City Hall

Dear Chairperson and Members:

Subject: Permit Applications, Koolauloa District

The Commission on Water Resource Management is presently reviewing permit applications for the following projects in the Koolauloa District:

- Hawaiian Memorial Park Irrigation Well (Well No. 2347-10)
- Kahuku-Kuilima Resort Well (Well No. 4158-14)
- Kuou II Well (Well No. 2348-05)

Please review the applications and submit any comments to the Division of Water and Land Development, at your earliest convenience. The Commission may act on these permits as early as their next scheduled meeting on May 16, 1990, so we ask your early review.

If you have any questions, please contact Ed Sakoda at .

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:bm
Enc.
Honorable Hoaliku L. Drake  
Director  
Department of Hawaiian Home Lands  
State of Hawaii

Dear Mrs. Drake:

Well Construction/Pump Installation Permit Applications

We are sending you a copy of the following permit applications and ask that your staff review each application to determine if Hawaiian Home Lands may be affected:

- Moloaa-Mattson Well (Well No. 1120-07)  
- Hawaii Kai Golf Course Well (Well No. 1840-08)  
- Kahuku-Kuilima Resort Well (Well No. 4158-14)  
- Kamaole-Bosa Well (Well No. 4326-07)  
- Keauhou-Kamehameha Investment Corporation Well (Well No. 3355-01)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Manabu Tagomori at...

Very truly yours,

WILLIAM W. PATY

Enc.
Honorable John C. Lewin, M.D.
Director
Department of Health
State of Hawaii

Attn. Mr. Thomas Arizumi, Drinking Water Branch

Dear Dr. Lewin:

Well Construction/Pump Installation Permit Applications

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168-12(c), we are sending you a copy of the following permit applications for your review:

Moloaa-Mattson Well (Well No. 1120-07)
Hawaii Kai Golf Course Well (Well No. 1840-08)
Kahuku-Kuilirna Resort Well (Well No. 4158-14)
Kamaole-Bosa Well (Well No. 4326-07)
Keauhou-Kamehameha Investment Corporation Well (Well No. 3355-01)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Manabu Tagomori at

Very truly yours,

WILLIAM W. PATY

Enc.
April 16, 1990

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu

Dear Mr. Hayashida:

Well Construction/Pump Installation Permit Applications

We are sending you a copy of the following permit applications for your review:

Hawaii Kai Golf Course Well (Well No. 1840-08)
Kahuku-Kuilima Resort Well (Well No. 4158-14)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Ed Sakoda at

Sincerely,

/\ MANABU TAGOMORI

MANABU TAGOMORI
Deputy Director

ES:bm
Enc.
March 26, 1990

Division of Water and Land Development
Department of Land and Natural Resources
State of Hawaii

Attention: Mr. Ed Sakoda

SUBJECT: Pump Installation Permit for Well No. 4158-14

We are transmitting herewith, on behalf of Kuilima Resort Company, an application for a pump installation permit for Well No. 4158-14, together with a filing fee of $25.

Enclosed are the following items:

1. Application for Pump Installation Permit
2. Driller's Report prepared by Roscoe Moss Company
3. Well Location Maps
4. Record of Step Rate Pump Tests and 72-hour Duration Test

We trust that this application meets with your satisfaction and we request your approval for installation of a 700 gpm pump to provide water for golf course irrigation purpose. Should you require any further information, please call me at [Contact Information].

ROBERT W. LAU, P.E.
President

Encls.

cc: Kuilima Development Co. - Mr. Eric Takamura
Mr. John Mink
Pay To The Order of DEPARTMENT OF LAND AND NATURAL RESOURCES $25.00

******************************TWENTY FIVE AND 00/100****************************** Dollars

PUMP INSTALLATION PERMIT APPL.
WELL NO. 4159-14

First Hawaiian Bank
KAPIOLANI BRANCH
HONOLULU, HAWAII
APPLICATION FOR

WELL CONSTRUCTION PERMIT

PUMP INSTALLATION PERMIT

[Details omitted for brevity]

1. WELL LOCATION

Island: Oahu

Tax Map Key: 5-6-03:44

Address:

(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name: Kuliima Resort Co.

Contact Person: Norman Quon

LANDOWNER

Firm Name: Kuliima Resort Co.

Contact Person: Norman Quon

3. PROPOSED CONTRACTOR FOR:

☐ Well Drilling

☐ Pump Installation

Name:

Not known - subject to bidding

Address:

Phone:

Contractor's License No.

4. PROPOSED WORK

☐ Drill New Well

☐ Deepen

☐ Redrill

☐ Alter

☐ Install New Pump

☐ Seal

☐ Abandon

☐ Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

☐ Municipal (including hotels, stores, etc.)

☐ Military

☐ Domestic (individual, noncommercial water systems)

☐ Industrial

☐ Irrigation (specify) Golf Course

☐ Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL

1,000,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type:

☐ Vertical Turbine

☐ Submersible

☐ Centrifugal

Motor:

☐ Diesel

☐ Gas

☐ Electric: 10

Rated Pump Capacity: 700 gallons per minute (gpm)

Well Owner (print): KULIMA RESORT CO.

Signature: [Signature]

Date: 3/23/90

For Official Use Only:

Field Checked By: [Signature]

Latitude: [Signature]

Hydrologic Unit: 4158-14

Date: [Signature]

Longitude: [Signature]

State Well No.: [Signature]
Briefly describe the proposed work:

Install pump within existing well, complete with related piping and electrical controls for pumping of water to a golf course irrigation holding pond.

Elevation at top of casing: 11.9 ft., msl.

Ground Elevation: 9.8 ft., msl*

Cement Grout: 79 ft.

Hole Dia.: 16 in.

Total Depth: 135 ft.

Rock Packing: ___ ft.

Solid Casing:
- Material: Steel
- Length: 79 ft.
- Diameter: 12 in.
- Wall thickness: 5/16 in.

Casing: / Perforated / Screen
- Material: ___
- Length: ___ ft.
- Diameter: ___ in.
- Wall thickness: ___ in.
- Openings: ___ sq. in./L.F.

Open Hole:
- Length: 56'
- Diameter: 12 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
Please:

See Me
Take Action By
Route to Your Branch
Review & Comment
Draft Reply
Acknowledge Receipt
Xerox copies
File
Mail
For Information

Remarks:

Both Kuluiama wells (4158-14 & 4258-11) have conditions requiring the applicant to "prepare a monitor plan, for approval by the Chairperson, to determine the effect pumping the proposed well has on existing wells in the area."

I'm working with DOH staff on this one since a nearby well is a drinking water well regulated by the Drinking Water Branch.
October 12, 1989

Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource Management
Department of Land & Natural Resources

SUBJECT: Kuilima Resort Wells 4158-14 and 4258-11

Pursuant to your letter of September 20, 1989, we have looked into the feasibility of using existing Well No. 4158-12, Well No. 4159-02 and Well No. 4159-01 as observation wells during the pump testing of the proposed Kuilima Resort wells.

Based on site visits, Wells 4158-12 and 4159-01 do not have any provision or means for measuring ground water levels and use of these wells as observation wells during the long term pumping test of the proposed wells does not appear feasible. Although requested of the Air Force, we have not been able to obtain permission to visit Well 4159-02. However, we doubt very much that use of this well for monitoring of ground water levels will be feasible.

We therefore propose that the effect of the proposed wells on these existing wells be monitored for a one year period after initial operation of the proposed wells. Monitoring as follows is proposed:

1. Obtain a water quality analysis of water samples to be taken from each existing well system prior to initial operation of the proposed new wells (to serve as baseline data).

2. Obtain a water quality analysis after 6 months and 12 months operation of the proposed wells.

3. All samples and analyses shall be made by Kuilima Development Company and the results submitted to DOWALD.

4. In the event of any apparent adverse effects, a reduction of pumpage from the proposed wells may be negotiated with Kuilima Development Company.
We trust that this proposed monitoring plan meets with your satisfaction and request your favorable consideration and approval.

ROBERT W. LAU, P.E.
President

cc: Mr. Ed Sakoda, DOWALD
**SURVEY BRANCH**

Division of Water Resource Management

**Kahuou-Kuiliou Resort Wells**

**FROM:** Ed  
**DATE:** 10/16/89  
**FILE IN:** 4158-14/4258-11

**TO:** INITIAL:

---

_ D. LUM
_ E. Sakoda
_ D. Nakano
_ P. Haraguchi
_ W. Rozeboom
_ R. Jinnai
_ M. Ohye
_ D. Hamada
_ K. Oshiro
_ M. Tagomori
_ G. Matsumoto
_ G. Akita
_ L. Chang
_ S. Kokubun
_ Y. Shiroma
_ _____________________

**PLEASE:**

---

___ See Me
___ Call
___ Review & Comment
___ Take Action
___ Investigate & Report
___ Draft Reply
___ Acknowledge Receipt
___ Type Draft
___ Type Final  
___ Xerox __ copies
___ File
___ Mail

**REMARKS:**

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Annual

Find out from DOH — frequency of sampling for Kahuou Air Base Water System No. 315. Discuss monitoring plan — get input from DOH staff.

Do we have baseline chloride data? Yes.

Is present monitoring (for Cl-) sufficient to determine if new wells affect existing well?
October 12, 1989

Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource Management
Department of Land & Natural Resources

SUBJECT: Kuilima Resort Wells 4158-14 and 4258-11

Pursuant to your letter of September 20, 1989, we have looked into the feasibility of using existing Well No. 4158-12, Well No. 4159-02 and Well No. 4159-01 as observation wells during the pump testing of the proposed Kuilima Resort wells.

Based on site visits, Wells 4158-12 and 4159-01 do not have any provision or means for measuring ground water levels and use of these wells as observation wells during the long term pumping test of the proposed wells does not appear feasible. Although requested of the Air Force, we have not been able to obtain permission to visit Well 4159-02. However, we doubt very much that use of this well for monitoring of ground water levels will be feasible.

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2. Obtain a water quality analysis after 6 months and 12 months operation of the proposed wells.

3. All samples and analyses shall be made by Kuilima Development Company and the results submitted to DOWALD.

4. In the event of any apparent adverse effects, a reduction of pumpage from the proposed wells may be negotiated with Kuilima Development Company.
We trust that this proposed monitoring plan meets with your satisfaction and request your favorable consideration and approval.

ROBERT W. LAU, P.E.
President

cc: Mr. Ed Sakoda, DOWALD
State of Hawaii  
DEPARTMENT OF LAND & NATURAL RESOURCES  
DIVISION OF WATER AND LAND DEVELOPMENT  
DRILLER'S REPORT

DESCRIPTION

Date of report: March 1, 1990  
 Person filing report: L.H. Runnels

WELL  
A. OWNER: Kuilima Development
NAME: Kuilima Well 4158-14  
ISLAND: Oahu

B. GENERAL LOCATION: Kuilima

C. DRILLING COMPANY: ROSCOE MOSS COMPANY

D. TYPE OF RIG: 60L  
DRILLING COMPLETED: 02-90  
DRILLER: J. Woerner

E. ELEVATION, msl: Top of drilling platform: 9.5 ft  
Height of drilling platform above ground surface: 0 ft  
elevation:

F. HOLE SIZE:  
24 inch dia. to 8 ft below drilling platform  
16 inch dia. to 79 ft below drilling platform  
12 inch dia. to 135 ft below drilling platform

G. CASING INSTALLED:  
12 in. I.D. x .312 in. wall solid section to 79 ft below drilling platform  
in. I.D. x in. wall perforated section to ft below drilling platform.
Type of perforation: None

H. ANNULUS: Grouted 0 ft to 79 ft below drilling platform  
Gravel packed ft to ft below drilling platform.

I. PERMANENT PUMP INSTALLATION:
- Pump type, make, serial no.
- Capacity g.p.m.
- Motor type, H.P., voltage, r.p.m.
- Depth of pump intake setting ft below
- Depth of bottom of airline ft below
- which elevation is ft

HYDROLOGY

J. INITIAL WATER LEVEL: 8.5 ft below drilling platform, Date of measurement: Jan. 9, 1990
K. INITIAL CHLORIDE: 352 ppm, total depth of well ft below drilling platform Feb. 6, 1990.

L. PUMPING TESTS:
Reference point (R.P.) used: which elevation is ft

M. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level ft</th>
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</thead>
<tbody>
<tr>
<td>0 to 9</td>
<td>Brown Clay</td>
<td></td>
</tr>
<tr>
<td>9 to 19</td>
<td>Coral</td>
<td></td>
</tr>
<tr>
<td>19 to 26</td>
<td>Boulder &amp; Coral</td>
<td></td>
</tr>
<tr>
<td>26 to 40</td>
<td>Brown Clay</td>
<td></td>
</tr>
<tr>
<td>40 to 58</td>
<td>Gray mud rock &amp; gravel</td>
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</tr>
<tr>
<td>58 to 70</td>
<td>Brown Clay &amp; rock</td>
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</tr>
<tr>
<td>70 to 74</td>
<td>Hard red clay</td>
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<tr>
<td>74 to 94</td>
<td>Rock broken</td>
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<tr>
<td>94 to 100</td>
<td>Hard rock</td>
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<tr>
<td>100 to 106</td>
<td>Red Cinders</td>
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</tr>
<tr>
<td>106 to 121</td>
<td>Med. rock</td>
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<table>
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<th>Rock Description &amp; Remarks</th>
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<tr>
<td>121 to 135</td>
<td>Rula Rock</td>
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</tr>
</tbody>
</table>

SUBSURFACE FORMATION

N. REMARKS:

FOR DRILLER'S USE

Job Name:  
Job No.:  

INSTRUCTIONS: Send three (3) copies to: Manager, Chief Engineer, Division of Water and Land Development.

FOR OFFICIAL USE

Latitude:  
Longitude:  
Well No.:  

EDP HAWAII INC.

RE: Kuilima Wells Irrigation Well #1

Well was tested at 100 ft. depth casing depth 79 ft.
Date tested: Feb. 6, 1990

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<tr>
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<th>Feet</th>
<th>D.O.</th>
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<tbody>
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<tr>
<td>700</td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>746</td>
<td>68</td>
<td></td>
<td>352 PPM</td>
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</table>

Checked with John Mink and Bobby Lau about the well. Pulled the pump going to deepen the well.

February 9, 1990
Tested the well at a depth of 115 ft.

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<td>824</td>
<td>64.67</td>
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<td>280 PPM</td>
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Checked with John Mink and Bobby Lau, pulled the pump, going to deepen the well to 135 ft.

February 14, 1990
Tested the well at a depth of 135 ft.

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<td>700</td>
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<tr>
<td>900</td>
<td>19.8</td>
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<td>240 PPM</td>
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February 15, 1990 - Pump tested the well 72 hours test.
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<th>Drawdown Ft.</th>
<th>PSI</th>
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Water Development • Well Drilling • Pump Sales and Service
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AECOS Lab. tested water February 18, 1990 170 PPM Chlorides
DESCRIPTION

Date of report: March 1, 1990
Person filing report: L.H. Runnels

A. OWNER: Kuilima Development
NAME: Kuilima Well 4158-14
ISLAND: Oahu

B. GENERAL LOCATION: Kuilima

C. DRILLING COMPANY: ROSCOE MOSS COMPANY

D. TYPE OF RIG: 60L
DRILLING COMPLETED: 02. 90
DRILLER: J. Werner

E. ELEVATION, msl: Top of drilling platform: 9.5 ft.
Height of drilling platform above ground surface: 0 ft.

F. HOLE SIZE:
- 24 inch dia. to 8 ft. below drilling platform.
- 16 inch dia. to 79 ft. below drilling platform.
- 12 inch dia. to 135 ft. below drilling platform.

G. CASING INSTALLED:
- 12 in. I.D. x 312 in. wall solid section to 79 ft. below drilling platform.
- in. I.D. x in. wall perforated section to ft. below drilling platform.
Type of perforation: None

H. ANNULUS: Grouted 0 ft. to 79 ft. below drilling platform.
Gravel packed ft. to ft. below drilling platform.

I. PERMANENT PUMP INSTALLATION:
- Pump type, make, serial no.
- Motor type, H.P., voltage, r.p.m.
- Depth of pump intake setting ft. below which elevation is ft.
- Depth of bottom of airline ft. below which elevation is ft.

HYDROLOGY

J. INITIAL WATER LEVEL: 8.5 ft. below drilling platform, Date of measurement: Jan. 9, 1990
K. INITIAL CHLORIDE: 352 ppm, total depth of well: 100 ft. below drilling platform

L. PUMPING TESTS:
Date: Feb. 6, 1990
Start water level: Ground level ft. below R. P.
End water level: Ground level ft. below R. P.
Depth of well: 100 ft. below R. P.

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<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Draw-down (ft.)</th>
<th>Cl- (ppm)</th>
<th>Temp. °F</th>
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Number of test: 72 hours test

M. DRILLER'S LOG:

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<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level, ft.</th>
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<tr>
<td>0. to 9</td>
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<tr>
<td>9. to 19</td>
<td>Coral</td>
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<td>19. to 26</td>
<td>Boulder &amp; Coral</td>
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<td>26. to 40</td>
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<td>40. to 58</td>
<td>Gray mud rock &amp; gravel</td>
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<td>58. to 70</td>
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<td>70. to 74</td>
<td>Hard red clay</td>
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<td>Hard rock</td>
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<td>100. to 106</td>
<td>Red Cinders</td>
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<td>106. to 121</td>
<td>Med. rock</td>
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N. REMARKS:

INSTRUCTIONS: Send three (3) copies to: Manager-Chief Engineer, Division of Water and Land Development.

FOR OFFICIAL USE
Latitude: 21° 41' 52"
Longitude: 157° 58' 61"
Well No: 4158-14
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Water Development • Well Drilling • Pump Sales and Service
# KUILIMA DEVELOPMENT WELL #1

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AECOS LAB. tested water February 18, 1990 170 PPM Chlorides
September 20, 1989

Mr. Robert W. Lau, President
EDP Hawaii, Inc.

Dear Mr. Lau:

We acknowledge receipt of your letter of September 7, 1989, concerning Kuilima Resort Well No. 4158-14. Condition 7 of the well construction permit issued by the Commission on July 26, 1989 requires the applicant to prepare a monitor plan for approval by the Chairperson to determine the effect pumping the proposed well has on existing wells in the area.

We are especially concerned with any possible adverse effects the proposed well may have on existing Well No. 4158-12, located 1,800 feet mauka of the proposed well. The well supplies potable water to the Kahuku Air Base Water System No. 315, operated by Campbell Estate, and is regulated under the Department of Health's Drinking Water Program. Other nearby wells which may be influenced by the proposed well include Well No. 4159-01 (Pump 2), used for irrigation, and Well No. 4159-02, used by the Air Force for non-potable domestic use. The wells are located 1,800 feet west of the proposed well.

The applicant shall determine the feasibility of using the above wells as observation wells during the long-term pumping test of the proposed well and shall include it as part of the monitor plan. Drilling of the well may begin before the monitor plan is approved. However, the monitor plan shall be submitted to and approved by the Chairperson prior to pump testing the well.

Sincerely,

MANABU TAGONORI
Deputy Director

ES:DL:ko
September 7, 1989

Division of Water and Land Development  
Department of Land and Natural Resources  
State of Hawaii

Attention: Mr. Ed Sakoda

SUBJECT: Kuilima Resort Well No. 4158-14

In compliance with Condition #7 of the Well Construction Permit issued on July 26, 1989, we are transmitting herewith for your approval our proposed specifications for the well drilling work which includes the monitoring requirements during drilling and testing of the well.

We trust that these requirements meet with your satisfaction and request your earliest approval in order that we may go out for bid for the drilling of this well. Should you require further information, please call me at [...].

ROBERT W. LAU, P.E.
President

Encl.
SECTION 1B. MISCELLANEOUS APPURtenant ITEMS

1. DRILLERS REPORT AND DAILY Logs. The Contractor shall maintain a continuous log of the drilling of the well, including a description and samples of the materials encountered, together with the depths to the top and bottom of each change in geologic characteristics. The log shall include a record of water levels encountered, any changes thereof, and the rate of flow at the surface, if any, for different depths of drilling.

Within fifteen (15) calendar days after construction of the well, the Contractor shall submit six (6) copies of the Driller's Report to the Owner for submittal to the Department of Land and Natural Resources.

2. ABANDONMENT OF WELL. In the event that the Contractor shall fail to drill the well to the depth specified, or should he abandon the well due to imperfections in plumbness or alignment, loss of tools or any other cause, he shall remove whatever casing installed if necessary and fill the abandoned well with clay, rock, aggregate and cement grout as the Owner may specify. The Contractor shall not be compensated for any work done on the well that is abandoned. Any partial payment made for work done on a well which is later abandoned shall be deducted from the amount which becomes payable for work done on a new well.

3. WATER QUALITY TESTING. The Contractor shall make his own arrangements with a laboratory properly certified by the State of Hawaii for performance of tests necessary pertaining to the quality of the well water from the newly drilled well for organic, inorganic and bacteriological requirements as delineated in Chapter 20 of Title II, Administrative Rules, entitled "Potable Water Systems" of the Department of Health, State of Hawaii and subsequent amendments. The Contractor shall be responsible to obtain two (2) samples and in a manner that shall adequately meet testing requirements. Six copies of such test data shall be submitted to the Owner within 15 calendar days after completion of the well.

* * * * *
SECTION 4A. DRILLING AND INSTALLATION OF WELL

1. GENERAL. Work and materials in this section shall be in accordance with Part III, Section 5, Well Drilling, of the Water System Standards, 1985 as amended, and as supplemented and/or modified in these specifications. Drilling and casing shall be undertaken as expeditiously as possible. Installation of permanent pumps and motors and the mechanical, electrical, and support facilities shall be at a later date under a separate contract.

2. DIAMETER. The well shall be drilled to a diameter of 16 inches minimum and sufficient to permit the installation of a 12-inch 10 steel casing of 5/16-inch minimum thickness with an annular space of at least 1-1/2-inches all around the outside of the casing as shown on the plans. All drilling below the bottom of the casing shall be to the minimum diameter as indicated on the plans.

3. ORDER OF WORK. The Contractor shall proceed in the order specified hereinafter. The well depth as called for is approximate, and the Owner reserves the right to change the depth, as required, depending on the field conditions. No blasting shall be permitted on this project.

   a. Well drilling shall extend from the finish ground elevation to the bottom of the well casing elevation, as shown on the plans and in accordance with Part III, Section 5.3 of the Water System Standards.

   b. Well casing shall be installed as detailed on the drawing and in accordance with Part III, Section 5.4 of the Water System Standards.

   c. Annular space shall be filled with grout in accordance with Part III, Section 5.5 of the Water System Standards.

   d. Well drilling below bottom of casing shall then be continued through the casing to the elevation of the bottom of well, as shown on the plans and in accordance with Part III, Section 5.8 of the Water System Standards. This portion of the well shall not be cased.

      (1) The well shall be purged clean after completion of drilling to bottom of the well. Purging of the well shall be at the rate in accordance with Section 4A-Item 5, "Cleansing of Well" of the Specifications hereinafter.

   e. Cleansing of well shall be performed in accordance with Section 4A, Item 5 of the specifications hereinafter.

   f. Testing for yield and drawdown shall be performed in accordance with Part III, Sections 5.11 and 5.12 of the Water System Standards and Section 4A, Item 6 of the specifications hereinafter.

   g. Additional well drilling, cleansing, and testing shall be performed in the event the results of the yield and drawdown test are not satisfactory. Such work shall be in accordance with the specifications hereinafter.

   h. Final chlorination of well. After the well has been completely constructed it shall be thoroughly cleaned of all foreign substance including, but not limited to, tools, timbers, rope, debris of any kind, cement, oil, grease, joint dope, and scum. The casing pipe shall be thoroughly swabbed, using alkalis if necessary to remove oil, grease, and joint dope. The well shall then be disinfected with a chlorine solution.
The chlorine solution used for disinfecting the well shall be of such volume and strength and shall be so applied that a concentration of at least 50 ppm of chlorine shall be obtained in all parts of the well.

In the event that the test pump is installed after the well has been disinfected, all exterior parts of the test pump coming in contact with the water shall be disinfected with the chlorine solution.

4. PLUMBNESS AND ALIGNMENT. The well shall be drilled circular with the casing set plumb and true to line and be within the tolerances of Part III, Section 5.6 of the Water System Standards. Errors of plumbness and alignment shall be corrected by the Contractor at his own expense.

5. CLEANSING OF WELL. The Contractor shall furnish and install a pump capable of pumping 1,200 gpm minimum with a pumping head sufficient to discharge water from the well above ground surface, with the pump suction set at a maximum of 5 feet above the bottom of the casing. Pumping and purging the well shall be at a rate of 1,100 gpm or greater. The Contractor shall be responsible to make arrangements for the proper and safe disposal of all discharge water. Such work shall be in accordance with Part III, Section 5.10 of the Water System Standards.

6. TESTING FOR YIELD-DRAWDOWN AND SUSTAINED PUMPING. The Contractor shall furnish and install a pump capable of pumping 1,100 gpm with a pumping head sufficient to discharge water from the well above ground surface with the pump suction set at 5 feet maximum above the bottom of the casing. The Contractor shall be responsible to properly support the test pump and piping. The Contractor shall also be responsible to make arrangements for the proper and safe disposal of all discharge water.

The Contractor shall test the well for yield, drawdown and chloride concentration at the following rates:

- 500 gpm
- 700 gpm
- 900 gpm
- 1,100 gpm

Pumping shall be at each rate for a minimum of 1 hour or until the water level in the well stabilizes for a period of 30 minutes, whichever is longer.

The Contractor shall record pumping rates and drawdown at approximately 10-15 minute intervals and provide two chloride concentration measurements for each rate of testing.

A separate sustained pumping test shall be performed after the yield drawdown test. The sustained pumping test shall be at a rate of 700 gpm for a minimum of 72 hours.

During this test period the following shall be measured and recorded:

a. Drawdown and chloride concentration every hour for initial 24-hour period and every 4 hours thereafter to the end of the testing period.

b. Two water samples for water quality testing; one to be taken at about the 24-hour period and one at about the 60-hour period.

Drawdown shall be accurately measured by the air line method utilizing a mercury manometer capable of being read to the nearest 0.1 foot of water or by an approved measuring device of equivalent accuracy.
7. **COMPLETION OF WELL.** The well shall be cleaned out and all foreign matter removed and a welded cap shall be installed in accordance with plans and Part III, Section 5.13 of the Water System Standards. In addition, the Contractor shall remove all blocks, pipes, and materials not incorporated in or necessary to the completed well and leave the site in a neat and orderly fashion in accordance with Part III, Section 5.4 of the Water System Standards.

* * * * *
September 7, 1989

Division of Water and Land Development  
Department of Land and Natural Resources  
State of Hawaii

Attention: Mr. Ed Sakoda

SUBJECT: Kuilima Resort Well No. 4158-14

In compliance with Condition #7 of the Well Construction Permit issued on July 26, 1989, we are transmitting herewith for your approval our proposed specifications for the well drilling work which includes the monitoring requirements during drilling and testing of the well.

We trust that these requirements meet with your satisfaction and request your earliest approval in order that we may go out for bid for the drilling of this well. Should you require further information, please call me at [redacted].

ROBERT W. LAU, P.E.  
President

Encl.
SECTION 1B. MISCELLANEOUS APPURTENANT ITEMS

1. DRILLERS REPORT AND DAILY LOGS. The Contractor shall maintain a continuous log of the drilling of the well, including a description and samples of the materials encountered, together with the depths to the top and bottom of each change in geologic characteristics. The log shall include a record of water levels encountered, any changes thereof, and the rate of flow at the surface, if any, for different depths of drilling.

Within fifteen (15) calendar days after construction of the well, the Contractor shall submit six (6) copies of the Driller's Report to the Owner for submittal to the Department of Land and Natural Resources.

2. ABANDONMENT OF WELL. In the event that the Contractor shall fail to drill the well to the depth specified, or should he abandon the well due to imperfections in plumbness or alignment, loss of tools or any other cause, he shall remove whatever casing installed if necessary and fill the abandoned well with clay, rock, aggregate and cement grout as the Owner may specify. The Contractor shall not be compensated for any work done on the well that is abandoned. Any partial payment made for work done on a well which is later abandoned shall be deducted from the amount which becomes payable for work done on a new well.

3. WATER QUALITY TESTING. The Contractor shall make his own arrangements with a laboratory properly certified by the State of Hawaii for performance of tests necessary pertaining to the quality of the well water from the newly drilled well for organic, inorganic and bacteriological requirements as delineated in Chapter 20 of Title II, Administrative Rules, entitled "Potable Water Systems" of the Department of Health, State of Hawaii and subsequent amendments. The Contractor shall be responsible to obtain two (2) samples and in a manner that shall adequately meet testing requirements. Six copies of such test data shall be submitted to the Owner within 15 calendar days after completion of the well.

*** *** ***
SECTION 4A. DRILLING AND INSTALLATION OF WELL

1. GENERAL. Work and materials in this section shall be in accordance with Part III, Section 5, Well Drilling, of the Water System Standards, 1985 as amended, and as supplemented and/or modified in these specifications. Drilling and casing shall be undertaken as expeditiously as possible. Installation of permanent pumps and motors and the mechanical, electrical, and support facilities shall be at a later date under a separate contract.

2. DIAMETER. The well shall be drilled to a diameter of 16 inches minimum and sufficient to permit the installation of a 12-inch ID steel casing of 5/16-inch minimum thickness with an annular space of at least 1-1/2-inches all around the outside of the casing as shown on the plans. All drilling below the bottom of the casing shall be to the minimum diameter as indicated on the plans.

3. ORDER OF WORK. The Contractor shall proceed in the order specified hereinafter. The well depth as called for is approximate, and the Owner reserves the right to change the depth, as required, depending on the field conditions. No blasting shall be permitted on on this project.

   a. Well drilling shall extend from the finish ground elevation to the bottom of the well casing elevation, as shown on the plans and in accordance with Part III, Section 5.3 of the Water System Standards.

   b. Well casing shall be installed as detailed on the drawing and in accordance with Part III, Section 5.4 of the Water System Standards.

   c. Annular space shall be filled with grout in accordance with Part III, Section 5.5 of the Water System Standards.

   d. Well drilling below bottom of casing shall then be continued through the casing to the elevation of the bottom of well, as shown on the plans and in accordance with Part III, Section 5.8 of the Water System Standards. This portion of the well shall not be cased.

      (1) The well shall be purged clean after completion of drilling to bottom of the well. Purging of the well shall be at the rate in accordance with Section 4A-Item 5, "Cleansing of Well" of the Specifications hereinafter.

   e. Cleansing of well shall be performed in accordance with Section 4A, Item 5 of the specifications hereinafter.

   f. Testing for yield and drawdown shall be performed in accordance with Part III, Sections 5.11 and 5.12 of the Water System Standards and Section 4A, Item 6 of the specifications hereinafter.

   g. Additional well drilling, cleansing, and testing shall be performed in the event the results of the yield and drawdown test are not satisfactory. Such work shall be in accordance with the specifications hereinafter.

   h. Final chlorination of well. After the well has been completely constructed it shall be thoroughly cleaned of all foreign substance including, but not limited to, tools, timbers, rope, debris of any kind, cement, oil, grease, joint dope, and scum. The casing pipe shall be thoroughly swabbed, using alkalis if necessary to remove oil, grease, and joint dope. The well shall then be disinfected with a chlorine solution.

4A-1
The chlorine solution used for disinfecting the well shall be of such volume and strength and shall be so applied that a concentration of at least 50 ppm of chlorine shall be obtained in all parts of the well.

In the event that the test pump is installed after the well has been disinfected, all exterior parts of the test pump coming in contact with the water shall be disinfected with the chlorine solution.

4. PLUMBNESS AND ALIGNMENT. The well shall be drilled circular with the casing set plumb and true to line and be within the tolerances of Part III, Section 5.6 of the Water System Standards. Errors of plumbness and alignment shall be corrected by the Contractor at his own expense.

5. CLEANSING OF WELL. The Contractor shall furnish and install a pump capable of pumping 1,200 gpm minimum with a pumping head sufficient to discharge water from the well above ground surface, with the pump suction set at a maximum of 5 feet above the bottom of the casing. Pumping and purging the well shall be at a rate of 1,100 gpm or greater. The Contractor shall be responsible to properly support the test pump and piping. The Contractor shall also be responsible to make arrangements for the proper and safe disposal of all discharge water. Such work shall be in accordance with Part III, Section 5.10 of the Water System Standards.

6. TESTING FOR YIELD-DRAWDOWN AND SUSTAINED PUMPING. The Contractor shall furnish and install a pump capable of pumping 1,100 gpm with a pumping head sufficient to discharge water from the well above ground surface with the pump suction set at 5 feet maximum above the bottom of the casing. The Contractor shall be responsible to properly support the test pump and piping. The Contractor shall also be responsible to make arrangements for the proper and safe disposal of all discharge water. The Contractor shall test the well for yield, drawdown and chloride concentration at the following rates:

- 500 gpm
- 700 gpm
- 900 gpm
- 1,100 gpm

Pumping shall be at each rate for a minimum of 1 hour or until the water level in the well stabilizes for a period of 30 minutes, whichever is longer.

The Contractor shall record pumping rates and drawdown at approximately 10-15 minute intervals and provide two chloride concentration measurements for each rate of testing.

A separate sustained pumping test shall be performed after the yield drawdown test. The sustained pumping test shall be at a rate of 700 gpm for a minimum of 72 hours.

During this test period the following shall be measured and recorded:

a. Drawdown and chloride concentration every hour for initial 24-hour period and every 4 hours thereafter to the end of the testing period.

b. Two water samples for water quality testing; one to be taken at about the 24-hour period and one at about the 60-hour period.

Drawdown shall be accurately measured by the air line method utilizing a mercury manometer capable of being read to the nearest 0.1 foot of water or by an approved measuring device of equivalent accuracy.

4A-2
7. **COMPLETION OF WELL.** The well shall be cleaned out and all foreign matter removed and a welded cap shall be installed in accordance with plans and Part III, Section 5.13 of the Water System Standards. In addition, the Contractor shall remove all blocks, pipes, and materials not incorporated in or necessary to the completed well and leave the site in a neat and orderly fashion in accordance with Part III, Section 5.4 of the Water System Standards.

* * * * *
Dear Mr. Lam:

We acknowledge receipt of your letter of September 7, 1989, concerning Kauai Reservoir Well No. 4158-14. Condition 7 of the well construction permit issued by the Commission on July 26, 1989 requires the applicant to prepare a monitor plan, for approval by the Chairperson, to determine the effect pumping the proposed well has on the existing wells in the area.

We are especially concerned with any possible adverse effects the proposed well may have on the existing well, Tainui, well No. 4158-12, located 1800 feet north of the proposed well. The well supplies drinking water to the Kauai Air Base Water System No. 315, operated by Campbell Estates and is part of the Department of Health's Drinking Water Program. Other wells nearby which may be affected or may be influenced by the proposed well include Ainaaina Well No. 4159-01 (Pump 2), and
If you have any questions, please contact Dr. Lam.

Drilling of the well may begin before the monitor plan is approved. However, the applicant should provide the approval by the Agency prior to drilling the well. Drilling of the well may begin before the monitor plan is submitted and approved. If the Agency approves the monitor plan, the applicant will be required to conduct the well during the approved time and shall include it as part of the monitor plan.

The applicant will determine the feasibility of using an alternative method of observation.
WELL CONSTRUCTION PERMIT

for

Kahuku-Kuilima Resort Well
Well No. 4158-14
Kahuku, Oahu

TO: Kuilima Resort Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well No. 4158-14 within Tax Map Key: 5-6-03:44 for golf course irrigation use, is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary pump installation permit from the Commission.

3. The following shall be submitted to DOWALD within 30 days after completion of the well:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.
4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

6. Use of the well will be allowed only if non-potable water sources are not available. The golf course will switch to non-potable water for irrigation if non-potable sources become available in the future.

7. Pumpage from the well shall not interfere with existing legal uses in the area. The applicant shall prepare a monitor plan, for approval by the Chairperson, to determine the effect pumping the proposed well has on existing wells in the area.

Date of Issuance

cc: USGS
    Department of Health,
    Drinking Water Program
    Ground Water Protection Program
    Honolulu Board of Water Supply
The Honorable William W. Paty, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii

Dear Mr. Paty:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATION  
KAHUKU-KUILIMA WELL  
STATE WELL NO. 4158-14  
KAHUKU, OAHU

Thank you for the opportunity to review the subject document. We have reviewed the application and have the following comments to offer:

1. The application indicates that the proposed well be used for golf course irrigation. Thus, the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems," will not be applicable.

2. The proposed well is situated above the Underground Injection Control (UIC) line. Land areas above the UIC line are considered to contain underground sources of drinking water. Thus, it is essential that the well be designed and constructed to prevent the possibility of groundwater contamination. For example, the well should have a concrete well pad and full grouting to prevent seepage or floodwaters from migrating down the well shaft.

3. The operation of these wells should not be allowed to adversely affect the water quality of nearby drinking water wells.

If you should have any questions, please contact the Drinking Water Program at [redacted].

Very truly yours,

[Signature]

JOHN C. LEWIN, M.D.  
Director of Health
July 11, 1989

Kuilima Resort Company

Gentlemen:

The Commission on Water Resource Management will be acting on your permit application for Kahuku-Kuilima Resort Well (4158-14) at their regularly scheduled meeting on July 19, 1989, at 2:00 p.m. in Board Room 132, 1151 Punchbowl Street, Honolulu.

Your application will be included on the agenda as Item 12 (attached).

You or your representative are invited to attend the meeting.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:bm
Enc.
Honorable John C. Lewin, M.D.
Director of Health
Department of Health

Attention: Mr. Thomas Arizumi, Drinking Water Program

Dear Dr. Lewin:

Well Construction Permit Applications

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168-12(c), we are sending you a copy of the following permit applications:

- Kahuku-Kuilima Resort Well (4158-14)
- Kohala Forest Reserve-Parker Ranch Well (6239-02)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Nanabu Tagomori at [number removed].

Very truly yours,

WILLIAM W. PATY

Enc.
Copy given to Ed

this is item 15 on meeting agenda

Fig. 16 showing 19
Mr. Manabu Tagomori  
Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  

Dear Mr. Tagomori:

Subject: Your Letter Dated June 20, 1989 on Well Permit Application (4158-14) for Kahuku-Kuilima Resort Well

Thank you for the opportunity to comment on the application.

The depths of the cased and uncased portions indicate that the proposed well will be pumping water from the basal aquifer. We recommend that the well permit application be approved with the conditions that use of the well will be allowed only if non-potable water sources are not available and the golf course will switch to non-potable water for irrigation if non-potable sources become available in the future. To conserve potable water, irrigation of golf courses should be accomplished with non-potable sources of water, such as reclaimed effluent and caprock water.

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer
June 20, 1989

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu

Dear Mr. Hayashida:

We would appreciate your review and comments of the following well construction permit application:

Kahuku-Kuulima Resort Well (4158-14)

Please submit any comments to us, orally or in writing, within three weeks from the date of this letter.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

ES:ko
Encl.
June 20, 1989

Kuilima Resort Co.

Gentlemen:

We acknowledge receipt of your application and $25.00 filing fee to construct a well (4158-14) for golf course irrigation use at Tax Map: 5-6-03:44, Kahuku, Oahu.

My staff is processing the application and will contact you should there be any questions.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:ko
EDP HAWAII, INC.

PAY TO THE ORDER OF DEPARTMENT OF LAND AND NATURAL RESOURCES

**************TWENTY FIVE AND 00/100******************************************** DOLLARS

KAPIOLANI BRANCH
First Hawaiian Bank
HONOLULU, HAWAII

FILING FEE - WELL CONSTRUCTION PERMIT
KAHU-KUILIMA RESORT WELL (4/58-14)

June 13, 1989

[Signature]
June 13, 1989

Division of Water and Land Development
Department of Land and Natural Resources
State of Hawaii

Attention: Mr. Ed Sakoda

SUBJECT: Kuilima Resort - Well Construction Permit

We are transmitting herewith, on behalf of Kuilima Resort Company, an application for a well construction permit together with a filing fee of $25.00.

Your earliest consideration and approval of this application will be greatly appreciated. Should you have any questions or require further information regarding this matter, please call me at [redacted].

ROBERT W. LAU, P. E.
President

Encls.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Division of Water Resource Management

APPLICATION FOR

X  WELL CONSTRUCTION PERMIT
   PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. If necessary, phone Hydrology/Geology Section for assistance.

1. WELL LOCATION

   Island   Oahu   Tax Map Key   5-6-03:44

   Address

   (Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

   Firm Name   Kui'ima Resort Co.
   Contact Person   Norman Quon

   LANDOWNER

   Firm Name   Kui'ima Resort Co.
   Contact Person   Norman Quon

3. PROPOSED CONTRACTOR FOR:  
   [ ] Well Drilling  [ ] Pump Installation

   Name   Not known - subject to bidding
   Phone

   Address

   Contractor's License No.

4. PROPOSED WORK

   [ ] Drill New Well  [ ] Deepen  [ ] Redrill
   [ ] Alter  [ ] Seal  [ ] Abandon
   [ ] Install New Pump  [ ] Replace Pump  [ ] Modify Pump

   (Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

   [ ] Municipal (including hotels, stores, etc.)  [ ] Military
   [ ] Domestic (individual, noncommercial water systems)  [ ] Industrial
   [ ] Irrigation (specify)   Golf Course  [ ] Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL   1,000,000 gallons per day

7. PROPOSED PUMP INFORMATION

   Pump Type:  [ ] Vertical Turbine  [ ] Submersible  [ ] Centrifugal
   Motor:  [ ] Diesel  [ ] Gas  [ ] Electric:  15
   Rated Pump Capacity   700 gallons per minute (gpm)

Well Owner (print)   Kui'ima Resort Co.
Signature   Takeshi Sato
Date   ____________________________

Landowner (print)   Kui'ima Resort Co.
Signature   Takeshi Sato
Date   ____________________________

For Official Use Only:
Field Checked By   ____________________________
Latitude   ____________________________
Hydrologic Unit
Longitude   ____________________________
State Well No.   4/58 - 14
Briefly describe the proposed work:

Drill, case and pump test a new well to be used for furnishing water for golf course irrigation purposes.

Elevation at top of casing 12 ft., msl.

Cement Grout 60 ft.
Hole Dia. 16 in.
Total Depth 95 ft.
Rock Packing ___ ft.

Ground Elev. 10 ft., msl*

Solid Casing:
Material Steel
Length 65 ft.
Diameter 12 in.
Wall thickness 5/16 in.

Casing: / /Perforated / /Screen
Material ____________
Length _______ ft.
Diameter _______ in.
Wall thickness _______ in.
Openings _______ sq. in./L.F.

Open Hole:
Length 35'
Diameter 11-1/2 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.