Kukio Lagoon Wells 1 & 2 (Well Nos. 4960-02 & 4959-19)

Well Location

ISLAND OF HAWAII
TOTAL = 2431 MOD HYDROLOGIC UNITS
Sustainable Yield / Aquifer Code

SCALE: 1" = 2000'
September 4, 2003

Mr. Sam Ainslie
WB Kukio Resorts LLC
P.O. Box 5349
Kailua-Kona, HI 96745

Dear Mr. Ainslie:

Well Modification for Well Nos. 4859-03 & 4959-19

This letter is being transmitted to you to confirm a discussion between Ryan Imata of Commission staff and Steve Bowles of Waimea Water Services on August 28, 2003. We understand that you wish to modify the Kukio Lagoon Wells #1 and #2 (Well No. 4859-03 & 4959-19), to deepen the source for salt water use. Because your Well Construction Permit is valid until November 30, 2003, you do not need to reapply for a permit for the modification. However, if you cannot meet this deadline, please notify us in writing prior to the permit expiration date.

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai).

Sincerely,

ERNEST Y.W. LAU
Deputy Director

RI:ss

c: Waimea Water Services
MEMO and ROUTE SLIP

WCR 2 Check for Well No. 4859-03 (survey to regulation memo)

1. **Pump Tests Check** (special condition of PIP? Yes/No)
   - Yes
   - No
   - Glenn Bauer (initial if yes)

   **Step-Drawdown Test:**
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.

   **Aquifer Pump Test:**
   - followed WCPI Stds
   - T & S analysis attached

   **Well Interference:**
   - estimated Steady-State drawdown at 1-mile radius is ______ ft.
   - analysis attached

   **Stream Surface Water Impacted:**
   - Yes
   - No
   - If yes, identify most probable stream

   **Geology Code for Well Index:** _____

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

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

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

4. Roy (initial) check

5. Subia (initial) finalize

6. Dean (initial) signature

7. Charley/Lenore/Ryan File
LETTER OF TRANSMITTAL

May 20, 2003

To: Ernest Lau
Commission on Water Resource Management
Department of Land and Natural Resources
1151 Punchbowl St.
Room 227
Honolulu, HI 96813
(808) 587-0214

From: Milton Morinaga
Kuki'o Resorts
P.O. Box 5349
Kailua HI 96745

Sending Via: FedEx

Re: Well Completion Report – Part II: Pump Installation

ENCLOSED ARE THE FOLLOWING:

<table>
<thead>
<tr>
<th>Copies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Well Completion Report – Part II: Pump Installation: Well # 4859-03 – Kukio Lagoon 1 Well</td>
</tr>
<tr>
<td>1</td>
<td>Well Completion Report – Part II: Pump Installation: Well # 4959-19 – Kukio Lagoon 2 Well</td>
</tr>
</tbody>
</table>

TRANSMITTED HEREWITH FOR THE FOLLOWING REASON(S):
( ) For review and comment
( ) For approval and return
( ) For signature & forwarding
( ) For your information

As requested
For your use
See remark below

REMARKS:

cc: Milton Morinaga (transmittal only)
Ryan Imata, State of Hawaii CWRM
Steve Bowles, Waimea Water Co.
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.state.hi.us/dlnr/cwrm/

1. State Well No.: 4859-03
   Well Name: Kukio Lagoon 1 Well
   Island: Hawaii

2. Address: 87 Mile Marker, Queen K Hwy
   Tax Map Key: 7-2-016: 002


4. Date Pump Installed: 05/03
   month/day/year

5. PERMANENT PUMP INFORMATION

   Pump Type, Make, Serial No.: Fybroc, Serial Nos. 1 (027713), 2 (027710), 3 (027712)

   Rated Capacity: 3 @ 500 gpm at head of: 37 ft.

   Motor Type, H.P., Voltage, rpm: Electric, 10HP, 230/460

   Type of flow meter: Insertion (Sea Metrics) which measures in gallons

   Model Number IP115/215, Serial Number 10020685

   Pump type (check one):
   ☐ Deep Well Turbine
   ☐ Submersible
   ☑ Centrifugal

   Method of flow measurement:
   ☑ Flowmeter
   ☐ Weir
   ☐ Open Pipe
   ☐ Orifice*
   ☐ Other*, explain below

   *attach schematic

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

7. Attach photograph of well and concrete pad clearly showing benchmark on concrete pad.

8. Other remarks/comments:

Pump Installation Contractor (print) Isemoto Contracting C-57/C-57a/A Lic. No. ABC - 1036

Signature ☑
Date 5/19/03

Permittee (print) WB Kukio Resorts, LLC

Signature ☑
Date 5/19/03
1. State Well No.: **4959-19**  
Well Name: **Kukio Lagoon 2 Well**  
Island: **Hawaii**

2. Address: **87 Mile Marker, Queen K Hwy**  
Tax Map Key: **7-2-016: 002**

3. Pump Installation Company: **Isemoto Contracting Co.**

4. Date Pump Installed: **05/03**

5. PERMANENT PUMP INFORMATION

<table>
<thead>
<tr>
<th>Pump Type, Make, Serial No.</th>
<th>Fybroc, Serial Nos. 1 (027708), 2 (027709), 3 (02771)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity</td>
<td>3 @ 500 gpm at head of: 37 ft.</td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm</td>
<td>Electric, 10 HP, 230/460</td>
</tr>
<tr>
<td>Type of flow meter</td>
<td>Insertion (Sea Metrics) which measures in gallons</td>
</tr>
<tr>
<td>Model Number</td>
<td>IP115/215 hot tag Serial Number 10020684</td>
</tr>
</tbody>
</table>

- **Pump type (check one):**
  - Deep Well Turbine
  - Submersible
  - Centrifugal

- **Rotary**
- **Rotary-Displacement**
- **Rotary-Gear**
- **Impulse**

- **Flowmeter**

6. Method of flow measurement:

- **Flowmeter**
- **Manufacturer**
- **Sea Metrics**
- **Make**
- **Size**

- **Weir**
- **Open Pipe**
- **Orifice**
- **Other**, explain below

- **Attach schematic**

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

8. Attach photograph of well and concrete pad clearly showing benchmark on concrete pad.

9. Other remarks/comments:

<table>
<thead>
<tr>
<th>Signature</th>
<th>Permittee (print)</th>
<th>WB Kukio Resorts, LLC</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pump Installation Contractor (print)</td>
<td>Isemoto Contracting C-57/C-57a/A Lic. No. ABC - 1036</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signature</td>
<td></td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C-57b 5/19/03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Date</td>
</tr>
</tbody>
</table>

**For Official Use Only:**

**RECEIVED**

**03 MAY 21 P3: 22**

COMMISSION ON WATER RESOURCE MANAGEMENT
9. AS-BUILT PICTURE SECTION

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

KUKIO LAGOON #2 WELL

Bench mark elevation surveyed to nearest 0.01 ft. = 7.67 ft. mean sea level

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

Pump intake depth = 11'8" (referenced to bench mark)

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

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

9-4959-19  KUKIO LAGOON 2
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 4959-19 (survey to regulation memo)

1. **Pump Tests Check**
   - Glenn Bauer [initial] (initial)

   **Step-Drawdown Test:**
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.

   **Aquifer Pump Test:**
   - followed WCPI Stds
   - T & S analysis attached

   **Well Interference:**
   - estimated Steady-State
drawdown at 1-mile radius is _________ ft.
   - analysis attached

   **Stream Surface Water Impacted:**
   - [ ] Yes, identify most probable stream

   **Geology Code for Well Index:**
   - _________

2. **Construction Check**
   - Mitch Ohye [initial] (initial)

   **data complete**
   - followed Special Cond & elevations
   - well database updated

   **Ingrid Kunimura** [initial] (initial)

   **Latitude**
   - NAD27
   - NAD83

3. Charley/Lenore/Ryan [initial] (initial) take action based on above analysis

4. Roy [initial] (initial) check

5. Subia [initial] (initial) finalize

6. Charley/Lenore/Ryan File

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 WCR 2 FORM
6 WUR FORM
7 USGS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 GLENN'S WORKSHEET
11 WELL As-Built CHECK PRINT

---

not necessary – only WCP.

To be sent to applicant
April 22, 2003

Ref:4859-03&4959-19.pip.doc

Mr. Sam Ainslie
WB Kukio Resorts, LLC
P.O. Box 5349
Kailua-Kona, HI 96745

Dear Mr. Ainslie:

Pump Installation Permit
Kukio Lagoon Wells 1 & 2 (Well No. 4859-03 & 4959-19)

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 March 24, 2003. Please note that with the GPS coordinates, the location of Kukio Well No. 1 has moved from the application. Therefore, we have reassigned Kukio Well No. 1 as Well No. 4859-03.

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai), extension 70255.

Sincerely,

for Peter T. Young
Chairperson

Enclosure

c: Waimea Water Services (via fax)
PUMP INSTALLATION PERMIT
Kukio\agoon Wells 1 & 2, Well No. 4859-03-959-19

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 Kukio Lagoon Wells 1 & 2 (Well No. 4859-03 & 4959-19) at 87 Mile Marker, Queen K Hwy, Hawaii, TMK 7-2-016:002, 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 1500 gpm rated 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, or 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 (1/23/97). If the HWCPIS are not followed and as a consequent 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: March 24, 2003
Expiration Date: March 24, 2005

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: ___________________________ Date: ___________
Printed Name: ___________________________ Firm or Title: ___________________________

Installer's Signature: ___________________________ 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

USGS
Department of Health: Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Wahiawa Water Resources North Pali
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 4960-02 (survey to regulation memo)

1. **Pump Tests Check** Glenn Bauer (initial)  
   - **Step-Drawdown Test:**
     - followed WCPI Stds
     - analysis attached
     - proposed pump cap o.k.
   - **Aquifer Pump Test:**
     - followed WCPI Stds
     - T & S analysis attached

   **Well Interference:**  
   - estimated Steady-State
   - drawdown at 1-mile radius is _________ ft.
     - analysis attached

   **Stream Surface Water Impacted:**  
   - If yes, identify most probable stream

   Geology Code for Well Index: ___________

2. **Construction Check** Mitch Ohye (initial)  
   - data complete
   - followed Special Cond & elevations
     - well database updated

   Ingrid Kunimura (initial)  
   - Latitude
   - Longitude
   - NAD27
   - NAD83

3. Charley/Lenore/Ryan (initial) take action based on above analysis
   - ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
     - 1 COVER LETTER
     - 2 PERMIT (2x)
     - 3 DOH COMMENTS
     - 4 LAND DIV. COMMENTS
     - 5 WCR 2 FORM
     - 6 WUR FORM
     - 7 USGS MAP
     - 8 PARCEL CHECK
     - 9 DATABASE PRINTOUT
     - 10 GLENN'S WORKSHEET
     - 11 WELL AS-BUILT CHECK PRINT

   ![Checkmark]
   - not necessary – only WCP.

   To be sent to applicant

4. Roy (initial) check
5. Subia (initial) finalize
6. Dean (initial) signature
7. Charley/Lenore/Ryan File
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: DEAN
DATE: MAR 24 2003

TO: ANAKALEA, P.
BAUER, G.
CHING, F.
DANBARA, S.
FUJII, N.
GOODING, K.
HARDY, R.
HIGA, D.
ICE, C.
IMATA, R.
KUNIMURA, I.

INIT: LAU, E.
MATHIAS, T.
NAKAMA, L.
NAKANO, D.
OHYE, M.
SAKODA, E.
SUBIA, S.
SWANSON, S.
UYENO, D.
YODA, K.
YOSHINAGA, M.

FOR: Approval
Signature
Information

PLEASE: See Me
Review & Comment
Take Action
Type Draft
Type Final
File
Xerox ___ copies

PLZ make copy of corre lter for each well file.

Salt into wells.
March 17, 2003

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Deputy Director
Commission on Water Resource Management
PO Box 621
Honolulu, Hawaii 96809
Attn: Ryan Imata

SUBJECT: Well Completion Reports - Part I
Kukio Lagoon Wells 1 & 2 (State Well Nos. 4960-02 & 4959-19)
TMK: (3)-7-2-16:02 & (3)-7-2-16:03

Dear Deputy Director:

Please find enclosed the Well Completion Reports – Part I for Kukio Lagoon Wells 1 & 2, State Well No. 4960-02 & 4959-19.

If you have any questions or require additional information, please call me at (808) 885-5941.

Mahalo,

[Signature]

Stephen P. Bowles

Enclosures

cc: Milton Morinaga – WB Kukio Resorts, LLC
    Leslie Isemoto – Isemoto Contracting Co., Ltd.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. State Well No.</strong></td>
<td><strong>4959-19</strong></td>
</tr>
<tr>
<td><strong>Well Name:</strong></td>
<td><strong>Kukio Lagoon #2 Well</strong></td>
</tr>
<tr>
<td><strong>Island:</strong></td>
<td><strong>Hawaii</strong></td>
</tr>
<tr>
<td><strong>2. Address:</strong></td>
<td><strong>87 Mile Marker, Queen K Highway</strong></td>
</tr>
<tr>
<td><strong>Tax Map Key:</strong></td>
<td><strong>7-2-16: 03</strong></td>
</tr>
<tr>
<td><strong>3. Drilling Company:</strong></td>
<td><strong>Isemoto Contracting Co., Ltd.</strong></td>
</tr>
<tr>
<td><strong>4. Drilling method used during construction:</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>5. Date Well Construction (drilled,cased,grouted) completed:</strong></td>
<td><strong>10/28/02</strong></td>
</tr>
</tbody>
</table>

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  
- [x] No

**7. Initial water-level encountered**  
- 14 ft. below ground  
- Date and time of measurement: see attached month/day/year time

**8. Step-Drawdown Test completed?**  
- [ ] No  
- [ ] Yes  
- Attach Step-Drawdown Test form (12/17/97 SDPTD Form)

**9. Constant Rate Aquifer Test completed?**  
- [ ] No  
- [ ] Yes  
- Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

**Parameters prior to pump test:**  
- **10. Water-level:** .94 ft. above msl  
- Date and time of measurement: 11/19/02 11:35 am  
- **11. Chloride:** TDS  
- Date and time of sampling: see attached month/day/year time  
- **12. Temperature:** °F  
- Date and time of measurement: see attached month/day/year time

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

**14. Fill in attached surveyor's report.**

**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. The proposed manufacturer's rated pump capacity is**  
- 2 @ 500 gpm at a head of  
- 20 ft.

**17. Remarks:**  
- This is a dug well (see As-built attached)

---

**Licensed Driller (print)**  
**Leslie Isemoto**  
**C57B**  
**C57 Lic. No.**  
**ABC-1036**  
**RMG Lic. No.**  
**ABC-21202**

**Signature**  
**Date**  
**3/6/03**

**Permittee (print)**  
**Michael Miranda**

**Signature**  
**Date**  
**3/6/03**
13. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below) (4959-19)

Kukio Lagoon #2

Elevation at top of casing _____ ft., msl* (to nearest 0.01 ft.)

Hole Diameter: _______ in.

Ground Elevation: _______ ft., msl

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

Minimum of 2' Radius & 4" Thick Concrete Pad

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))
Length: _______ see attached ft.
Nominal Diameter: _______ in.
Wall Thickness: _______ in.
Bottom Elevation: _______ ft., msl

Open Casing: □ Perforated □ Screen
Length: _______ ft.
Nominal Diameter: _______ in.
Wall Thickness: _______ in.
Bottom Elevation: _______ ft., msl

Open Hole:
Length: _______ ft.
Diameter: _______ in.
Bottom Elevation: _______ ft., msl

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)
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PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
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□ 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

Solid = mean sea level
DRILLER'S LOG

WELL NUMBER: 4959-19

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
<th>Depths (ft.)</th>
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Remarks:
PLOT PLAN
(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)
W. B. KUKIO RESORTS, LLC
P. O. Box 5349
Kailua-Kona, HI 96745-5349

WELL CERTIFICATION
KUKIO WELL NO. 4959-19
TMK: (3) 7-2-16:03

The undersigned CERTIFIES that a field survey was performed to establish the elevation for KUKIO WELL No. 4959-19 as follows:

A “cut cross (+)” was set on the floor next to the grill work of the wellhead and has a Mean Sea Level (MSL) elevation of 7.63 feet.

The above elevation is based upon Benchmark No. 101 GRID which has an elevation of 101.07 feet (MSL).

Kailua-Kona, Hawaii
WELL NO. 4959-19
JOB NO. K-006
November 26, 2002

Copy: Gregg Scheid
<table>
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<th>Suggested Elapsed Time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Depth to water level (nearest 0.1 ft)</th>
<th>Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (mg/L)</th>
<th>CT</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
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*Table 1 (ODPTD Form 12/17/97)*

**STEP-DRAWDOWN PUMP TEST DATA**

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

Pumped Well No. 4959-19
Pumped Well Name KUKU LAGEN 2
Target Q
Observation well no. NA
Distance between Obs. & Pumped Well
Reference pt. for depth to water 76.5 ft. msl
Static Water Level @ start of test
2.10 ft. msl

Water level measurements by: 🡪 steel tape 🡩 pressure transducer 🚮 airline

START TEST Date: 15 OCT 92 Time of day: 9 am

Flow Meter Reading Start: N/A gals

Context:

- The pumped well number is 4959-19.
- The pumped well name is KUKU LAGEN 2.
- The target Q is not specified.
- The observation well number is NA.
- The distance between the observation and pumped well is not specified.
- The reference point for depth to water is 76.5 ft. msl.
- The static water level at the start of the test is 2.10 ft. msl.
- Water level measurements are taken using steel tape, pressure transducer, and airline.

**Data Table**:

- **Suggested Elapsed Time (min)**
- **Actual Elapsed Time (min)**
- **Depth to water level (nearest 0.1 ft)**
- **Drawdown S (unadjusted to nearest 0.1 ft)**
- **Pumping rate Q (at least 3 steps) (gpm)**
- **EC (mg/L)**
- **CT**
- **Temp. °F or °C**
- **Remarks**

**Remarks**:

- Start test/ Step 1
- Time shown
- In W.L.
- Start pump
- Time changing
- On raising tide
- Chloride sample taken
- Step 2 begin?
# CONSTANT-RATE PUMP TEST DATA

### Table 2 (CRPTD Form 12/17/97)

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<th>Actual elapsed time (min)</th>
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<th>EC (μhos)</th>
<th>CT (mg/l)</th>
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Data in this table is for:
- Pumped Well
- Observation Well

Remarks:
- Only 1 pump available
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<th>Pumping rate Q (gpm)</th>
<th>EC (mhos)</th>
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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
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</table>

**END TEST** Date: 22 NOV 02  Time of day: 2:00PM

**ADDITIONAL REMARKS:** T | 0% INFLUENCE IN VAULT

Person in charge of pump test (print): **JOHN STUBBAUL**

Signature: **[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.
Kukio Lagoon #1

Water Level = 0.91 feet elev.
Raising tide
15-Oct-02

PUMPING TEST DATA
STEP DRAWDOWN TEST

<table>
<thead>
<tr>
<th>GPM</th>
<th>Drawdown</th>
</tr>
</thead>
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<td>500</td>
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<td>1000</td>
<td>0.1</td>
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<tr>
<td>1500</td>
<td>0.1</td>
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</tbody>
</table>

Kukio Lagoon #2

Water Level = 1.04 feet elev.
Raising Tide
15-Oct-02

PUMPING TEST DATA
STEP DRAWDOWN TEST

<table>
<thead>
<tr>
<th>GPM</th>
<th>Drawdown</th>
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<tbody>
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<td>0.03</td>
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<td>1000</td>
<td>0.11</td>
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<td>1500</td>
<td>0.1</td>
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</table>
Your Company Name

Your Company Name (2)

Location: Lagoon Well North

LTC-Logger (06079). Instrument number: SC#3984

BM = 7.63'

8-8° Knut To Rigge

C -7' WL = From Case + 6.58'

11/22/02 - 2pm

1 Pump

#2 Constant Rate

2002-12-31
# 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.state.hi.us/dlnr/cwrm/](http://www.state.hi.us/dlnr/cwrm/).

1. **State Well No.**: 4B99-03
   - **Well Name**: Kukio Lagoon #1 Well
   - **Island**: Hawaii

2. **Address**: 87 Mile Marker, Queen K Highway
   - **Tax Map Key**: 7-2-16: 02

3. **Drilling Company**: Isemoto Contracting Co., Ltd.

4. **Drilling method used during construction**: □ Rotary □ Percussion ☑ Other (describe) Dug

5. **Date Well Construction (drilled, cased, grouted) completed**: 9/30/02
   - Fill out attached Driller's Log

   **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** 13 ft. below ground
   - **Date and time of measurement**: see attached

8. **Step-Drawdown Test completed?** □ No ☑ Yes
   - Attach Step-Drawdown Test form (12/17/97 SDPTD Form)

9. **Constant Rate Aquifer Test completed?** □ No ☑ Yes
   - Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

   **Parameters prior to pump test:**

10. **Water-level**: .94 ft. above msl
    - **Date and time of measurement**: 11/19/02 11:45

11. **Chloride**: TDS □ ppm □ mg/L Date and time of sampling: see attached

12. **Temperature**: °F Date and time of measurement: see attached

### Remarks:
- This is a dug well (see As-built drawing attached).

---

**Licensed Driller (print)**: LESLIE ISEMOTO

**RME Lic.No.**: ABC-21202

**Signature**

**Permittee (print)**: MILTON MORIMOTO

**Signature**

**Date**: 3/6/03

---
**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
## DRILLER'S LOG

**WELL NUMBER:** 4960-02

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>0 to 20</td>
<td>Fractured A'a</td>
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</table>

**Remarks:**

---

WCR1 Form 9/12/01 Page 3 of 4
Kukio Lagoon Wells 4859-03
Brackish Wells (4959-19) and (4966-02)

Dug well dimensions and pump room as built

Plan View
PLOT PLAN
(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)
Kukio Lagoon Brackish Water Wells #1 and #2 TMK Map
# Step-Drawdown Pump Test Data

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

<table>
<thead>
<tr>
<th>Pumped Well No.</th>
<th>Observation well no.</th>
<th>Distance between Obs. &amp; Pumped Well</th>
<th>Target Q</th>
<th>Reference pt. for depth to water</th>
</tr>
</thead>
<tbody>
<tr>
<td>4859-03</td>
<td>N/A</td>
<td>N/A</td>
<td>500-1500</td>
<td>7.41 ft. msl (GRATE)</td>
</tr>
</tbody>
</table>

Water level measurements by: ☐ steel tape ☐ pressure transducer ☐ airline

**START TEST** Date: 15 OCT 02 Time of day: NEON

Flow Meter Reading Start: N/A gals

## Table 1 (SDPTD Form 12/17/97)

<table>
<thead>
<tr>
<th>Suggested Elapsed time (min)</th>
<th>Actual Elapsed Time (min)</th>
<th>Drawdown Level (nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (uMhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp. °F</th>
<th>Remarks</th>
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<td>STOP - Rest well</td>
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<td>START 1 pump</td>
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<td>6.410 - 76.4</td>
<td>Chloride sample taken</td>
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</table>

Chloride sample taken

Step 2 begin?

* ATTACHED CHART
## CONSTANT-RATE PUMP TEST DATA

**Table 2** (CRPTD Form 12/17/97)

**Pumped Well No.** 4859-03  
**Pumped Well Name** 4966-02  
**Target Q** 1050 gpm  
**Distance between Obs. & Pumped Well** N/A ft.  
**Reference pt. for depth to water** 7.41 ft. msl  
**Static Water Level @ start of test** 0.94 ft. msl  

**Water level measurements by:**  
- □ steel tape  
- □ pressure transducer  
- □ airline

**START TEST**  
**Date:** 19 NOV 02  
**Time of day:** NOON

**Flow Meter Reading Start:**  
**Start:** gals

<table>
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (umhos)</th>
<th>CT (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
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<td>EC (μhmhos)</td>
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</table>

Data in this table is for:
- □ Pumped Well
- □ Observation Well

Remarks

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: N/A. gals

---

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
### Table 2 (CRPTD Form 12/17/87)

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<th>Actual elapsed time (min)</th>
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<th>Recovery Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate (gpm)</th>
<th>EC (mhos)</th>
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END TEST Date: **22 Nov 87**  Time of day: **NOON**

ADDITIONAL REMARKS:

Person in charge of pump test (print): **John Stubbert**

Signature: **[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.
水平面：

- BM = 6.41
- 9-1/2' = Mcf to discharge
- 6-1/2' = Gage in w.c.

日期：11/27/02 1:30pm

图表说明：

- 4909-02
- 4859-03
- 2 pumps

水位水平面

- 水位高度：9.37’
- 1.14’ tide
- W.L. 6.47’ from B.M. (Gage) (0.91’ MSL)
- 8.23’

日期范围：20-Nov-2002 to 22-Nov-2002

#1 constant rate
Kukio Lagoon #1
4859-03
PUMPING TEST DATA
STEP DRAWDOWN TEST

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Water Level = 0.91 feet elev.
Raising tide
15-Oct-02

Kukio Lagoon #2
4959-19
PUMPING TEST DATA
STEP DRAWDOWN TEST

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Water Level = 1.04 feet elev.
Raising Tide
15-Oct-02
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<th>Recovery Drawdown S (unadjusted to nearest 0.1 ft)</th>
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END TEST Date: **15TH Oct 1972** Time of day: **3:00 PM**

ADDITIONAL REMARKS: **CHANGING TIDE INFLUENCE W.L.**

Person in charge of pump test (print): **JOHN STUBBART**

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.
W. B. KUKIO RESORTS, LLC
P. O. Box 5349
Kailua-Kona, HI 96745-5349

WELL CERTIFICATION
KUKIO WELL NO. 4960-02
TMK: (3) 7-2-16:02

The undersigned CERTIFIES that a field survey was performed to establish the elevation for KUKIO WELL No. 4960-02 as follows:

A "cut cross (+)" was set on the floor next to the grill work of the wellhead and has a Mean Sea Level (MSL) elevation of 7.41 feet.

The above elevation is based upon Benchmark No. 101 GRID which has an elevation of 101.07 feet (MSL).

Kailua-Kona, Hawaii
WELL NO. 4960-02
JOB NO. K-005
November 26, 2002

Copy: Gregg Scheid
December 19, 2001

Mr. Samuel Ainslie
WB Kukio Resorts, LLC
P.O. Box: 5343
Kailua-Kona, HI 96745

Dear Mr. Ainslie:

Well Construction Permit
Kukio Lagoon #1 and #2 Wells (Well No. 4960-02 & 4959-19)

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.

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. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."

If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.

Please sign and have the contractor sign both permit originals and 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 Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000, extension 70255.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

c: Waimea Water Services
WELL CONSTRUCTION PERMIT

Kukio Lagoon #1 and #2 Wells, Well No. 4960-02 & 4959-19

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

In accordance with the 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 Kukio Lagoon #1 and #2 Wells (Well No. 4960-02 & 4959-19) at Mile Marker, Queen K Highway, Hawaii, TMK 7-2-16: 02 & 03, 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 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 pumping test 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 in-stream 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 (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 §13-168-12(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: November 30, 2001
Expiration Date: November 30, 2003

GILBERT S. COLOMA-AGARAN, 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 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: ALLEN HEYDEN
Firm or Title: V.P. WKB KUKIO RES.
Driller's Signature: [Signature]
Printed Name: Jerry Egami
Contractor's License #: ABC1036
Firm or Title: Isemoto Contracting Co., Ltd.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
December 19, 2001

Mr. Samuel Ainslie
WB Kukio Resorts, LLC
P.O. Box 5349
Kailua-Kona, HI 96745

Dear Mr. Ainslie:

Well Construction Permit
Kukio Lagoon #1 and #2 Wells (Well No. 4960-02 & 4959-19)

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.

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. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."

If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction 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 Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000, extension 70255.

Aloha,

[Gilbert S. Cooma-Agaran's signature]

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

c: Waimea Water Services
WELL CONSTRUCTION PERMIT

Kukio Lagoon #1 and #2 Wells, Well No. 4960-02 & 4959-19

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 construction and testing of Kukio Lagoon #1 and #2 Wells (Well No. 4960-02 & 4959-19) at 87 Mile Marker, Queen K Highway, Hawaii, TMK 7-2-16: 02 & 03, 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 1½-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 pumping test 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:
   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 §13-168-12(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: November 30, 2001
Expiration Date: November 30, 2003

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: ___________________________ 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.
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: RYAN
DATE: 12/17/01
SUSPENSE DATE: ________________

TO: LUM, A.
INIT: ____________
FOR: Approval
PLEASE: See Me

TO: NAKAMA, L.
INIT: ____________
FOR: Signature
PLEASE: 1. Review & Comment

TO: NAKANO, D.
INIT: ____________
FOR: Information
PLEASE: Type Draft

TO: NISHIOKA, L.
INIT: ____________
FOR: Take Action
PLEASE: 2. Type Final

TO: OHYE, M.
INIT: ____________
FOR: File
PLEASE: 3. Xerox __ copies

TO: HIRANO, E.
INIT: ____________
FOR: Information
PLEASE: 4. Xerox __ copies

TO: ICE, C.
INIT: ____________
FOR: Information
PLEASE: 5. Xerox __ copies

TO: IMATA, R.
INIT: ____________
FOR: Information
PLEASE: 6. Xerox __ copies

TO: JINNAI, R.
INIT: ____________
FOR: Information
PLEASE: 7. Xerox __ copies

TO: KUNIMURA, I.
INIT: ____________
FOR: Information
PLEASE: 8. Xerox __ copies

WELL NUMBER 4960-02
WELL NAME Kokio Wells

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

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 WCR FORM
6 WUR FORM
7 USGS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 GLENNS WORKSHEET

FOR OFFICE USE ONLY

Salt water well, OK
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  
Kukio Lagoon #1 and #2 Wells (Well No. 4960-02 & 4959-19)

Transmitted for your review and comment is a copy of the captioned well 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 November 30, 2001. 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 Ryan Imata of the Commission staff at 587-0255.

Rt:ky
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

Contact Person: Lori N. Kajiwara  
Phone: 506-4294

Signed: Lori N. Kajiwara  
Date: 12-3-2001
TO: Honorable Bruce S. Anderson, Director  
Department of Health  
Attention: Dennis Tuliang, 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  
Kukio Lagoon #1 and #2 Wells (Well No. 4950-02 & 4959-19)  
  
Transmitted for your review and comment is a copy of the captioned well 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 November 30, 2001. 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 Ryan  
Imata of the Commission staff at 587-0255.  

R:ky  
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  

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  
content 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 [1] 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: 11/28/01
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 55, 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) 586-4309 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
Transmitted for your review and comment is a copy of the captioned well application which includes a request for a pump installation permit.

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 November 30, 2001. 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 Ryan Imata of the Commission staff at 587-0255.

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. ________________.

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

[ ] No objections

[ ] Other comments: Original source of private title for both parcels (2 and 3) is Royal Grant 2121 issued in 1858.

Contact Person: Gary Martin Phone: 587-0421

Signed: Gary Martin Date: ____________
Dear Mr. Ainslie:

Well Construction/Pump Installation Permit Application for Well No. 4960-02 & 4959-19

We acknowledge receipt, on September 24, 2001, of your completed Well Construction/Pump Installation permit application and filing fee for the Kukio Lagoon #1 and #2 Wells (Well No.

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 Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai) extension 70255.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

RI:ky
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
         Kukio Lagoon #1 and #2 Wells (Well No. 4960-02 & 4959-19)

Transmitted for your review and comment is a copy of the captioned well 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 November 30, 2001. 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 Ryan
Imata of the Commission staff at 587-0255.

RI:ky
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.

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[ ] 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 application which includes a request for a pump installation permit.

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 November 30, 2001. 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 Ryan Imata of the Commission staff at 587-0255.

R:k/ky
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. ____________________________.

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: ________________

Signed: ____________________________ Date: ____________________________
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<th>Taxkey</th>
<th>Subdiv/Condo</th>
<th>Tnr Property Address</th>
<th>Owner/Lessee</th>
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<th>Baths</th>
<th>Land area</th>
<th>Living area</th>
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<td>WB KUKIO RESORTS LLC</td>
<td>18.27 ac</td>
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</tr>
</tbody>
</table>

This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.
September 18, 2001

Linnel Nishioka, Deputy Director
Attn: Ryan Imata
Commission on Water Resource Management
PO Box 621
Honolulu, HI 96809

Re:  Well Construction Application Permit
      Kukio Lagoons #1 and #2

Dear Linnel:

Enclosed please find five (5) signed copies of each Well Construction Application Permit and exhibits as well as a check for $50.00 filing fee for the two applications.

Should you have any questions, please feel free to call me at (808) 885-5941. Thank you.

Sincerely,

John Stubbart

SPB:mdc

Enclosure

cc: Samuel Ainslie – WB Kukio Resorts, LLC
WAIMEA WATER SERVICES, INC.

VENDOR ID:  

CHECK NO.: 5651  

PAYEE: Department of Land & Nat'l Re 

MEMO: Permit Kukio

DATE: 09/21/01

CHECK TOTAL: ********$50.00

RECEIVED

ON SEP 24  ALL: 07

CHECK TOTAL: ********$50.00
**WAIMEA WATER SERVICES, INC.**

**VENDOR ID:** 
**CHECK NO.:** 5651 **DATE:** 09/21/01

**PAYEE:** Department of Land & Nat'l Re  **MEMO:** Permit Kukio

---

**RESERVED**

**09 SEP 24 All: 07**

---

**PAY: FIFTY DOLLARS**

**TO THE ORDER OF**

Department of Land & Nat'l Re

---

**PAY: FIFTY DOLLARS**

**TO THE ORDER OF**

Department of Land & Nat'l Re

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**DEPARTMENT OF LAND AND NATURAL RESOURCES**

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**REMARKS:** LINE (1) WC/PIP Appl. for Well No. 4960-02 & 4969-19

**NAME/DESCRIPTION (WANG INPUT):**

Waimea Water Services, Inc. (Ck 5651)

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**0005651**

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**Bank of Hawaii**

Kamuela Branch
Kamuela, Hawaii 96743

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**DATE**

09/21/01

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**AMOUNT**

$50.00
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

1. WELL OWNER: WB Kukio Resorts, LLC
   Contact Person: Samuel Ainslie
   Phone: (808) 325-1000
   Mailing Address: PO Box 5349, Kailua-Kona, HI 96745
   Fax: (808) 325-2511
   Email: sainslie@kukio.com

2. LANDOWNER: WB Kukio Resorts, LLC
   Contact Person: Samuel Ainslie
   Phone: (808) 325-1000
   Mailing Address: PO Box 5349, Kailua-Kona, HI 96745
   Fax: (808) 325-2511
   Email: sainslie@kukio.com

3. CONTRACTOR: to be determined
   Contact Person: 
   Phone: 
   Mailing Address: 
   Fax: 
   Email: 
   Lic #: 
   (circle one: C-57, C-57a, or A)

4. WELL NAME: Kukio Lagoon #1
   Island: Hawaii
   Address: 87 Mile Marker, Queen K Hw
   Tax Map Key: 7 2 16 02

5. PROPOSED WORK: • Construct New Well
   (check all that apply)
   • Install New Pump
   • Modify Existing Well
   • Modify Pump
   • Abandon/Seal

6. CONSTRUCTION: • Drilled
   • Digged
   • Shaft
   • Tunnel

7. PROPOSED PUMPING RATE: 1,500 gallons per minute
   PROPOSED USE: • Brackish water feature
   • Domestic (individual, noncommercial water system)
   • Municipal (including hotels, stores, etc.)
   • Industrial
   • Irrigation (crop)
   • Military
   • Other (explain)

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

9. REMARKS, EXPLANATIONS: This well is to provide brackish water to a water feature at up to 1,500 gpm.

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 correctness of 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 to compliance, and any work done while the permit is in suspension may result in fines of up to $1000 daily.

Well Owner: WB Kukio Resorts
Landowner: WB Kukio Resorts
Contractor: 

Signature: Samuel Ainslie
Date: 1/28/01

For official use only
Latitude _____________
Aquifer System No.
Longitude _____________
State Well No.

WOPPA Form B2181
APPLICATION FOR PERMIT

APPLICANT INFORMATION:

1. (a) WELL OWNER: WB Kukio Resorts,llC Contact Person: Samuel Ainslie Phone: (808) 325-1000
   Mailing Address: PO Box 5349, Kailua-Kona, HI 96745
   Fax: (808) 325-2511 E-mail: sainslie@kukio.com

2. LAND OWNER: WB Kukio Resorts,llC Contact Person: Samuel Ainslie Phone: (808) 325-1000
   Mailing Address: PO Box 5349, Kailua-Kona, HI 96745
   Fax: (808) 325-2511 E-mail: sainslie@kukio.com

3. CONTRACTOR: to be determined
   Fax: E-mail: Lic #:
   Mailing Address: Phone:
   Mailing Address:

WELL & PUMP INFORMATION:

2. WELL NAME: Kukio Lagoon #2 Island: Hawaii
   Address 87 Mile Marker, Queen K Hw
   Fax Map Key: Zone 7 Sec 2 Plt 16 Parcel 03
   Add: (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
   - Install New Pump
   - Modify Pump
   - Abandon/Seal

   *State Well No. (if unknown, please call Commission at 808-622-6669)

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

5. PROPOSED PUMPING RATE: 1,500 gallons per minute

6. PROPOSED USE: (check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water system)
   - Military
   - Irrigation (crop)
   - Industrial
   - No.
   - No. of Acres:
   - Other (explain): Brackish water feature

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 1,296,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
      - Flowmeter
      - Open-pipe
      - Weir
      - Orifice
      - 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 587-0014
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEGC at 586-4185
   Special Management Area Permit (SMAP) To determine if a SMAP is necessary, call OAHU, call 527-5374; on Hawaii, call 961-8288; for Maui
   county, call 270-7235, on Oahu, call 270-7235; on Maui, call 241-8677.

9. REMARKS, EXPLANATIONS: This well is to provide brackish water to a water feature at up to 1,500 gpm.

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 90 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 $1000 per day.

Well Owner
Landowner
Contractor
Signature
Signature
Signature
Date
Date
Date

For official use only
Latitude Aquifer System No.
Longitude State Well No.

WCPA Form 82161
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

For non-ABS Plastic Open Culina Material:

- Stalnl_ CarbonS...
- Thermo_
- ABS Plastic
- PVC

Solid Casing Material:
- Carbon Steel: compliant with (check one or more):
  - ANSIAWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
  - 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 Molder 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):
  - ANSIAWWA 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)
- Filament Wound Resin Pipe conforming to ASTM D2996
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- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

Note:
- See attached for dug well

Kukio Lagoons #1 and #2
Map 1
Kukio Lagoon Brackish Wells #1 and #2 Location Map