State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrm/

1. State Well No.: 5629-01 Well Name: Piwai Well #2 Island: Kauai
2. Address: Upper Omao Tax Map Key: 2-5-01:02
4. Date Pump Installed: December 04, 2007
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Lineshaft Vertical Turbine, Goulds, 12CMC, SN 515815-2
   Rated Capacity: 1050 gpm at head of: 660 ft.
   Motor Type, H.P., Voltage, rpm: VHS, US Motors, 250 HP, 460V, 1785 RPM
   Pump type (check one):
   □ Deep Well Turbine □ Rotary □ Reciprocating
   □ Submersible □ Rotary-Displacement □ Impulse
   □ Centrifugal □ Rotary-Gear
6. Method of flow measurement:
   □ Flowmeter Manufacturer Wyatt/Badger Model no. BVT-F Size 8" 
   □ Other, explain and attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Attach the rating curve for the installed pump.
9. Attach photograph of well clearly showing the benchmark on the concrete pad, the well head, and the method of flow measurement.
10. Well Owner Company: Kauai Department of Water Supply Contact: Bruce Inouye
    Address: 4398 Pua Loke Street, Lihue, HI 96766 Phone: 808 245-5415 Fax: 808 245-5813
11. Land Owner Company: Kauai Department of Water Supply Contact: Bruce Inouye
    Address: 4398 Pua Loke Street, Lihue, HI 96766 Phone: 808 245-5415 Fax: 808 245-5813
12. Remarks

Pump Installation Contractor (print): Beylik Drilling C-57/C-57a/A Lic. No. AC-21896
Signature [Signature] Date 3-10-08
7. AS-BUILT PUMP SECTION
(Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = L--=--=--=--= ft. mean sea level

Elev (pending - 618') ft. MSL

If airline installed, bottom of airline elevation = NA ft. mean sea level

Chase tube depth = 632.5 ft. (referenced to bench mark)

Pump intake depth = 643.1 ft. (referenced to bench mark)
ITT - Goulds Pumps
Turbine Operations

SO: 515815-2
Model: 12CMC/10

Certified Test Results
Flow - GPM
Imp Dia: 8.69 in
Speed: 1770 RPM

Design

Certified by: Don Holgo
Title: Engineer
Date: Oct. 16, 2006

Rev 1
5/2002
ITT Industries

ITT - Goulds Pumps
Turbine Operations

Flow - GPM
Eff

0
10
20
30
40
50
60
70
80
90
100
0
100
200
300
400
500
600
700
800
900
1000

TDH - Ft

TDH

Horsepower

0
200
400
600
800
1000
1200
1400
1600

0
20
40
60
80
100

Efficiency - %

Create with LTPro, (c) Oct 14, 2002.
February 19, 2009

Mr. Ken Kawahara, Deputy Director
DLNR Commission on Water Resource Management
1151 Punchbowl Street, Room 227
Honolulu, HI 96813

Attention: Mr. Charley Ice

Dear Mr. Kawahara:

Subject: Final Environmental Assessment (FEA)
Piwai 677' 0.5 MG Storage Tank
Lawai-Omao Water System

Thank you for your comment letter dated July 9, 2007 in response to the Draft Environmental Assessment (copy enclosed for your reference). The County will incorporate this project into the Water Use and Development Plan. With respect to Piwai Wells 2 and 3 (5629-01 and 02), the Well Completion Report – Part II for the wells were completed March 21, 2008. We hope these responses are to your satisfaction. The Final Environmental Assessment will be forthcoming.

Sincerely,
FUKUNAGA & ASSOCIATES, INC.

[Signature]
Lynn Malingr

encl.
cc: Keith Fujimoto, KDOW
Ms. Lynn Malinger  
Fukunaga & Associates  
1388 Kapiolani Boulevard  
Honolulu HI  96814

Dear Ms. Malinger:

SUBJECT: Piwai 677 0.5 mg Water Storage Tank DEA

FILE NO.:  

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://www.hawaii.gov/dlnr/cwrm.

Our comments related to water resources are checked off below.

1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

3. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM: Additional information and forms are available at www.hawaii.gov/dlnr/cwrm/forms.htm.

4. The proposed water supply source for the project is located in a designated ground-water management area, and a Water Use Permit is required prior to use of ground water.

5. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.

6. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
7. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

8. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

9. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

10. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

11. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

12. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

13. We recommend that the report identify feasible alternative non-potable water resources, including reclaimed wastewater.

OTHER:

Piwai Well Construction Permits for Well Nos. 5629-01 & -02 have been extended three times and have expired as of May 1, 2007. Any work underway should be suspended pending reapplication, subject to fines of up to $5000 per day.

The project should not affect surface water.

If there are any questions, please contact Charley Ice at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

DRF-IA 04/15/2005
May 5, 2008

Mr. Fred Camero
Beylik Drilling and Pump Service, Inc.
91-259A Olai Street
Kapolei, HI 96707

Dear Mr. Camero:

Well Completion Report Part II for Well Nos. 5629-01 & 02

We received your Well Completion Report Part II for the Piwai Wells 2 & 3 (Well Nos. 5629-01 & 02) on March 24, 2008, and acknowledge that it is complete.

This completes your obligations under the pump installation permit. A certificate of pump installation completion will be issued to the well operator/landowner and you will receive a copy. The certificate transfers responsibility of all aspects of well usage and maintenance from you to the well operator/landowner.

If you have any questions, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 274-3141 (Kauai), extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Cl: ss

c: Tom Shigemoto, Kukuiula Development Company
    Tom Nance Water Resource Engineering
May 5, 2008

Mr. Tom Shigemoto
Kukuiula Development Company
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Certificate of Well Construction Completion for Well Nos. 5629-01 & 02 (TMK 2-5-001:002)

We are pleased to inform you that the Well Construction work permitted for the Piwai Wells 2 & 3 (Well Nos. 5629-01 & 02) is complete and acceptable.

To protect Hawaii's natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. Before this well can be pumped on a regular basis, a certificate of pump installation completion must be obtained.
2. If the well is not in use it must be properly capped.
3. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.
4. In the event that the well operator and/or landowner changes, the Commission shall be notified of the change prior to the change, and all forms shall be transferred to the new owner.
5. In the event the benchmark in the concrete base of the well is altered in any way, an updated elevation survey (page 5 of the Well Completion Report Part I) shall be submitted to the Commission. The Well Completion Report Part I can be obtained by contacting staff or at www.hawaii.gov/dlnr/cwnnlfonns.htm.

Because groundwater in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the Hawaii Administrative Rules, may be subject to fines of up to $5,000/day. The Commission needs your help and asks that you do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 274-3141 (Kauai), extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Cl: ss

c: Kauai Department of Water
Beylik Drilling and Pump Service, Inc.
May 5, 2008

Mr. Tom Shigemoto
Kukuiula Development Company
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Certificate of Pump Installation Completion for Well Nos. 5629-01 & 02 (TMK 2-5-001:002)

We are pleased to inform you that the Pump Installation work permitted for the Piwai Wells 2 & 3 (Well Nos. 5629-01 & 02) is complete and acceptable. This certificate of pump installation completion allows you to commence pumping your well for reasonable & beneficial water use.

To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. If the well is not in use it must be properly capped.

2. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

3. In the event that the well operator and/or landowner changes, the Commission shall be notified of the change prior to the change, and all forms shall be transferred to the new owner.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated elevation survey (page 5 of the Well Completion Report Part I) shall be submitted to the Commission. The Well Completion Report Part I can be obtained by contacting staff or at www.hawaii.gov/dlnr/cwnnlforms.htm.

5. Your approved pump has a capacity of 1050 gpm at a head of 660 ft. In the future, pump replacements of equal or lesser capacity will not require an additional permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer. If the pump replacement is greater than the existing pump, you will need to apply for a new pump installation permit.
6. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR.

7. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. The authorization to drill a well and/or install a pump shall not constitute a determination of correlative water rights. The landowner and well operator are notified that the quantity of water taken from the well and/or the pump capacity could be reduced by the Commission in the future.

8. In the event that your installed pump is less than 70 gallons per minute, and no elevation survey has been completed, you may be required to do one in the future.

Because groundwater in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions, or any other provision of the Hawaii Administrative Rules, may be subject to fines of up to $5,000/day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 274-3141 (Kauai), extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

CI:ss
Encl: Water Use Report Forms

c: Kauai Department of Water
   Beylik Drilling and Pump Service, Inc.
WCR 2 Check for Well No. 5629-01&02 (survey to regulation memo)

1. **Pump Tests Check** (special condition of PIP? Yes/No)
   - Yes
   - No
   - If no, describe deficiency

   **Step-Drawdown Test:**
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.
   - □<70 gpm no test required

   **Aquifer Pump Test:**
   - followed WCPI Stds
   - T & S analysis attached
   - □<50 gpm no test required

   **Potential Well Interference:**
   - □

   **Potential Stream Impacts:**
   - □
   - stream names:

   **Additional Testing or Data Required:**
   - □

   **Pump Test Comments Attached:**
   - □

2. **Pump Installation Check**
   - Mitch Ohye (initial)
   - Yes
   - No
   - If no, describe deficiency

   - data complete
   - followed Special Cond & Elev.
   - well database updated

3. **Charley Ryan** (initial) take action based on above analysis

ATTACHMENTS FOR ACCEPTANCE:

1. 1WCR2 ACCEPTANCE LETTER
2. 2PUMP INST. COMPLETION CERTIFICATE
3. 3METER INSTALL. REPORT (IF NECESSARY)
4. 4WUR FORM (if necessary)
5. 5USGS MAP UPDATED
6. 6PARCEL CHECK
7. 7WELL DATABASE INPUT CHECK
8. 8LENNS PUMP TEST WORKSHEET
9. 9PUMP A5-B5 CHECK PRINT

4. Roy (initial) check (Entered WCR 2/PICC accept date into database)
5. Susan Hoagbin (initial) finalize
6. Ken (initial) signature
7. Faith Ching (initial) enter into WUR database
8. Charley Ryan File
TO

STATE OF HAWAII - DLNR
COMMISSION ON WATER RES. MGMT.
P.O. BOX 621
HONOLULU, HI 96809

WE ARE SENDING YOU  X: Attached  □ Under separate cover via

☐ Shop drawings  ☐ Prints  ☐ Plans  ☐ Samples  ☐ Specifications
☐ Copy of letter  ☐ Change order  ☐

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>WELL COMPLETION REPORT - PART II (PIWAI WELL NO. 2)</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>WELL COMPLETION REPORT - PART II (PIWAI WELL NO. 3)</td>
</tr>
</tbody>
</table>

ELEVATION TRANSFER TO
B.M. • TOP OF CHASE TUBE.

THESE ARE TRANSMITTED as checked below:

☐ For approval  ☐ Approved as submitted  ☐ Resubmit ______ copies for approval
☐ For your use  ☐ Approved as noted  ☐ Submit ______ copies for distribution
☐ As requested  ☐ Returned for corrections  ☐ Return ______ corrected prints
☐ For review and comment  ☐

☐ FOR BIDS DUE __________________________  ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

THE ATTACHED WELL COMPLETION REPORTS HAVE BEEN UPDATED WITH THE

BENCHMARK ELEVATIONS

COPY TO  G. FUKUMITSU/1418H/C FILE

SIGNED:  Fred G. Camero, Jr.
PROJECT MANAGER
7. AS-BUILT PUMP SECTION  (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = ______ ft. mean sea level

Elevation of top of chase tube 648.30 ft. mean sea level

Pump intake depth = 643.1 ft. (referenced to bench mark)

Chase tube depth = 632.5 ft. (referenced to bench mark)

Elev (+) 30.05 ft MSL

If airline installed, bottom of airline elevation = N/A ______ ft. mean sea level
7. AS-BUILT PUMP SECTION

(Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = ft. mean sea level

Elevation of top of chase tube ft. mean sea level

Pump intake depth = ft. (referenced to bench mark)

Chase tube depth = ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = ft. mean sea level

El (+) 30.64 ft MSL
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrm/

<table>
<thead>
<tr>
<th>1. State Well No.: 5629-02</th>
<th>Well Name: Piwai Well #3</th>
<th>Island: Kauai</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address: Upper Omao</td>
<td>Tax Map Key: 2-5-01:02</td>
<td></td>
</tr>
<tr>
<td>4. Date Pump Installed: November 19, 2007</td>
<td></td>
<td></td>
</tr>
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<td>5. PERMANENT PUMP INFORMATION</td>
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<td>Centrifugal ■</td>
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<td>Other, explain and attach schematic</td>
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</tbody>
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Pump Installation Contractor (print): Beylik Drilling C-57/C-57a/A Lic. No. AC-21896

Signature ___________________________ Date ___________________________

rec'd by email 09 Mar 08, 10:57am
7. AS-BUILT PUMP SECTION

(Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = ___ ft. mean sea level

Pump intake depth = 661.1 ft. (referenced to bench mark)

Chase tube depth = 650.5 ft. (referenced to bench mark)

Elevation of top of chase tube pending, ft. mean sea level

If airline installed, bottom of airline elevation = N/A ft. mean sea level

El (pending - 624') ft MSL
ITT - Goulds Pumps
Turbine Operations

SO: 515815-1
Model: 12CMC/10

Certified Test Results

Imp Dia: 8.69 in
Speed: 1770 RPM

By: Don Hollett
Title: Engineer
Date: Oct. 16, 2006
### State of Hawaii
#### COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

**WELL COMPLETION REPORT - PART II**
Pump Installation

**Instructions:** Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrm/

1. **State Well No.:** 5629-01
   - **Well Name:** Piwai Well #2
   - **Island:** Kauai

2. **Address:** Upper Omao
   - **Tax Map Key:** 2-5-01:02

3. **Pump Installation Company:** Beylik Drilling & Pump Services, Inc.

4. **Date Pump Installed:** December 04, 2007

5. **PERMANENT PUMP INFORMATION**
   - **Pump Type, Make, Serial No.:** Lineshaft Vertical Turbine, Goulds, 12CMC, SN 515815-2
   - **Rated Capacity:** 1050 gpm at head of: 660 ft.
   - **Motor Type, H.P., Voltage, rpm:** VHS, US Motors, 250 HP, 460V, 1785 RPM
   - **Pump type (check one):**
     - [ ] Deep Well Turbine
     - [x] Submersible
     - [x] Centrifugal
     - [ ] Rotary
     - [ ] Rotary-Displacement
     - [ ] Reciprocating
     - [x] Reciprocating-Gear
     - [ ] Impulse

6. **Method of flow measurement:**
   - [x] Flowmeter
   - Manufacturer: Wyatt/Badger
   - Model no.: BVT-F
   - Size: 8"
   - [ ] Other, explain and attach schematic

7. **Fill in the as-built section on the other side of this sheet.**

8. **Attach the rating curve for the installed pump.**

9. **Attach photograph of well clearly showing the benchmark on the concrete pad, the well head, and the method of flow measurement.**

10. **Well Owner**
    - **Company:** Kauai Department of Water Supply
    - **Contact:** Bruce Inouye
    - **Address:** 4398 Pua Loke Street, Lihue, HI 96766
    - **Phone:** 808 245-5415
    - **Fax:** 808 245-5813

11. **Land Owner**
    - **Company:** Kauai Department of Water Supply
    - **Contact:** Bruce Inouye
    - **Address:** 4398 Pua Loke Street, Lihue, HI 96766
    - **Phone:** 808 245-5415
    - **Fax:** 808 245-5813

12. **Remarks**

---

**Pump Installation Contractor (print):** Beylik Drilling
**C-57/C-57a/A Lic. No.:** AC-21896

**Signature** ___________________________  **Date** ________________

---

**rec'd by email 09Mar08, 10:57 am**
7. AS-BUILT PUMP SECTION  (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 648.05 ft. mean sea level

Pump intake depth = \( \frac{643.1}{\text{ft.}} \) (referenced to bench mark)

Chase tube depth = \( \frac{632.5}{\text{ft.}} \) (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A ft. mean sea level
ITT - Goulds Pumps
Turbin Operations

Certified Test Results

Model: 12CMC/10

Imp Dia: 8.69 in
Speed: 1770 RPM

By: [Name]
Title: Engineer
Date: Oct. 16, 2006
FROM: ROY
DATE: OCT 5 2007
SUSPENSE DATE:

TO: CHENG, C. INIT. TO: KAWAHARA, K. INIT.
   CHING, F. TO: KIMURA, J. FOR: Approval
   CHONG, R. TO: KUNIMURA, I. Signature
   DANBARA, S. TO: LEROUX, E. Information
   ENGLAND, D. TO: NAKAMA, L. PLEASE:
   FUJII, N. TO: OHYE, M. See Me
2 HARDY, R. TO: SAKODA, E. Review & Comment
   HOAGBIN, S. TO: SWANSON, S. Take Action
1 ICE, C. TO: UYENO, D. Type Draft
   IMATA, R. TO: YODA, K. Type Final

Initially issued 9/04 and year ext. = 9/08
before going back to carry.

• this would be the 4th extension. Should inquire how
  secure is 4-year old well with no pump. Capped? Locked?
  Prescott

• Puller 21846 has outstanding issues (reports). I don't
  think we should extend with Puller until he cleans house.
  Installer's work mostly done - extension allows for utility power to be
  completed - a landowner issue, taking responsibility
November 8, 2007

Mr. Sean Perkins
Kukuiula Development Company (Hawaii), LLC
P.O. Box 280
Koloa, HI 96756

Dear Mr. Perkins:

Request for Pump Installation Permit Extension
Piwai Wells 2 & 3 (Well Nos. 5629-01 & 02)

Thank you for your letter dated October 1, 2007, requesting an extension to the captioned permits. We understand that the pump has been installed but that permanent power and discharge pipe for efficiency testing have not yet been installed, and that these are the well owner's responsibility.

We have been in contact with the permittee, your licensed contractor, and he concurs with this request. By this letter, the request is approved. The new expiration date for the permit is February 1, 2008. All other conditions remain the same. This letter should be filed with other correspondence and your copy of the permits for reference.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0251, or toll free from Maui at 984-2400, extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Cl:ss

c: Beylik Drilling and Pump Service, Inc.
October 1, 2007

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Attn: Mr. Ken Kawahara

Re: Piwai Wells No.2 (No. 5629-01) and Piwai Wells No.3 (No. 5629-02)
Pump Installation Permit Extension Request

Dear Mr. Ken Kawahara:

Kukui‘ula Development Company (Hawaii), LLC, (KDCH) respectfully requests an extension of three (3) months to the Piwai Wells No. 2 and No. 3 Pump Installation Permits. Both current installation permits are set to expire on November 1, 2007.

Progress continues to be made on the construction of the Piwai Water System that has been underway since March 2006. As stated previously, the water transmission lines and access road to the well sites are complete. At the present time, pump bowls and pump column assemblies have been installed in both wells. However, the motors and discharge systems are awaiting the availability of permanent electric power before they are installed. Power is expected to be available in six weeks, unfortunately, a short time after the pump installation permits will have expired.

Therefore, KDCH hereby request extensions of the Pump Installation Permits for Wells 2 (No. 5629-01) and No. 3 (No. 5629-02) until February 1, 2008.

Your consideration of the pump installation permit extensions is greatly appreciated. Should you have any questions or concerns, please feel free to contact me at 742-6233.

Very truly yours,
Kukui‘ula Development Company (Hawaii), LLC

Sean Perkins
Project Manager

Attachments

CC: Tom Nance w/ attach
    Tom Shigemoto w/ attach
Mr. Sean Perkins  
Kukuiula Development Company, (Hawaii), LLC  
P.O. Box 280  
Koloa, HI 96756  

Dear Mr. Perkins:  

This is in response to your January 21, 2007 letter, requesting a six (6) month extension of the pump installation permits for the Piwai Wells Nos. 2 & 3 (Well Nos. 5629-01 & 02). Our records show that this is the third extension request for these permits, which are currently set to expire on May 1, 2007.  

Thank you for documenting the considerable progress made on the Piwai Water System construction. We understand that an extension is needed to complete the remaining work which includes site work and well and pump testing.  

Your request is hereby approved. The pump installation permits have been extended to November 1, 2007.  

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

Sincerely,  

W. ROY HARDY  
Hydrologic Program Manager  

LN:ss  

c: Tom Shigemoto, Alexander & Baldwin, Inc./McBryde Sugar Co., Ltd.  
Dwight Ho, Beylik Drilling & Pump Service, Inc.
PUMP INSTALLATION PERMIT
Piwai No. 3, Well No. 5629-02

Note: This permit shall be prominently displayed at the site until the work is completed.

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-188, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Piwai No. 3 (Well No. 5629-02) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 821, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-188-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1,250 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights; The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (February 18, 2004). If the HWCPS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than thirty (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must file for a well abandonment permit in accordance with §13-188-12(1) prior to any well sealing or pluging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury; or death arising out of any act or omission of the applicant, assignee, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: September 14, 2004
Expiration Date: September 14, 2008

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5000 per day starting from the permit date of approval.

Permittee's Signature: [Signature]
Printed Name: [Name]
Firm or Title: Vice President
Date: 10/07/04

Installer's Signature: [Signature]
Printed Name: DWIGHT HO
C-57, C-57a, or A License #: AC-21896
Date: 12/7/05
Firm or Title: BEYLIK DRILLING & PUMP SERVICE, INC.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments:
- USGS Department of Health Safe Drinking Water & Wastewater Branch
- Kauai Department of Water Supply
- Tom Silliman, Kauai Department of Water Supply
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**FROM:** KEN  
**DATE:** JUN 28 2007  
**SUSPENSE DATE:** 07/19/07

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- P1P expired for Pauai well (5629-01-02)  
  Send letter (expiration) ✔
- Comment on doc_rev ✔
Mr. Sean Perkins  
Kukuiula Development Company (Hawaii) LLC  
P.O. Box 280  
Koloa, HI 96756  

Dear Mr. Perkins:  

Expiration of Pump Installation Permits  
Piwai Wells 2 & 3 (Well Nos. 5629-01 & 02)  

Under the conditions of your captioned permits, well completion reports should be filed within 60 days of completion of work, to be done by the permit expiration date of May 1, 2007. Please submit these at your earliest convenience, as violations of these conditions are subject to fines of up to $5,000 per day.  

The pump installation permits expired on May 1, 2007.  

If you have any questions, please contact Charley Ice of our staff at (808) 587-0251, or toll free from Kauai at 274-3141, extension 70251.  

Sincerely,  

KEN C. KAWAHARA, P.E.  
Deputy Director
Ms. Lynn Malinger  
Fukunaga & Associates  
1388 Kapiolani Boulevard  
Honolulu HI 96814  

Dear Ms. Malinger:  

SUBJECT: Piwai 677 0.5 mg Water Storage Tank DEA  

FILE NO.:  

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://www.hawaii.gov/dlnr/cwrm.

Our comments related to water resources are checked off below.

☐ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM: Additional information and forms are available at www.hawaii.gov/dlnr/cwrm/forms.htm.

☐ 4. The proposed water supply source for the project is located in a designated ground-water management area, and a Water Use Permit is required prior to use of ground water.

☐ 5. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.

☐ 6. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
7. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

8. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

9. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

10. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

11. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

12. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

13. We recommend that the report identify feasible alternative non-potable water resources, including reclaimed wastewater.

OTHER:

Piwai Well Construction Permits for Well Nos. 5629-01 & -02 have been extended three times and have expired as of May 1, 2007. Any work underway should be suspended pending reapplication, subject to fines of up to $5000 per day.

The project should not affect surface water.

If there are any questions, please contact Charley Ice at 587-0251.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director
February 23, 2007

Mr. Sean Perkins
Kukuiula Development Company, (Hawaii), LLC
P.O. Box 280
Koloa, HI 96756

Dear Mr. Perkins:

This is in response to your January 21, 2007 letter, requesting a six (6) month extension of the pump installation permits for the Piwai Wells Nos. 2 & 3 (Well Nos. 5629-01 & 02). Our records show that this is the third extension request for these permits, which are currently set to expire on May 1, 2007.

Thank you for documenting the considerable progress made on the Piwai Water System construction. We understand that an extension is needed to complete the remaining work which includes site work and well and pump testing.

Your request is hereby approved. The pump installation permits have been extended to November 1, 2007.

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

Sincerely,

W. ROY HARDY
Hydrologic Program Manager

LN:ss

c: Tom Shigemoto, Alexander & Baldwin, Inc./McBryde Sugar Co., Ltd.
Dwight Ho, Beylik Drilling & Pump Service, Inc.
January 21, 2007

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Attn: Mr. Dean Nakano, Acting Deputy Director

Re: Piwai Wells No.2 (No. 5629-01) and Piwai Wells No.3 (No. 5629-02) Pump Installation Permit Extension Request

Dear Mr. Dean Nakano:

Kukui' ula Development Company (Hawaii), LLC (KDCH) respectfully requests an extension of six (6) months to the Piwai Wells No.2 and No. 3 Pump Installation Permits. Both current installation permits are set to expire on May 1, 2007. Pursuant to Standard Condition 8 of the permit, KDCH is submitting this request three (3) months in advance of the permit expiration for your consideration.

Progress continues to be made on the construction of the Piwai Water System that has been underway since March 2006. As stated previously, the water transmission lines and access road to the well sites are complete. Additionally, the 0.1 Mg concrete storage tank and site driveway are anticipated to be complete in the next two months. The two well site control buildings and pump works are under construction with the pump installations anticipated within the next three months. Unfortunately, the current schedule does not indicate that all of the work for the two well sites will be completed by the May 1, 2007, deadline. There will be site work, well testing, pump testing, and final inspections that will run past the deadline.

Therefore, KDCH hereby requests extensions of the Pump Installation Permits for Wells 2 (No. 5629-01) and No. 3 (No. 5629-02) until November 1, 2007.

Your consideration of the pump installation permit extensions is greatly appreciated. Should you have any questions or concerns, please feel free to contact me at 72-6304.

Very truly yours,

Kukui' ula Development Company (Hawaii), LLC

Sean Perkins
Project Manager

Attachments

CC: Tom Nance w/ attach
    Tom Shigemoto w/ attach
September 21, 2006

Mr. Thomas Hoen
Kukui‘ula Development Co., (Hawaii), LLC
P.O. Box 280
Koloa, HI 96756

Dear Mr. Hoen:

This is in response to your August 29, 2006 letter, requesting an extension of the pump installation permits for the Piwai Wells Nos. 2 and 3 (Well Nos. 5629-01 & 02). Our records show that the permit for Piwai Well No. 2 expired on July 15, 2006, and the permit for Piwai Well No. 3 is set to expire on September 14, 2006. According to your letter, permitting delays and inclement weather have resulted in an extension of the construction completion.

Although Standard Condition 8 of the permit requires that a request to extend the permit must be submitted no later than three (3) months prior to the permit expiration date, we will allow an extension at this time. In the future, please adhere to the terms and conditions of the permits.

Your request is hereby approved. The pump installation permits have been extended to May 1, 2007.

If you have any questions, please contact Lenore Nakama at 587-0218 or toll-free at 274-3141, extension 70218.

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

LN:ss

c: Tom Shigemoto, Kukui‘ula Development Co., (Hawaii), LLC
   Dwight Ho, Beylik Drilling
August 24, 2006

Mr. Dean Nakano  
Acting Deputy Director  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hi 96809

Re: Piwai Wells No. 2 (No. 5629-01) and No. 3 (No. 5629-02)  
Pump Installation Expiration Extensions

Dear Mr. Nakano:

We respectfully request another extension to the Piwai Well No. 2 Pump Installation Permit, and an extension to the Piwai Well No. 3 Permit. Due to the longer than anticipated permitting phase and a very wet spring season, the construction completion of the project has been extended.

Significant progress has been made as the construction of the Piwai Wells and Waterline Project has been underway since March 2006. The water transmission lines and access road to the Well Sites are complete and construction of the well complex sitework is currently underway with pump installation scheduled for April 2007.

Therefore, we hereby request extensions of the Pump Installation Permits for Wells 2&3 (5629-01 and 5629-02) until May 1, 2007.

If you have any questions regarding this matter please call me at (808) 742-6304. For your convenience attached, please find copies of the Pump Installation Permits referenced above along with the letter granting extension of the Piwai well No. 2 Permit.

We appreciate your consideration in this matter.

Yours Truly,  

[Signature]

Thomas Hoen  
Project Manager

TH/lac  

attachments

cc: Tom Nance w/attach  
Bob Diffley w/ attach  
Tom Shigemoto w/ attach
PUMP INSTALLATION PERMIT
Piwai No. 3, Well No. 5629-02

Note: This permit shall be prominently displayed at the site until the work is completed.

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works," this document permits the pump installation for Piwai No. 3 (Well No. 5629-02) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1,250 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (February 18, 2004). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the permittee, assignees, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: September 14, 2004
Expiration Date: September 14, 2006

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that if I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5000 per day starting from the permit date of approval.

Permittee's Signature: Tom H. Shigemoto
Firm or Title: Vice President
Date: 10/07/04

Installer's Signature: DWIGHT HO
C-57, C-57a, or A License #: AC-21896
Date: 12/7/05

Printed Name: Tom H. Shigemoto
Firm or Title: Vice President

Printed Name: DWIGHT HO
Firm or Title: BEYLIX DRILLING & PUMP SERVICE, INC.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments:
- USGS
- Department of Health/ Safe Drinking Water & Wastewater Branch
- Kauai Department of Water Supply
- Tom Shigemoto, Alexander & Baldwin Inc./McBryde Sugar Co.
Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Piwai Well No. 2 (Well No. 5629-01) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1250 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights.

5. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

6. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(d) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: July 17, 2003
Expiration Date: July 17, 2005

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence or stop any part of the pump installation until the Commission has given the operator, and the operator, and/or well owner notice of the proposed action and an opportunity to be heard.

Permittee's Signature: 
Printed Name: 
Firm or Title: Vice President
Date: 8/25/03

Installer's Signature: 
Printed Name: 
Firm or Title: BEYLIK DRILLING & PUMP SERVICE, INC.
Date: 12/7/05

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments
C:
USGS
Department of Health's Safe Drinking Water & Wastewater Branch
Kauai Department of Water Supply
May 24, 2005

Ref: 5629-01.ext

Mr. Tom Shigemoto, Vice President
A&B Properties, Inc.
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Request for Extension of Time
Pump Installation Permit for Piwai Well No. 2 (Well No. 5629-01)

This is in response to your May 13, 2005 letter, requesting a one-year extension of time to complete work authorized by the subject permit. According to your letter, a time extension is needed because design plans and specifications have been revised and are awaiting approval from the Department of Water.

By this, letter your request is approved. The new expiration date for the subject Pump Installation Permit is July 15, 2006. Please do not forget to return a fully executed permit prior to the start of any work. Thank you for your attention to the terms and conditions of your permit.

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

Sincerely,

[Signature]

DEAN A. NAKANO
Acting Deputy Director
PUMP INSTALLATION PERMIT
Piwai Well No. 2, Well No. 5629-01

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Piwai Well No. 2 (Well No. 5629-01) at Upper Camao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (123/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 821, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1250 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (123/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: July 17, 2003
Expiration Date: July 17, 2005

[Signature]
PETER T. YOUNG, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee’s Signature: [Signatures]
Printed Name: Tom H. Shigemoto Firm or Title: Vice President

Installer’s Signature: [Signatures]
Printed Name: Dwight Ho Firm or Title: Beylik Drilling & Pump Svcs, Inc.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments:

C: USGS
Department of Health Safe Drinking Water & Wastewater Branch
Kauai Department of Water Supply

[Signature]
December 14, 2005

Mr. Dean Nakano  
Acting Deputy Director  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, HI 96809

Re: Piwai Wells No 2(No. 5629-01) and No 3 (5629-02)  
Pump Installation Permits

Dear Mr. Nakano:

Attached are the completed Pump Installation Permit forms with the Installer’s information and signature affixed.

The installer is Beylik Drilling & Pump Service, Inc., the same company that drilled the wells. They intend to commence with construction early next year.

In the past, Tom Shigemoto of A&B Properties, Inc. has been communicating with you on these matters as landowner. As Kukui’ula Development Company (Hawaii), LLC is responsible for developing these facilities for the Kukui’ula Project, we are addressing you directly and copying Tom Shigemoto of A&B on the correspondence. We hope this is acceptable.

Please feel free to call me with any questions and/or concerns at (808) 742-6304.

Yours truly,

Thomas A. Hoen  
Project Manager

cc: Tom Nance w/attachments  
    Tom Shigemoto w/attachments
**LETTER OF TRANSMITTAL**

**DATE:** 12-7-05  
**JOB NO.**  
**ATTENTION:** THOMAS A. HOEN  
**REL.:** PIWAI WELL NO. 2, WELL NO. 5629-01  
**PIWAI WELL NO. 3, WELL NO. 5629-02**  

**TO:** KUKUI‘ULA DEVELOPMENT CO. (HAWAII), LLC  
P.O. BOX 280  
KOLOA, KAUAI, HI 96756

WE ARE SENDING YOU  
☒ Attached  
☐ Under separate cover via ________________________________  
the following items:  
☐ Shop drawings  
☐ Prints  
☐ Plans  
☐ Samples  
☐ Specifications  
☐ Copy of letter  
☐ Change order  
☐ __________________________

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<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
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<td></td>
<td></td>
<td>PUMP INSTALLATION PERMIT FOR WELL NO. 2</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>PUMP INSTALLATION PERMIT FOR WELL NO. 3</td>
</tr>
</tbody>
</table>

THESE ARE TRANSMITTED as checked below:  
☐ For approval  
☐ Approved as submitted  
☐ Resubmit ______ copies for approval  
☐ For your use  
☐ Approved as noted  
☐ Submit ______ copies for distribution  
☒ As requested  
☐ Returned for corrections  
☐ Return ______ corrected prints  
☐ For review and comment  
☐ __________________________

☐ FOR BIDS DUE  
☐ PRINTS RETURNED AFTER LOAN TO US

**REMARKS**

---

DEC 09 2005

---

COPY TO 1418H/C FILE  

SIGNED: 

If enclosures are not as noted, kindly notify us at once.

DWIGHT HO
PUMP INSTALLATION PERMIT
Piwai Well No. 2, Well No. 5629-01

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works"; this document permits the pump installation for Piwai Well No. 2 (Well No. 5629-01) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1250 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

6. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: July 17, 2003
Expiry Date: July 17, 2005

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: [Signature]
Printed Name: DWIGHT HO Firm or Title: BEYLK DRILLING & PUMP SERVICE, INC.

Installer's Signature: [Signature]
Printed Name: [Signature]

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments:
c: USGS
   Department of Health/ Safe Drinking Water & Wastewater Branch
   Kauai Department of Water Supply
May 24, 2005

Mr. Tom Shigemoto, Vice President
A&B Properties, Inc.
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Request for Extension of Time
Pump Installation Permit for Piwai Well No. 2 (Well No. 5629-01)

This is in response to your May 13, 2005 letter, requesting a one-year extension of time to complete work authorized by the subject permit. According to your letter, a time extension is needed because design plans and specifications have been revised and are awaiting approval from the Department of Water.

By this letter, your request is approved. The new expiration date for the subject Pump Installation Permit is July 15, 2006. Please do not forget to return a fully executed permit prior to the start of any work. Thank you for your attention to the terms and conditions of your permit.

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

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

LYN:ss

c: Kukuiula Development Corp.
May 13, 2005

Mr. Dean Nakano  
Acting Deputy Director  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hi 96809  

Re: Piwai Well No. 2 No. 5629-01  
Pump Installation Permit

Dear Mr. Nakano:

As noted on the attached copy of the Pump Installation Permit for Piwai Well No.2, the expiration date of the permit of July 17, 2005 is approaching. We have been fully engaged in the design and permitting phase of the project and are committed to perform the installation in a timely manner. Our progress to date includes completion of the design plans and specifications, which were submitted to the County of Kauai Department of Water on September 3, 2004. The Department and our Engineering firm, Tom Nance Water Resource Engineering, have made comments and revisions to the plans and we anticipate an approval from the Department in the next few weeks. We therefore hereby request an extension of the Pump Installation Permit for a period of one year from the expiration date of July 17, 2005. We anticipate that the construction will commence in mid-July 2005 and be complete one year later.

If you have any questions or comments please feel free to contact our Project Manager, Mr. Tom Hoen at (808) 742-6304, or our Engineer, Mr. Tom Nance at (808) 537-1141. We appreciate your consideration in this matter.

Yours Truly

Tom Shigemoto, Vice President  
A&B Properties

attachment

Cc: Tom Nance  
Tom Hoen  
R. K. Sasaki
PUMP INSTALLATION PERMIT
Piwai Well No. 2, Well No. 5629-01

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Piwai Well No. 2 (Well No. 5629-01) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-158-15, Hawaii Administrative Rules.

2. The pump installation permit shall be for installation of a 1250 gpm capacity, or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established in-stream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

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11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: July 17, 2003
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Permittee's Signature: [Signature]
Printed Name: Tom H. Shigemoto, Firm or Title: Vice President

Installer's Signature: [Signature] C-57, C-57a, or A License #: Date: 
Printed Name: [Signature] Firm or Title: [Title]

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments
C: USGS
Department of Health's Safe Drinking Water & Wastewater Branch
Kauai Department of Water Supply
August 14, 2003

Ref: 5629-01.pip

Mr. Tom Shigemoto
Kukuiula Development Co. (Hawaii) LLC
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Pump Installation Permit
Piwai Well No. 2 (Well No. 5629-01)

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) that authorize permanent pump installation work for your well(s). As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 11:

Special Conditions

1. If the elevation benchmark needs to be altered, the permittee, well operator, and/or well owner shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

2. Please enclose the pump specification and rating curve for the installed pump with the Well Completion Report.

The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the pump installation contractor submits a completed Part II of the Well Completion Report form (enclosed) within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of the Well Completion Report (Part II) and a copy of your water use report form are enclosed for your use.
IMPORTANT - Pump installation shall not commence until a fully signed permit is returned to the Commission. Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

Finally, this letter is notice that we have accepted your Well Completion Report - Part I as complete as of July 17, 2003.

If you have any questions, please call Lenore Y. Nakama of the Commission staff at 587-0218 or toll-free at 274-3141 (Kauai), extension 70218.

Sincerely,

[Signature]

Peter T. Young
Chairperson

Enclosure
PUMP INSTALLATION PERMIT
Piwai Well No. 2, Well No. 5629-01

Note: This permit shall be prominently displayed at the site until the work is completed

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Permittee's Signature: ___________________________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

Installer's Signature: ___________________________ C-57, C-57a, or A License #: __________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachments

C: USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Kauai Department of Water Supply
### SECTION 1: WELL LOCATION INFORMATION

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<th>Island</th>
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<td>System Sustainable Yield</td>
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### SECTION 2: WELL SECTION DATA  (enter data in grey cells only)

| Elevation at top of casing | 650.6 ft., m.s.l. |
| Ground Elevation           | 649.2 ft., m.s.l. |
| Cement Grout               | 449.9 ft. |
| Rock Packing               | 0 ft. |
| Hole Diameter              | 24 in. |
| Total Depth                | 775 ft. |
| Estimated Head             | 48.38 ft., m.s.l. |
| Calculated Aquifer Thickness | 1984 ft. |
| County Water Supply (Y/N ?) | YES |

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<td>Diameter</td>
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<td>Wall Thickness</td>
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<table>
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<th>Openings</th>
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Open Hole
| Length | 60 ft. |
| Diameter | 24 in. |

### SECTION 3: CHECKLIST  (values to check are shaded)

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<td>Theoretical Thickness of Aquifer</td>
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<td>1/4 Aquifer Thickness</td>
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<td>Depth of Well below Sea Level</td>
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Well Casing
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<th>Minimum Wall Thickness</th>
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<td>Material</td>
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<tr>
<td>County or Non-County</td>
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<tr>
<td>Minimum Thickness per standards</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
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</table>

Minimum Length of Solid Casing
| 90% of ground to top of aquifer | 540.8 ft. |
| Length of solid casing Provided | 595 ft. |

Casing Material
| ASTM A139 |

Annular Space
| Calculated Depth of Grouting | 420.6 ft. |
| Depth of Grouting provided   | 449.9 ft. |
| Thickness of Annular Space   | 3.625 in. |

- Okay (refer to HWCPIS Section 2.2)
- Okay (refer to HWCPIS Section 2.4 c)
- Okay (refer to HWCPIS Section 2.4 d)
- Okay (refer to HWCPIS Section 2.4 e)
- If the cell above reads #N/A, reference HWCPIS (if this is a non-county well)
- If the cell above reads #N/A, reference HWCPIS (if this is not basal, deep monitor or salt water)
Mr. Ernest YW Lau - Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Lau:

Well Completion Report - Part I - for
Piwai Well No. 2 - State No. 5629-01
Kauai, Hawaii

Attached is the Well Completion Report, elevation certification, and pump test data for Piwai Well No. 2. Feel free to call if there are questions.

Sincerely,

Tom Nance

cc: Tom Hoen - Kukui'Ula Dev. Co.
Dwight Ho - Beylik Drilling
Michael Hinazumi - DOW

Attachments
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART I  
Well Construction  

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrmm/

| 1. State Well No.: | 5629-01 | Well Name: | Piwai #2 | Island: | Kauai |
| 2. Address: | | | | Tax Map Key: | (4) 2 - 5 - 01, 02 |
| 4. Drilling method used during construction: | ☑ Rotary | ☐ Percussion | ☐ Other (describe) |
| 5. Date Well Construction (drilled, cased, grouted) completed: | 4/24/03 | Attach Driller's Log (7/26/99 DL Form) |

In addition to the driller's log, if a geologic log was prepared, please submit with this form.

| 6. Was the subject well cored? | ☑ Yes | ☐ No |
| 7. Initial water-level encountered ______ ft. below ground Date and time of measurement: | | |

Date and time of measurement: | | | |

| 8. Step-Drawdown Test completed? | ☑ Yes | ☐ No |
| 9. Constant Rate Aquifer Test completed? | ☐ No | ☑ Yes |

Attach Step-Drawdown Test form (12/17/97 SDPTD Form)  
Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

Parameters prior to pump test:

| 10. Water-level: | ______ ft. above msl Date and time of measurement: | | |

Date and time of measurement: | | | |

| 11. Chloride: | ______ ppm Date and time of sampling: | |

Date and time of sampling: | | | |

| 12. Temperature: | ______ °F Date and time of measurement: | |

Date and time of measurement: | | | |

| 13. Fill in the as-built section on the other side of this sheet. |


| 15. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.) |

| 16. Remarks: |

| 17. Licensed Driller (print) | Beylik Drilling, Inc. | C-57 Lic. No. | AC-21896 |
| Signature | | Date | 6/23/03 |

| Signature | | Date | 7/11/03 |

| 19. Permittee (print) | Tom H. Shigemoto | |
| Signature | | Date | 6/24/03 |

WCR1 Form 9/29/00
13. AS-BUILT WELL SECTION

(Please attach as-built if different from diagram provided below)

Bench mark elevation:
________ ft., msl* (Survey to nearest 0.01 ft.)

Cement Grout: 449.9 ______ ft.
(min. 70% of distance from ground elevation to top of water surface or 500 ft.
whichever is less.)

Annular space between hole and casing (min.3"):
3.625 ______ in.

Rock or Gravel Packing:
none ______ ft.
Material:
☐ Crushed Basalt
☐ Rounded Gravel

Water Level Elevation:
699.35 ______ ft., msl*

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))
Length: ___________________ ft.
Nominal Diameter: 16.75 _____________ in.
Wall Thickness: .375 _________________ in.
Bottom Elevation: ___________________ ft., msl

Open Casing: ☐ Perforated ☐ Screen
Length: ___________________ ft.
Nominal Diameter: 16.75 _____________ in.
Wall Thickness: .31 _________________ in.
Bottom Elevation: ___________________ ft., msl

Open Hole:
Length: ___________________ ft.
Diameter: 24 _________________ in.
Bottom Elevation: ___________________ ft., msl

*msl = mean sea level

Solid Casing Material:
Carbon Steel: compliant with (check one or more):
☐ ANSI/AWWA C200 ☐ API Spec. 5L ☐ ASTM A53 ☐ ASTM A139
And compliant with (check one or more):
☐ ASTM A242 ☐ Type E ☐ Type S ☐ Grade B ☐ Other
Stainless Steel: (check one):
☐ ASTM A409 (production wells) ☐ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) ☐ Schedule 40 ☐ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
☐ Schedule 40 ☐ Schedule 80 ☐ Schedule 120
Thermoset Plastic: (check one)
☐ Filament Wound Resin Pipe conforming to ASTM D2996
☐ Centrifugally Cast Resin Pipe conforming to ASTM D2997
☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
☐ PTFE Fluorocarbon Tubing conforming to ASTM D3296
☐ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more):
☐ ANSI/AWWA C200 ☐ API Spec. 5L ☐ ASTM A53 ☐ ASTM A139
And compliant with (check one or more):
☐ ASTM A242 ☐ Type E ☐ Type S ☐ Grade B ☐ Other
Stainless Steel: (check one):
☐ ASTM A409 (production wells) ☐ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) ☐ Schedule 40 ☐ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
☐ Schedule 40 ☐ Schedule 80 ☐ Schedule 120
Thermoset Plastic: (check one)
☐ Filament Wound Resin Pipe conforming to ASTM D2996
☐ Centrifugally Cast Resin Pipe conforming to ASTM D2997
☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
☐ PTFE Fluorocarbon Tubing conforming to ASTM D3296
☐ FEP Fluorocarbon Tubing conforming to ASTM D3296
ELEVATION

BENCH MARK USED:
1/2" PIPE "JESUS"
(ELEV.=510.71)

WELL #2
State of Hawaii
Water Commission
Well #5629-01
Owner: A & B Properties, Inc.
Date of Survey: July 9, 2003
### STEP-DRAWDOWN PUMP TEST DATA

(not required for wells producing < 100,000 gpd or 70 gpm)

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<th>Pumped Well No.</th>
<th>Observation well no.</th>
<th>Distance between Observ. &amp; Pumped Well</th>
<th>Reference pt. for depth to water</th>
<th>Static Water Level @ start of test</th>
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<td>ft. msl</td>
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<td>48.38 ft. msl</td>
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Water level measurements by:  
- steel tape  
- pressure transducer  
- airline

**START TEST** Date: **May 5, 2003** Time of day: **10:00 AM**

Flow Meter Reading Start: **36,637,300 gals**

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<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Water Level (ft. msl)</th>
<th>Drawdown (ft.)</th>
<th>Pumping Rate (gpm)</th>
<th>EC (ppm)</th>
<th>Cl (mg/l)</th>
<th>Temp (°F)</th>
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**Data in this table is for:**  
- Pumped Well  
- Observation Well  
- Remarks

3 Chloride sample taken
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<th>Pumping rate Q (at least a step per min)</th>
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Data in this table is for
- Pumped Well
- Observation Well

Remarks
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<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Water Level (ft. MSL)</th>
<th>Drawdown S (inches of drawdown in feet)</th>
<th>Pumping Rate Q (gpm)</th>
<th>EC (mhos)</th>
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Max possible duration, water level or quality did not stabilize for any 24 period

Begin recovery data next page
Flow meter reading at end of pumped period: 36,802,902 gals

1 starting pumping rate Q
2 minimum length of step period of constant pumping rate
3 minimum mandatory Chloride (Cl) measurement/sampling at end of every step
4 Use same ending drawdown figure as start for recovery
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END TEST Date: 5-5-2003 Time of day: 14:10

ADDITIONAL REMARKS:

Person in charge of pump test (print): Tom

Signature: __________________________

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
## CONSTANT-RATE PUMP TEST DATA

**Pumped Well No.** 5629-01  
**Pumped Well Name** PUMP WELL NO. 2  
**Target Q** __________ gpm  
**Observation well no.** __________

**Distance between Obs. & Pumped Well** __________ ft.  
**Reference pt. for depth to water** __________ ft. msl  
**Static Water Level @ start of test** __________ ft. msl

Water level measurements by:  
- [ ] steel tape  
- [ ] pressure transducer  
- [ ] airline

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**Flow Meter Reading Start:** 373301, 100 gals

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<td>Cl⁻ sample taken</td>
<td></td>
</tr>
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<td>4.12</td>
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<td>20</td>
<td></td>
<td></td>
<td>Max possible duration, water level or quality did not stabilize for any 24 period</td>
</tr>
</tbody>
</table>

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

Flow meter reading at end of pumped period: 49,782,080 gals

Begin recovery data next page

12,487,980 GALLONS PUMPED

AVERAGE 1230 GPM

[Due to too short outcomes on May 23]
### Table 2 (CRPTD Form 12/17/97)

<table>
<thead>
<tr>
<th>Suggested Collapse Time (min)</th>
<th>Actual Collapse Time (min)</th>
<th>Water Level (ft. ng)</th>
<th>Recovery Drawdown (ft. ng)</th>
<th>Pumping Rate (gpm)</th>
<th>TEC (uhms)</th>
<th>CT (mg/l)</th>
<th>Temp. (° C)</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
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<td>Start recovery</td>
</tr>
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<td>49.66 &lt;0.03&gt;</td>
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<td>Build-up due to</td>
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<td>Flow back down</td>
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<td>48.23 &lt;0.30&gt;</td>
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</tr>
</tbody>
</table>

- **END TEST**  Date: **May 28, 2003**  Time of day: **12:00 Noon**

**ADDITIONAL REMARKS:**

Person in charge of pump test (print): **TOM NANCE**

Signature:  

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
Input:

<table>
<thead>
<tr>
<th>Casing dia. ( (d_c) )</th>
<th>16 Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annulus dia. ( (d_w) )</td>
<td>23.25 Inch</td>
</tr>
<tr>
<td>Screen Length ( (L) )</td>
<td>180 Feet</td>
</tr>
</tbody>
</table>

Depts to:

<table>
<thead>
<tr>
<th>Water level ( (DTW) )</th>
<th>125 Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top of Aquifer</td>
<td>125 Feet</td>
</tr>
<tr>
<td>Base of Aquifer</td>
<td>625 Feet</td>
</tr>
</tbody>
</table>

Annular Fill:

<table>
<thead>
<tr>
<th>Across screen -- Open Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above screen -- Cement</td>
</tr>
<tr>
<td>Aquifer Material -- Permeable Basalt</td>
</tr>
</tbody>
</table>

Flow Rate: 1250 GPM

Compueted:

Aquifer thickness = 600 Feet

Slope = 0.149392 Feet/log10

Input is consistent.

\[ K = 600 \text{ Feet/Day} \]
\[ T = 300,000 \text{ Feet2/Day} \]

\( K = 600 \text{ is greater than likely maximum of 100 for Permeable Basalt} \)

Adjust slope of line to estimate T

Remarks: Cooper-Jacob recovery analysis of single-well aquifer test
<table>
<thead>
<tr>
<th>Entry</th>
<th>Date Hr:Min:Sec</th>
<th>Water Level</th>
<th>Feet</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>47.94</td>
</tr>
<tr>
<td>2</td>
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<td>43.81</td>
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<td>3</td>
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<tr>
<td>4</td>
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<td>47.58</td>
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<td>1/7/00 0:07:00</td>
<td></td>
<td>47.58</td>
</tr>
<tr>
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<td>1/7/00 0:08:00</td>
<td></td>
<td>47.59</td>
</tr>
<tr>
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</tr>
<tr>
<td>12</td>
<td>1/7/00 0:25:00</td>
<td></td>
<td>47.64</td>
</tr>
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<td>47.74</td>
</tr>
<tr>
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<td>1/7/00 2:30:00</td>
<td></td>
<td>47.80</td>
</tr>
<tr>
<td>22</td>
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<td>47.86</td>
</tr>
</tbody>
</table>
Pumping Test No. Long-Term Test
Well No. 5629-01
Discharge 1239.00 U.S. gal/min

Test conducted on: May 21-28, 2003

Transmissivity [ft²/d]: $3.04 \times 10^5$
<table>
<thead>
<tr>
<th>Pumping test duration</th>
<th>Water level</th>
<th>Drawdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>[d]</td>
<td>[ft]</td>
<td>[ft]</td>
</tr>
<tr>
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<td>606.09</td>
<td>3.93</td>
</tr>
<tr>
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<td>606.09</td>
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<td>3.93</td>
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<td>3.93</td>
</tr>
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<td>3.93</td>
</tr>
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</tr>
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<td>8</td>
<td>606.09</td>
<td>3.93</td>
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<td>3.93</td>
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<td>29</td>
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<td>3.93</td>
</tr>
</tbody>
</table>
Pump Test Analysis - Comments

Well ID: 5629-01
Analysis Date: 4/17/08  Test Date: 5/21/08
Geologist: Diane England

Step Drawdown Test

Deviations From Pump Test Requirements
1. No Deviations from Pump Test Requirements.

Other Comments
2. Step test not run at 1250 gpm. Highest pump rate was 1012 gpm.

Constant Rate Pumping Test

Deviations From Pump Test Requirements
1. No Deviations from Pump Test Requirements.

Drawdown Curve Comments
2. Estimated $K = 2,700$ ft/d. Estimated $T = 490,000$ ft²/d.

Well Interference & Stream Impacts

<table>
<thead>
<tr>
<th>Drawdown Prediction (ft) - One Mile Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Coefficient = 0.001</td>
</tr>
<tr>
<td>50yr</td>
</tr>
<tr>
<td>100yr</td>
</tr>
<tr>
<td>500yr</td>
</tr>
</tbody>
</table>

1. Based on preliminary analysis, no adverse stream or well impacts are expected.

Other Comments
1. The well is tapping high-level water.

Proposed Pump Capacity OK?: YES
WELL ID: 5629-01

Island: Kauai
Test Date: 5/21/2003
Analysis Date: 4/17/2008

INPUT

<table>
<thead>
<tr>
<th>Construction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing dia. ($d_c$)</td>
<td>24 inch</td>
</tr>
<tr>
<td>Annulus dia. ($d_w$)</td>
<td>24 inch</td>
</tr>
<tr>
<td>Screen Length (L)</td>
<td>180 feet</td>
</tr>
</tbody>
</table>

Depths to:
- water level (DTW): 603.71 feet
- Top of Aquifer: 603.71 feet
- Base of Aquifer: 783.71 feet

Annular Fill:
- across screen -- Open Hole
- above screen -- Cement
- Aquifer Material -- Permeable Basalt

FLOW RATE: 1254 GPM

K = 2700 Feet/Day
T = 490000 Feet^2/Day

COMPUTED

Aquifer thickness = 180 Feet
Slope = 0.090266 Feet/log10

Input is consistent.

$K = 2700$ is greater than likely maximum of 100 for Permeable Basalt

REMARKS: Cooper-Jacob analysis of single-well aquifer test

Analysis Program: USGS Aquifer Test Analysis Spreadsheets v.1.2, Open File Report 02-197
<table>
<thead>
<tr>
<th>Entry</th>
<th>Date</th>
<th>Hr: Min: Sec</th>
<th>Feet</th>
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Constant Rate Pump Test
Well 5629-01 (5-21-03)

Time (min)

Drawdown (feet)

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5

Pumping Rate
Well 5629-01 (5-21-03)

Pumping Rate (gpm)

0 200 400 600 800 1000 1200 1400 1600

Time (min)
### Constant Rate Test (5629-01)

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<th>Pump Rates (gpm)</th>
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**Average:** 1253.95
Step Drawdown Test
Well 5629-01 (5-5-03)

Drawdown (feet)

Time (min)

Pumping Rate
Well 5629-01 (5-5-03)

Pumping Rate (gpm)

Time (min)
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Step Change

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? No Pump Rate Listed
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Mr. Dean Nakano
Acting Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Nakano:

Executed Permit for
Piwai Well No. 2 - State No. 5629-01
Omao, Kauai, Hawaii

Attached is the well construction permit signed by Tom Shigemoto on behalf of the Permittee and David Hines of Beylik Drilling, Inc., the contractor. We anticipate beginning actual drilling in mid-February. Feel free to contact me if you have any questions.

Sincerely,

Tom Nance

cc: Tom Shigemoto - A&B
    Mike Roberts and Tom Hoen - DMB
    David Hines - Beylik

Attachment
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Piwai Well No. 2 (Well No. 5629-01) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-158-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   a. Well completion report (attached - Part I, Well Construction Report)
   b. Elevation (referenced to mean sea level, msl) 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 records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-158-12(f) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: October 22, 2002
Expiry Date: October 22, 2004

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: [Signature]
Printed Name: [Name]
Firm or Title: [Title]

Driller's Signature: [Signature]
Printed Name: [Name]
C-57 License #: [License Number] Date: [Date]
Firm or Title: [Title]

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment

USGS
Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
Kauai Department of Water Supply
January 16, 2003

Dr. David Shideler  
Cultural Surveys Hawaii  
733 North Kalaheo Avenue  
Kailua, Hawaii 96734

Dear Dr. Shideler:

SUBJECT: Chapter 6E Historic Preservation Review -- Archaeological Inventory Survey for a Well Construction/Pump Installation Permit Application Piwai Well No. 5629-01 (A&B), TMK: 2-5-01: 22 Omao, Koloa, Kauai

This letter reviews this report which was submitted on December 7, 2002 (Yorck, Shideler and Hammatt, 2002. Archaeological Inventory Survey of Three Proposed Well Sites and Appurtenances in the Vicinity of the Piwai Reservoir, Koloa Ahupua'a, District of Kaua'i, Cultural Survey Hawaii, ms.) The background and archaeological summary information of this report was very good and complete. The survey of the project area seems to have been acceptable. No historic sites were found in the area. We find the report to be acceptable. No historic properties will be impacted by the proposed well construction. This concludes the historic preservation review process for this project.

If you have any questions, please call Nancy McMahon 742-7033.

Aloha,

P. Holly McEldowney, Acting Administrator  
State Historic Preservation Division

c. Dan Yasui, A&B Properties fax 525-6652  
Dean Nakano, Water Resource Management

NM:ak
December 6, 2002

DLNR Commission on Water Resource Management,
PO Box 621,
Honolulu, Hawai‘i, 96809

SUBJECT: Well Construction Permit application for Piwai Well # 2 (Permit # 5629-01)
Archaeological Inventory Survey of Three Proposed Well Sites and
Appurtenances in the Vicinity of the Piwai Reservoir, Kōloa Ahupua‘a,
District of Kona, Island of Kaua‘i (TMK: 2-5-01: Por. 8)

Dear Sir:

I am submitting this memo to make you aware that Cultural Surveys Hawai‘i, Inc. has completed a draft Archaeological Inventory Survey - a condition of a well construction permit application for Piwai Well # 2 (Permit # 5629-01). No sites or other historic preservation concerns were identified. The report has been submitted to the State Historic Preservation Division with a request for their review (cover letter enclosed).

Aloha

David W. Shideler
Office Manager
Cultural Surveys Hawai‘i, Inc.

Cc. Mr. Dan Yasui, A&B Properties, Fax 525-6652
December 6, 2002

Ms. Nancy McMahon
State Historic Preservation Division
5532 Tapa St.
Kōloa Hawai‘i 96756

SUBJECT: Request for Review - Archaeological Inventory Survey of Three Proposed Well Sites and Appurtenances in the Vicinity of the Piwai Reservoir, Kōloa Ahupua‘a, District of Kona, Island of Kaua‘i (TMK: 2-5-01: Por. 8)

Aloha Nancy McMahon:

Enclosed please find a draft copy of an Archaeological Inventory Survey of Three Proposed Well Sites and Appurtenances in the Vicinity of the Piwai Reservoir, Kōloa Ahupua‘a, District of Kona, Island of Kaua‘i (TMK: 2-5-01: Por. 8) sent for your review. We have also sent a copy to the Archaeology Branch Chief, SHPD Kapolei, with a request for their review. This Archaeological Inventory Survey study was a condition of a well construction permit application for Piwai Well # 2 (Permit # 5629-01). There were no significant findings. We request your assistance in addressing the Department of Land and Natural Resources Commission on Water Resource Management concerns for historic preservation matters in the area of the proposed well. Mahalo for your kōkua.

Aloha

David W. Shideler
Office Manager
Cultural Surveys Hawai‘i, Inc.

Cc. Mr. Dan Yasui, A&B Properties, Fax 525-6652

DLNR Commission on Water Resource Management, PO Box 621, Honolulu, Hawai‘i, 96809
SUBJECT: Request for Review - Archaeological Inventory Survey of Three Proposed Well Sites and Appurtenances in the Vicinity of the Piwai Reservoir, Kōloa Ahupua’a, District of Kona, Island of Kaua‘i (TMK: 2-5-01: Por. 8)

Aloha Archaeology Branch Chief:

Enclosed please find a draft copy of an Archaeological Inventory Survey of Three Proposed Well Sites and Appurtenances in the Vicinity of the Piwai Reservoir, Kōloa Ahupua’a, District of Kona, Island of Kaua‘i (TMK: 2-5-01: Por. 8) sent for your review. We have also sent a copy to Ms. Nancy McMahon, SHPD Kaua‘i archaeologist, with a request for her review. This Archaeological Inventory Survey study was a condition of a well construction permit application for Piwai Well # 2 (Permit # 5629-01). There were no significant findings. We request your assistance in addressing the Department of Land and Natural Resources Commission on Water Resource Management concerns for historic preservation matters in the area of the proposed well. Mahalo for your kōkua.

Aloha

David W. Shideler
Office Manager
Cultural Surveys Hawai‘i, Inc.

Cc. Mr. Dan Yasui, A&B Properties, Fax 525-6652

DLNR Commission on Water Resource Management, PO Box 621, Honolulu, Hawai‘i, 96809
Mr. Tom Shigemoto
Kukuiula Development Co. (Hawaii) LLC
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Well Construction Permit
Piwai Well No. 2 (Well No. 5629-01)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for your permanent pump. As part of the Chairperson’s approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. Attached for your information is a copy of the Department of Health’s (DOH) review comments. Please note DOH’s requirements related to discharge of effluent from well drilling and testing activities.

2. Attached for your information is a copy of the Historic Preservation Division’s review comments. Please contact the Historic Preservation Division for additional information on their rules and regulations and any actions that may be required to protect historic sites.

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.
IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141 (Kauai), extension 70218.

Aloha,

[Signature]

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures
In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Piwai Well No. 2 (Well No. 5629-01) at Upper Omao, Kauai, TMK 2-5-01:02, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1/4-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

3. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall notify the Department and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface or ground water, and established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) 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 records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit upon giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

12. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

13. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: October 22, 2002
Expiration Date: October 22, 2004

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: ___________________________ Date: ________________
Printed Name: ___________________________ Firm or Title: ___________________________

Driller's Signature: ___________________________ C-57 License #: ___________________________ Date: ________________
Printed Name: ___________________________ Firm or Title: ___________________________

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

Attachment

C: USGS
Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
Kauai Department of Water Supply
**SECTION 1: WELL LOCATION INFORMATION**

<table>
<thead>
<tr>
<th>Island</th>
<th>KAUAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>LIHUE</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>KOLOA</td>
</tr>
</tbody>
</table>

**Proposed Use**
- Municipal

**Proposed Withdrawal**
- System Sustainable Yield: 600000

**SECTION 2: WELL SECTION DATA**

* (enter data in grey cells only)

<table>
<thead>
<tr>
<th>Description</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing</td>
<td>647 ft., m.s.l.</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>640 ft., m.s.l.</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>200 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>0 ft.</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>23 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>240 ft.</td>
</tr>
<tr>
<td>Estimated Head</td>
<td>2335 ft., m.s.l.</td>
</tr>
<tr>
<td>Calculated Aquifer Thickness</td>
<td>1435 ft.</td>
</tr>
<tr>
<td>County Water Supply (Y/N ?)</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Solid Casing**
- Material: Steel
- Designation: ASTM A53
- Length: 120 ft.
- Diameter: 6.25 in.
- Wall Thickness: 0.375 in.

**Casing**
- Material: Steel
- Designation: ASTM A53
- Length: 120 ft.
- Diameter: 6.25 in.
- Wall Thickness: 0.375 in.
- Openings: 0 sq.in./l.f.
- Open Hole Length: 40 ft.
- Open Hole Diameter: 15 in.

**SECTION 3: CHECKLIST**

* (values to check are shaded)

**Well Depth**
- Theoretical Thickness of Aquifer: 1435 ft.
- 1/4 Aquifer Thickness: 358.8 ft.
- Depth of Well below Sea Level: 200 ft. okay (refer to HWCPIS Section 2.2)

**Well Casing**
- Minimum Wall Thickness
  - Material: Steel
  - County or Non-County: county
  - Wall Thickness per standards: 0.375 in.
  - Wall Thickness Provided: 0.375 in. okay (refer to HWCPIS Section 2.4 c)
- Minimum Length of Solid Casing
  - 90% of ground to top of aquifer: 544.5 ft.
  - Length of solid casing Provided: 680 ft. okay (refer to HWCPIS Section 2.4 d)
- Casing Material: ASTM A53 okay (refer to HWCPIS Section 2.4 e)

**Annular Space**
- If the cell above reads #N/A, reference HWCPIS)
- Calculated Depth of Grouting: 423.5 ft.
- Depth of Grouting provided: 500 ft. okay (refer to HWCPIS Section 2.6 c)
- Thickness of Annular Space: 3.5 in. okay (refer to HWCPIS Section 2.6 d)
MEMORANDUM

TO: Linnel T. Nishioka, Deputy Director
    Commission on Water Resource Management

FROM: Don Hibbard, Administrator
       State Historic Preservation Division

SUBJECT: Historic Preservation Review --
Well Construction/Pump Installation Permit Application
Piwai Well No. 5629-01, TMK: 2-5-01: 22
Omao, Koloa, Kauai

Thank you for the opportunity to comment. No archaeological inventory surveys have been done for this parcel. We expect to find historic sites in the area, such as house sites, agricultural complexes (auwai and terraces), and heiau.

Given the above, we cannot make an evaluation of the impact of this project on historic sites. We recommend the following conditions to any approved permit, to ensure significant historic sites are properly identified and treated:

1) An archaeological inventory survey shall be conducted by a qualified archaeologist prior to well construction. A report documenting the archaeological work shall be submitted to the State Historic Preservation Division for review and approval. This report shall propose significance evaluations and shall propose mitigation treatments for any significant historic sites.

2) If significant historic sites are identified and once mitigation commitments are agreed to, then the applicant shall development detailed mitigation plans (scopes of work) and submit these to the State Historic Preservation Division for review and approval. Prior to any land alteration, that Division must verify in writing that these plans have successfully executed.

3) If burials are discovered during the survey, a burial treatment plan shall be prepared following the procedures outlined in Chapter 6E-43 and its rules. Coordination with the Kauai Island Burial Council is required as part of the approval of burial treatment. Contact DLNR Historic Preservation Burials Program for information on this matter (Kai Markell 587-0008).

If you have any questions, please call Nancy McMahon 742-7033.

NM:ak
TO: Honorable Bruce S. Anderson, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch  
Dr. Keith Kawaoa, Hazardous Evaluation and Emergency Response  
Alec Wong, Clean Water Branch  

FROM: Gilbert S. Coloma-Agaran, Chairperson  
Commission on Water Resource Management  

SUBJECT: Well Construction/Pump Installation Permit Application  
Well Well No. 2 (Well No. 5629-01)  

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.  

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. **Please respond by returning this cover memo form by October 24, 2002.** If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.  

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.  

LN:ss  
Attachment(s)
September 25, 2002

TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

FROM: Gilbert S. Coloma-Agaran, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Piwai Well No. 2 (Well No. 5629-01)

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We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by October 24, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

[ ] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[ ] For the applicant's information, a source of possible wastewater contamination [ ] is not located near the proposed well site (information attached).

[ ] An NPDES permit is required.

[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

No comments/objections  NO RECORDS

Contact Person: Loni N. Kajiwara  Phone: 586-4294

Signed: Loni N. Kajiwara  Date: 10-4-02
Facsimile Request and Cover Sheet
Wastewater Branch
919 Ala Moana Blvd. Room 309
Honolulu, Hawaii 96814-4920
(808) 586-4294 Fax (808) 586-4300

Date: OCT 8, 2002

FROM: Joe Tateyama, Kauai District Health Office
Phone (808)341-3323 Fax (808)241-3366

TO: Lori Kajiwara, Planning/Design Section
Email: lkajiwara@eha.health.state.hi.us

Subject: Request for Information

Do you have any IWS files or records for the following:

(4) 2. 3. 1. 2. Piiwai well No. 2
Upper Umao

Please check all that apply and fax site/plot plan if available:

[ ] sewered [X] no record [ ] cesspool [ ] septic tank [ ] aerobic unit

File # if applicable: ___________________ # of Bedrooms ___________________

Record Date: __________________________
Submit Date: __________________________
Plan Approval Date: _____________________
Inspection Date: ________________________
System "Approval for Use" Date: __________

Other: ________________________________________________________________
TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

FROM: Gilbert S. Coloma-Agaran, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Piwai Well No. 2 (Well No. 5629-01)

September 25, 2002

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by October 24, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable sights with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

For the applicant's information, a source of possible wastewater contamination [ ] is [ ] not located near the proposed well site (information attached).

An NPDES permit is required.

Other relevant DOH rules/regulations, information, or recommendations are attached.

No comments/objections.

Contact Person: Alec Wong
Phone: 586-4309

Signed: Alec Wong
Date: 10/7/02
The Department of Health, Clean Water Branch has the following comments:

1. **For Well-Drilling Activities**

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules, Title 11, Chapter 56, Appendix I, effective September 22, 1997. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewaters, and well purge wastewaters. This general permit does not cover well pump testing. The applicable Notice of Intent Forms and filing fee shall be submitted at least thirty (30) days before the start of discharge to the Department of Health, Clean Water Branch at 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814-4920 or P.O. Box 3378, Honolulu, Hawaii 96801-3378. Inquiries may be directed to the Clean Water Branch at (808) 686-4309 or by fax at (808) 586-4352.

2. **For Well Pump Testing**

The discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of the initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of that storm drain prior to discharge. Furthermore, best management practices shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

JS/cr
TO: Honorable Bruce S. Anderson, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch; William Wong, Safe Drinking Water Branch; Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response; Alec Wong, Clean Water Branch.

FROM: Gilbert S. Coloma-Agaran, Chairperson  
Commission on Water Resource Management.

SUBJECT: Well Construction/Pump Installation Permit Application  
Piwai Well No. 2 (Well No. 5629-01)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by October 24, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

LN:ss  
Attachment(s)

RESPONSE:

☐ This well qualifies as a source which will serve as a source of potable water to a public water system (as defined by serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 29, Rules Relating to Potable Water Systems, §11-29-29.

☐ This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

☐ If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

☐ It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

☐ For the applicant's information, a source of possible wastewater contamination [X] is [ ] not located near the proposed well site (information attached).

☐ An NPDES permit is required.

☐ Other relevant DOH rules/regulations, information, or recommendations are attached.

☐ No comments/objections

Contact Person: Stuart Yamada  
Phone: 586-4258

Signed:  
Date: 10/04/02
The Department of Health, Safe Drinking Water Branch has the following additional comments for the Well Construction / Pump Installation Permit Application for the Piwai Well No. 2 (Well No. 2-5629-01 Kauai):

Please be advised that the Department of Health has experienced drinking water and groundwater contamination by submersible pumps containing mercury. Specifically, the failure of the seals of the pumps allowed mercury to leak out into the well shaft resulting in contamination of the well and the water served by the well. If you intend to install a submersible pump, please review your pump specifications to be sure that the submersible pump(s) you propose to use does not contain materials which could result in either groundwater contamination or drinking water contamination.
September 25, 2002

TO: Dede Mamiya, Administrator
   Land Division

FROM: Linnel T. Nishioka, Deputy Director
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Piwai Well No. 2 (Well No. 5629-01)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by October 24, 2002. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

RESPONSE:

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[ ] A water lease/permit is not required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. ____________________________.

[ ] This well project [ ] requires [X] does not require a CDUP. If a CDUP is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Outer relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments: Original source of private title is Land Commission Award No. 43 issued between 1845 and 1855.

Contact Person: Gary Martin Phone: 587-0421

Signed: Gary Martin Date: OCT-1 2002

Original source of private title is Land Commission Award No. 43 issued between 1845 and 1855.
September 25, 2002

Mr. Tom Shigemoto
Kukuiula Development Co. (Hawaii) LLC
P.O. Box 430
Koloa, HI 96756

Dear Mr. Shigemoto:

Well Construction/Pump Installation Permit Application for Well No. 5629-01

We acknowledge receipt, on September 11, 2002, of your completed Well Construction/Pump Installation permit application and filing fee for the Piwai Well No. 2 (Well No. 5629-01). You can expect your application to be processed within ninety (90) days from this date.

For your information, the process of constructing a well is normally regulated and permitted in two (2) steps. First, a well construction permit is issued for drilling and testing purposes only. Based upon information provided by you through a Well Completion Report Part 1 (Well Construction), a pump installation permit (upon completed application) may then be issued to authorize pump work. If a pump is installed then a Well Completion Report Part 2 (Pump Installation) is required.

If you have any questions about your permit application, please contact Lenore Nakama of the Commission staff at 587-0218 or toll-free at 274-3141 (Kauai), extension 70218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ss
September 25, 2002

TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Gilbert S. Coloma-Agaran, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Piwai Well No. 2 (Well No. 5629-01)

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by October 24, 2002. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

[ ] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

[ ] For the applicant's information, a source of possible wastewater contamination [ ] is [ ] not located near the proposed well site (information attached).

[ ] An NPDES permit is required.

[ ] Other relevant DOH rules/regulations, information, or recommendations are attached.

[ ] No comments/objections

Contact Person: ____________________________ Phone: ________________

Signed: ____________________________ Date: ________________
Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. **Please respond by returning this cover memo form by October 24, 2002.** If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

**RESPONSE:**

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[ ] A water lease/permit is **not** required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. ____________________________.

[ ] This well project [ ] requires [ ] does not require a CDUP. If a CDUP is required it [ ] has [ ] has not been approved and [ ] is [ ] is not currently active.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

---

Contact Person: ____________________________ Phone: __________________

Signed: ____________________________ Date: ________________
Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. **Please respond by returning this cover memo form by October 24, 2002.** If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

**RESPONSE:**

[ ] There may be areas in the vicinity of the well site that contain subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal.

[ ] Other relevant Historic Preservation rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: __________

Signed: ___________________________ Date: __________
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**REMARKS:**
LINE (1) Well No. 5629-01
LINE (2)
LINE (3)
LINE (4)

**DATE**

**DESCRIPTION**

Filing Fee
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<td>A&amp;B HAWAII, INC</td>
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.
Ms. Linnel T. Nishioka - Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809  

Dear Ms. Nishioka:

Well Construction and Pump Installation Permit Application for  
Piwai Well No. 2 in Upper Omao - Kauai, Hawaii  

On behalf of Kukuiula Development Co. (Hawaii) LLC, I am pleased to submit the attached application and $25 filing fee for Piwai Well No. 2 in upper Omao. If the well proves successful, it will be dedicated to the Kauai Department of Water and incorporated into the 677-foot service zone of DOW's Lawai-Omao water system, ultimately to supply the planned Kukuiula project.

If you have any questions or require additional information, please feel free to contact me or Tom Shigemoto on Kauai (phone number 808-742-2770). Thank you for your consideration.

Sincerely,

Tom Nance

Attachments

cc:  Tom Shigemoto - A&B Properties  
     Mike Roberts - DMB Associates  
     Ernest Lau - Kauai DOW
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

9-02
WeIl Construction and/or Pump Installation

01-72

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96806. Application must be accompanied by 5 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit http://www.state.hi.us/dlnr/wrm.

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) WELL OWNER: Kukuiula Development Co. (Hawaii) LLC
   Contact Person: Tom Shigemoto
   Phone: 808-742-2770
   Mailing Address: P.O. Box 430
   Kolona, Kauai, Hawaii 96756
   Fax: 808-742-2776
   E-mail: tahigemoto@abprop.com

   (b) LAND OWNER: Alexander & Baldwin, Inc. / Baldwin, Inc.
   Mailing Address: P.O. Box 430
   Kolona, Kauai, Hawaii 96756
   Fax: 808-742-2776
   E-mail: tahigemoto@abprop.com

   (c) CONTRACTOR: To Be Competitively Bid
   Mailing Address: 
   Fax: 
   E-mail: 
   Lic #: (circle one: C-57, C-57a, or A)

WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

2. WELL NAME: Piwai Well No. 2
   Island: Kauai
   Address Upper Omao
   Tax Map Key: Upper Omao
   Zone Sec Plat Parcel
   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

3. PROPOSED WORK: (check all that apply)
   - Construct New Well
   - Modify Existing Well*
   - Abandon/Seal*
   - Install New Pump*
   - Modify Pump*
   *State Well No.: ____________________________
   (If unknown, please call Commission at 587-0225)

4. CONSTRUCTION:
   - Drilled
   - Dug
   - Shaft
   - Tunnel
   - Is this well part of a battery of wells? ☐ Yes ☐ No (Please describe)

5. PROPOSED PUMPING RATE: 1250 gallons per minute

6. PROPOSED USE: ☐ Municipal (including hotels, stores, etc.) ☐ Industrial
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - No. of Acres:
   - Military
   - Other (explain): __________________________

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 600,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT: ☐ Flowmeter ☐ Open-pipe ☐ Weir ☐ Office ☐ Other (explain)

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   ☐ Not Required
   ☐ Required, date approved __________________________
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEOC at 586-4185
   ☐ Not Required
   ☐ Required, date published in OEOC bulletin __________________________
   Special Management Area Permit (SMAP) To determine if an SMAP is necessary, on Oahu, call 527-5374; on Hawaii, call 961-8288; for Maui county, call 270-7235; on Kauai, call 241-6677.
   ☐ Not Required
   ☐ Required, date approved __________________________

9. REMARKS, EXPLANATIONS: If successful, the well will be outfitted and dedicated to the Kauai Department of Water.
   (if more space is needed, please attach additional sheet)

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $100/day.

For Official use only:

For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit http://www.state.hi.us/dlnr/wrm.
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 647 ft., msl*

Hole Diameter: 23 in.

Cement Grout: 500 ft. (min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Annular space between hole and casing (min.3"):

Rock or Gravel Packing:

- None
- Crushed Basalt
- Rounded Gravel

Estimated Water Level Elevation: 35 ft. msl*

Solid Casing: (≥90% x (Ground Elev.-Water Level Elev.))

- Total Length: 680 ft.
- Nominal Diameter: 16 in.
- Wall Thickness: 0.375 in.
- Bottom Elevation: -40 ft., msl*

Open Casing:

- Perforated
- Screen

- Total Length: 120 ft.
- Nominal Diameter: 16 in.
- Wall Thickness: 0.3125 in.
- Bottom Elevation: -160 ft., msl*

Open Hole:

- Length: 40 ft.
- Diameter: 15 in.
- Bottom Elevation: -200 ft., msl*

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = \[\frac{1}{4} \times \text{Water Level} - \text{Bottom Elevation}\]

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = \[\frac{1}{4} \times (647 - 640)\] = 18.5 ft.

Solid Casing Material:

- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200  API Spec. 5L  ASTM A53  ASTM A139
- Stainless Steel: (check one): ASTM A409 (production wells)  ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): Schedule 40  Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): Schedule 40  Schedule 80  Schedule 120
- Thermoset Plastic: (check one):
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluocarbon Tubing conforming to ASTM D3296
  - FEP Fluocarbon Tubing conforming to ASTM D3296

Open Casing Material:

- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200  API Spec. 5L  ASTM A53  ASTM A139
- Stainless Steel: (check one): ASTM A409 (production wells)  ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): Schedule 40  Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): Schedule 40  Schedule 80  Schedule 120
- Thermoset Plastic: (check one):
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluocarbon Tubing conforming to ASTM D3296
  - FEP Fluocarbon Tubing conforming to ASTM D3296

Please refer to the HAWAI'I WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.