### CHECKLIST

**WELL CONSTRUCTION PERMIT**  
Princeville 1 & 2  
WELL NAME or LOCATION: Princeville 2  
ISLAND: Kauai  
WELL NUMBER: 1127-02 (Princeville 2)  
Tax Map Key: 5-3-01:02

**OWNER/OPERATOR:**  
Firm Name Princeville Water Systems, Inc  
Contact Person: Michael Loo  
Address: P.O. Box 3040  
Princeville, HI 96722  
Phone: 826-3310

**LANDOWNER:**  
Firm Name Princeville Development Corp.  
Contact Person: Same  
Address: Same  
Phone:  

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Date application received: September 30, 1991  
Date acknowledged receipt/request more info: 10/29/91  
Date application accepted:  
Suspense date (90 days):  
Date filing fee deposited: ($50):  

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Application sent to following:  

<table>
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<tr>
<th>Agency</th>
<th>Date sent</th>
<th>Comments received</th>
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<tbody>
<tr>
<td>Dept. of Hawn Home Lands</td>
<td>10/31/91</td>
<td></td>
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<tr>
<td>Dept. of Health</td>
<td>10/29/91</td>
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<td>Office of Hawn. Affairs</td>
<td>10/31/91</td>
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<td>State Hist Pres Div</td>
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<td>Dept/Bd of Water Supply</td>
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<td>Sierra Club L. D. F.</td>
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<td>Additional List (Molokai)</td>
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Date agenda due:  
Date submittal due:  
Date submittal sent to applicant:  
Date application approved or disapproved:  
Date applicant notified of decision:  

---

### REMARKS:

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PER
in Library

TNWRE - March 2002
TO
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MGMT.
P.O. BOX 621
HONOLULU, HI 96809

WE ARE SENDING YOU X Attached □ Under separate cover via __________________________ the following items:

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

<table>
<thead>
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<th>DESCRIPTION</th>
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<td></td>
<td></td>
<td>FACTORY TEST CURVE FOR PUMP INSTALLED IN WELL</td>
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</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 PER YOUR REQUEST, ATTACHED IS THE FACTORY CURVE FOR THE GOULDS PUMP IN PRINCEVILLE WELL #4.

COPY TO LARRY DILL, PRINCEVILLE UTILITIES 1226W/C FILE

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

SIGNED: ____________________________

KEITH WEBSTER
**INDUSTCES - GOULDS PUMPS - TURBO OPERATII**

**PERFORMANCE TEST RESULTS**

**CUSTOMER: ROSCOE MOSS**

**ITEM: PRINCEVILLE WELL #4**

**S.O. NUMBER: 453343**

**DATE: 05/03/02**

---

### CONDITIONS

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<td>PUMP TYPE:</td>
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<td>CUST RPM:</td>
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<tr>
<td>CUST HP:</td>
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| SP. GR: | 1.00 |
| BOWL TDH: | 651.0 |
| VISC. SSU: | 32 |
| WATER TEMP (F): | 68 |
| MAX GPM: | 700 |
| MOTOR S/N: | R2111493 |
| EFFICIENCY%: | 84.0 |
| WATER TEMP (F): | 68 |
| TEST RMP: | 1770 |
| TEST MOTOR: | 100 HP |
| TRQ METER: | 6 |
| TEST LINE: | 8 |

**TESTED BY: Mark Nerios**

**CURVE RPM: 1740**

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### READINGS DURING TEST

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**VIBRATION**

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### TEST DATA RECORDED AT TEST RPM

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**PUMP EFF**

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### TEST DATA CONVERTED TO CUSTOMER RPM

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**PUMP EFF**

| RPM | 0.0 | 40.0 | 63.8 | 77.3 | 84.1 | 76.0 | 52.1 |

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**CERTIFIED TEST RESULTS**

**BY: John Smith**

**TITLE: Engineer**

**DATE: May 23, 2002**

**ITT Industries**
ITT - Goulds Pumps
Turbine Operations

Process Line 4

Flow - GPM

TDH - Ft

Horsepower

Eff

Design

Imp Dia: 6.69 in
Speed: 1740 RPM

Model: 9RCLC/17

SO: 453343
October 15, 2002

Mr. Larry Dill
Princeville Utilities Co., Inc.
P.O. Box 3040
Princeville, HI 96722

Dear Mr. Dill:

Well Completion Report for Well No. 1127-02

We received your Well Completion Report Part II for Princeville Well No. 4 (Well No. 1127-02) on October 7, 2002 and acknowledge that it is complete. Although not a requirement of your permit, we would appreciate a copy of the manufacturer's pump curves for the installed pump.

If you have any questions, 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
Ms. Lenore Nakama  
State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Re: State Well No. 1127-02  
Princeville Well No. 4  
Tax Map Key No. (4) 5-3-01:27  
Princeville, Kauai, Hawaii

Dear Ms. Nakama:

Enclosed for processing is our “Well Completion Report – Part II”.

If you have any questions or need further information, please call me at 808-826-3330.

Thank you.

Yours truly,

Lawrence J. Dill, P.E.  
Manager

Enclosure
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.: 1127-02  Well Name: PRINCEVILLE WELL NO. 4  Island: KAUAI
2. Address:  POWERLINE ROAD, KAUAI  Tax Map Key: 5-3-01:27
3. Pump Installation Company: BEYLK DRILLING, INC.
4. Date Pump Installed: 8/9/02
5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)
   Pump Type, Make, Serial No.: GOLDS 9RCLC-17
   Rated Capacity: 400 gpm at head of: 658 ft.
   Motor Type, H.P., Voltage, rpm: BYRON JACKSON 100 HP SUBMERSIBLE 460V, 1800 RPM
   Type of flow meter: TURBINE which measures in GALLONS
   Model Number Serial Number
   Pump type (check one):
   □ Deep Well Turbine
   □ Submersible
   □ Centrifugal
   □ Rotary
   □ Rotary-Displacement
   □ Reciprocating
   □ Rotary-Gear
   □ Impulse
6. Method of flow measurement:
   ○ Flowmeter Manufacturer NEPTUNE Make TURBINE Size 6"
   □ 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:

Pump Installation Contractor (print) BEYLK DRILLING, INC. C-57/C-57a/A Lic. No. AC-21896
Signature
Date 9-24-02

Permittee (print) Larry Dill, Manager
Signature
Date 9-30-02
9. AS-BUILT PUMP SECTION

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

Bench mark elevation surveyed to nearest 0.01 ft. = 572.67 ft. mean sea level

Elevation of top of chase tube = 573.67 ft. mean sea level

Pump intake depth = 668 ft. (referenced to bench mark)

Chase tube depth = 654 ft. (referenced to bench mark)

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

2-11-27-02 PRINCEVILLE 4

WCR2 Form 12/4/01 Page 2 of 2
MEMORANDUM

FROM: Lenore Nakama
SUBJECT: Princeville No. 4

9/10/02 Called Larry Dill, who confirmed that the pump was installed a few weeks ago. He will turn in the required paperwork ASAP.
PUMP INSTALLATION PERMIT

Princeville Well No. 4, Well No. 1127-02

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 Princeville Well No. 4 (Well No. 1127-02) at Powerline Road, Kauai, TMK 5-3-01:27, 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 400 gpm capacity, or less, pump in the well.

3. The permittee 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 is 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 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 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 is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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 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 must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

Date of Approval: October 14, 1998
Expiration Date: October 14, 2000

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 do not hold a valid permit 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.

Permittee's Signature: Michael V. Moo

Installer’s Signature: William C. Moore

Printed Name: Michael V. Moo
Firm or Title: Vice President
Princeville Utilities Co., Inc.

Printed Name: William C. Moore, Vice Pres.
Firm or Title: Beylik Drilling, Inc.

License #: AC-21986 Date: 8-31-01

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 Branches
Kauai Department of Water Supply

Michael D. Wilson, Chairperson
Commission on Water Resource Management
Mr. Larry Dill  
Princeville Utilities Company, Inc.  
P.O. Box 3040  
Princeville, HI 96722  

Dear Mr. Dill:  

We have received your timely request to extend the pump installation permit for the Princeville Well No. 4 (Well No. 1127-02) to September 30, 2002. We understand that the project was deferred because water demands following Hurricane Iniki were lower than projected, but have now returned to pre-Iniki levels. By this letter, your request is approved. The new expiration date is September 30, 2002.

Please remember to return a copy of the permit signed by your licensed contractor prior to commencing any work under this permit. Work performed without a fully signed permit is a violation of your permit approval conditions.

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

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director
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

Subject: Pump Installation Permit  
Princeville Well No. 4 (Well No. 1127-02)

Dear Ms. Nishioka:

Enclosed is our executed Pump Installation Permit for Princeville Well No. 4. As indicated on the form, the pump installation contractor is yet to be determined by competitive bid. Upon determination of the contractor, we will have the contractor execute the Pump Installation Permit, and we will forward a copy to your office.

By this letter we also request an extension of the referenced Permit. Our Well No. 4 project was initiated in the early 1990's in response to a projected need for additional capacity for Princeville Utilities' water system due to increasing demands. However, after Hurricane Iniki struck in September of 1992, water demands dropped dramatically, and the project has been deferred ever since. However, water demands have now returned to pre-Iniki levels, and we now plan to begin outfitting of the well this year, with completion of the project scheduled for late 2001. For this reason, on January 14, 2000, the Board of Land and Natural Resources extended our Conservation District Use Permit (CDUP KA-2710) for this project until September 30, 2002. A similar extension for our Pump Installation Permit would be most appreciated.

Please contact me at 826-3330 if you have any questions.

Very truly yours,

Larry Dill, P.E.  
Manager

Enclosure  
cc: Michael Loo  
skb\dill\0040301
PUMP INSTALLATION PERMIT

Princeville Well No. 4, Well No. 1127-02

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 Princeville Well No. 4 (Well No. 1127-02) at Powertline Road, Kauai, TMK 5-3-01-27, 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 400 gpm capacity, or less, in the well.

3. The permittee 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 is 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 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 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 is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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 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 must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

Date of Approval: October 14, 1998
Expiration Date: October 14, 2000

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 do not hold a valid permit 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.

Permittee's Signature: ___________________________ Date: 3/24/2000
Printed Name: Michael Y.M. Too
Firm or Title: Vice President
Princeville Utilities Co., Inc.

Installer's Signature: ___________________________ 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 Branches
Kauai Department of Water Supply
Mr. Larry Dill  
Princeville Utilities Co., Inc.  
P.O. Box 3040  
Princeville, Hawaii 96722

Dear Mr. Dill:

Pump Installation Permit  
Princeville Well No. 4 (Well No. 1127-02)

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) which authorizes 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 10:

\[ \text{Special Conditions} \]

1. (NONE)

The permittee is responsible for all conditions of the permit. This includes ensuring that the pump installation contractor, or other party who installs the pump, 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.

To validate your pump installation permit, 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. Except for the monthly water use report form, please provide copies of all the information in this packet to your pump installation contractor.

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

Aloha,

\[ \text{Michael D. Wilson} \]
Chairperson

Enclosures
PUMP INSTALLATION PERMIT

Princeville Well No. 4, Well No. 1127-02

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 Princeville Well No. 4 (Well No. 1127-02) at Powerline Road, Kauai, TMK 5-3-01:27, 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 400 gpm capacity, or less, pump in the well.

3. The permittee 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 is 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 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 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 is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97).

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 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 must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

Date of Approval: October 14, 1998
Expiration Date: October 14, 2000

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 do not hold a valid permit 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.

Permittee's Signature: ___________________________ Date: __________

Printed Name: ___________________________ Firm or Title: ___________________________

Installer's Signature: ___________________________ 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

USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Kauai Department of Water Supply
TO: Honorable Lawrence Miike, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson  
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application  
Princeton Well No. 4 (Well No. 1127-02)

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 October 9, 1998.

Please find a map, attached, 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 (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).

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

No comments/objections

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

Signed: Loni N. Kajiwara  
Date: 10-9-98
Mr. Larry Dill
Princeville Utilities Company, Inc.
P.O. Box 3040
Princeville, HI 96722

Dear Mr. Dill:

Well Abandonment Report for Well No. 1127-01

We have received your Well Abandonment Report for Princeville Well No. 3 (Well No. 1127-01) and acknowledge that it is complete. We appreciate your attention and assistance in protecting Kauai's ground water resources.

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

Sincerely,

TIMOTHY E. JOHNS
Deputy Director

LN:ss
TO: Honorable Lawrence Miike, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch  

FROM: Michael D. Wilson, Chairperson  
Commission on Water Resource Management  

SUBJECT: Well Construction Permit Application  
Princeville Well No. 4 (Well No. 1127-02)  

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 October 9, 1998.  

Please find a map, attached, 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.  

This well qualifies as a source which will serve as a source of potable water to a public water system (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).  

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

No comments/objections  

Contact Person: William Wong  
Phone: 586-4258  
Signed: William Wong  
Date: Sept. 25, 1998
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, Chapter 11-55, 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
FAX TRANSMITTAL

To: Lenore Nakama
   State of Hawaii
   Department of Land & Natural Resources
   Commission on Water Resource Management

Fax No: (808) 587-0219

From: Larry Dill, Manager

Date: September 25, 1998

Re: Abandonment of Princeville Well No. 3

No. Pages: Three (including this cover sheet)

If transmission is incomplete call Saundra at (808) 826-3360

Attached is a copy of the Well Abandonment Report as requested. Let me know if you would like a hardcopy mailed to you.

Please call me at 826-3330 if you have any questions.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL ABANDONMENT REPORT

3-7-97

1. STATE WELL NO. 1127-01
2. WELL NAME Princeville Well No. 3
3. ISLAND Kauai
4. LOCATION: Address Next to 1.5 MG Tank
5. Tax Map Key 5-3-01:13
6. CONTRACTORS C-57 LICENSE NUMBER C-16437
7. NAME OF DRILLER WHO PERFORMED WORK John Mole
8. TYPE OF RIG/CONSTRUCTION Pump Rig/Tremie Pipe
9. DATE OF WELL SEALING COMPLETION March 5, 1997

NOTE: Report must be submitted within 30 days after this date.

---

Finished Grade Elevation 411 ft.
Casing Diameter 20 in.

Check Material Used
Grout Seal: [ ] Cement [ ] Sand/Cement
Sand/Cement Ratio __

Total Measured Depth 235 ft.
Measured Depth Blank Casing 20 ft.
Measured Depth Perforated Casing None ft.

Measured Depth to Bottom of Grout 235 ft.
Measured Depth of Sand Fill N/A ft.

Remarks: See Reverse Side
(If more space is needed, continue on back.)

Contractor (print) William C. Morea
Title V.P.
Signature William C. Morea
Date Mar 7 1997

For Driller's Use
Job Name ___________ Job No ___________

For Official Use:
Well No. 1127-01
Longitude 194 27 06
Latitude 22 11 59
Remarks (cont'd): The well consisted of 20-inch diameter, 20-foot long conductor pipe and 730 feet of 12-inch diameter open hole. When the borehole was sounded, it was discovered that the borehole had collapsed to a depth of 235 feet (about 230 feet above the water table). The conductor pipe was pulled and the borehole was filled with neat cement.
Mr. Larry Dill
Princeville Utilities Co., Inc.
P.O. Box 3040
Princeville, HI 96722

Dear Mr. Dill:

Pump Installation Permit Application for Well No. 1127-02

We acknowledge receipt, on August 14, 1998, of your completed pump installation permit application for the Princeville Well No. 4 (Well No. 1127-02). You can expect your application to be processed within ninety (90) days from this date.

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, extension 70218.

Sincerely,

TIMOTHY E. JOHNS
Deputy Director

LN:ss
TO: Honorable Lawrence Miike, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch
FROM: Michael D. Wilson, Chairperson
      Commission on Water Resource Management
SUBJECT: Well Construction Permit Application
         Princeville Well No. 4 (Well No. 1127-02)

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 October 9, 1998.

Please find a map, attached, 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 (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 [ is not located near the proposed well site (information attached).

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

[ ] No comments/objections

Contact Person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
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**REMARKS:**
- LINE (1) Well No. 1127-02
- LINE (2)
- LINE (3)

**FILING FEE**

**DATE**

| 8/12/98 | FILING FEE | $25.00 |

**NOTICE:**

The attached check is in payment of items described below. If not correct, please notify us promptly. No receipt desired.
Mr. Timothy E. Johns - 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. Johns:  

Pump Installation Permit Application  
for the Princeville Potable Well No. 4 (State Well No. 1127-02)  

Enclosed please find completed application form, filing fee, and required copies to install the permanent 400 GPM Pump in Princeville Well No. 4. The well will be the third source of potable supply for Princeville’s Private, PUC-regulated water system.  

If you have questions or require additional information, please feel free to call. Thank you for your attention to this matter.  

Sincerely,  

Tom Nance  

Enclosures  

cc: Larry Dill - Princeville Utility Company
APPLICATION FOR PERMIT

☐ Well Construction or ☐ Pump Installation

Instructions: Please print in ink or type, attach required maps, and send the completed application & two (2) copies to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809. This application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance in completing this application, please call the Commission’s Regulation Branch at 587-0225.

1. APPLICANT: (circle primary contact a, b, or c) Primary Fax: (808) 826-9592
   (a) WELL OWNER
   Firm/Name: Princeville Utilities Co., Inc.
   Contact Person: Larry Dill
   Address: P.O. Box 3040, Princeville, Hi 96722
   (b) LANDOWNER
   Firm/Name: Princeville Corporation
   Contact Person: Michael Loo
   Address: P.O. Box 3040, Princeville, Hi 96722
   (c) CONTRACTOR
   Firm/Name: ________
   Contact Person: ________
   Address: ________

2. WELL LOCATION/NAME: Princeville Well No. 4 (#1127-02) Island Kauai
   Address: Powerline Road
   Tax Map Key: 5-3-01:27

Attach the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1"=24,000), and (b) a property tax map, showing well location referenced to established property boundaries.

3. (a) PROPOSED WORK:
   □ Drill New Well □ Deepen □ Install New Pump
   □ Modify Existing Well □ Redrill □ Modify Pump
   □ Abandon/Seal □ Replace Pump
   * Be sure to complete and submit well abandonment report upon completion of work.
   (b) WELL TYPE:
   □ Dug □ Bored □ Driven □ Drilled □ Radial
   Is this well a part of a battery of wells? □ Yes □ No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 400 gallons per minute
   Pump Type: □ Deep Well Turbine
   □ Rotary □ Propeller □ Diesel □ Other: ________ □ Reciprocating □ Gas
   [ ] Submersible □ Rotary-Displacement
   [ ] Centrifugal □ Rotary-Gear □ Impulse □ Electric, rated horsepower: 100 HP
   If Pump Replacement, Existing Pump Capacity: ________ gallons per minute

5. PROPOSED USE:
   [ ] Municipal (including hotels, stores, etc) □ Industrial
   [ ] Domestic (individual, noncommercial water sys.) □ Dwelling Units ________
   [ ] Irrigation (crop) □ Acres ________ □ Other: ________
   [ ] Military

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 500,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   □ Flow-meter □ Open-pipe □ Orifice Plate □ Well

7. PENDING ACTIONS: □ CDUA □ SMA □ EIS □ EA □ NONE □ Other(explain)
   Completion Date: ________

8. REMARKS, EXPLANATIONS: This well will be third source of potable supply for Princeville's existing drinking water system
   (If more space is needed, continue on back)

I 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 30 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.

Well Owner Princeville Utilities Co., Inc. Landowner Princeville Corporation Contractor ________
Signature ________ Signature ________ Signature ________
Date ________ Date ________ Date ________

For Official Use Only:
Date Received
Date Accepted
Field Checked By
Date
Longitude
Latitude
Aquifer System Name
State Well No.

3 Jan 97 WCPIA Form
9. PROPOSED WELL SECTION

Elevation at top of casing 572.91 ft., msl.

Ground Elevation: 571.2 ft., msl*

Cement Grout: 150 ft.

Rock Packing: 0 ft.

Hole Diameter: 17 in.

Total Depth: 1250 ft.

Solid Casing: steel

- Length: 320 ft.
- Diameter: 12 in.
- Wall thickness: 3/8 in.

Casing: Perforated Screen

- Material: steel
- Length: 400 ft.
- Diameter: 12 in.
- Wall thickness: 3/8 in.
- Openings: sq. in./L.F.

Open Hole:

- Length: 530 ft.
- Diameter: 10 in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
TO: Michael D. Wilson, Chairperson 
Commission on Water Resource Management 
Department of Land and Natural Resources

FROM: Michael Y.M. Loo

RE: Well No. 1127-01
Well Construction Permit to Abandon/Seal

DATE: July 29, 1996

WE ARE TRANSMITTING THE FOLLOWING:

Executed Well Construction Permit to Abandon/Seal for Well No. 1127-01.

cc: Tom Nance
WELL CONSTRUCTION PERMIT TO ABANDON/SEAL
Well No. 1127-01

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 abandonment/sealing of Well No. 1127-01 at Princeville, Hanalei, Kauai, TMK 5-3-01:13, subject to the following conditions:

1. The Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809, shall be notified in writing before any work covered by this permit commences.

2. The Well Abandonment Report form (attached) shall be submitted to the Commission on Water Resource Management within thirty (30) days after completion of the work.

3. The permittee shall comply with all applicable laws, rules, and ordinances.

4. 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 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 Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

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

Date of Approval: 7/18/96
Expiration Date: 7/18/98

MICHAEL D. WILSON, 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.

Applicant's Signature: [Signature]
Printed Name: [Printed Name]
Firm or Title: [Firm or Title]
Date: 7/29/96

Please sign both copies and return one copy of this permit to the Commission and retain a copy for your record.

Attachment
cc: USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Kauai Board of Water Supply
Mr. Michael Y.M. Loo  
Princeville Utilities Company, Inc.  
P.O. Box 3040  
Princeville, Hawaii 96722  

Dear Mr. Loo:  

Well Construction Permit to Abandon/Seal  
Well No. 1127-01  

Enclosed are two (2) copies of your approved Well Construction Permit to abandon/seal Well No. 1127-01. As part of the Commission's approval, the following special condition was added and is part of your permit under Standard Permit Condition 5:  

Special Condition  

A. The sealing of the well shall be in compliance with the requirements in Sections 3.1 to 3.9 of the proposed Well & Pump Installation Standards (attached).  

Please sign the permit copies and return one for our files.  

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214 or toll free at 1-800-274-3141.  

Aloha,  

MICHAEL D. WILSON  
Chairperson  

Enclosures
TO:     Honorable Lawrence Miike, Director
        Department of Health
        Attention: Dennis Tulang, Wastewater Branch
                  William Wong, Safe Drinking Water Branch

FROM:   Michael D. Wilson, Chairperson
        Commission on Water Resource Management

SUBJECT: Well Construction Permit Application to
         Abandon/Seal Well No. 1127-01)

Transmitted for your review and comment is a copy of a well construction permit
application to abandon/seal Well No. 1127-01. We have notified the applicant of our
proposed Well and Pump Installation Standards and the provisions therein regarding the
method and materials to be used.

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 July 21, 1996.

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

LN:ss
Attachment(s)

RESPONSE: (X) We have no comments
(   ) Comments attached

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

Signed: Lori N. Kajiwara Date: 7-10-96
TO: Honorable Lawrence Miike, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction Permit Application to Abandon/Seal Well No. 1127-01)

Transmitted for your review and comment is a copy of a well construction permit application to abandon/seal Well No. 1127-01. We have notified the applicant of our proposed Well and Pump Installation Standards and the provisions therein regarding the method and materials to be used.

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 July 21, 1996.

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

RESPONSE: ( ) We have no comments
( ) Comments attached

Contact Person: Bill Wong Phone: 586-4258

Signed: Bill Wong Date: 06/27/96
Mr. Michael Y.M. Loo
Princeville Utilities Company, Inc.
P.O. Box 3040
Princeville, Hawaii 96722

Dear Mr. Loo:

Well Construction Permit Application to
Abandon/Seal Well No. 1127-01

Thank you for your timely response to our letter of May 7, 1996 and your cooperation in this matter. We accepted your application to abandon/seal Well No. 1127-01 on June 21, 1996 and hereby acknowledge that it is complete. You can expect your application to be processed within ninety (90) days from that acceptance date.

You are in receipt of the appropriate section from our proposed Well & Pump Installation Standards that discusses the method and materials for well abandonment/sealing. If you would like to propose an alternate method or materials to be used, please submit your proposal to the Commission on Water Resource Management as soon as possible.

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

Sincerely,

RAE M. LOUI
Deputy Director
TO: Honorable Lawrence Miike, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
             William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
      Commission on Water Resource Management

SUBJECT: Well Construction Permit Application to
         Abandon/Seal Well No. 1127-01

Transmitted for your review and comment is a copy of a well construction permit application to abandon/seal Well No. 1127-01. We have notified the applicant of our proposed Well and Pump Installation Standards and the provisions therein regarding the method and materials to be used.

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 July 21, 1996.

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

LN:ss
Attachment(s)

RESPONSE: ( ) We have no comments
           ( ) Comments attached

Contact Person: ___________________________ Phone: ___________

Signed: ________________________________ Date: ___________
May 23, 1996

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

Re: Well Abandonment
Princeville Well #3 (Well No. 1127-01)

Gentlemen:

Enclosed herewith are the original and two copies of a completed Application for Permit to abandon and seal Princeville Well #3 (Well No. 1127-01), together with a check in the amount of $25.00 to cover the filing fee. Please process this accordingly.

If you have any questions, or need further information, please contact me at 826-3310.

Sincerely,

Michael Y. M. Loo
Vice President

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

APPLICATION FOR PERMIT
☐ Well Construction  or  ☐ Pump Installation

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 96829. Application must be accompanied by 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.

1. APPLICANT: (circle primary contact a, b, or c)  
   (a) WELL OWNER
   FirmName: PRINCEVILLE WATER Co Inc
   Contact Person: Michael Keo
   Address: PO Box 3040
   Phone: 808-826-9592
   (b) LANDOWNER
   FirmName: PRINCEVILLE WATER Co Inc
   Contact Person: Michael Keo
   Address: PO Box 3040
   Phone: 808-826-9592
   (c) CONTRACTOR
   FirmName: ROSS TO OR NAME
   Contact Person: L. RENNELS
   Address: 11-239 A OLAI ST EWA BEACH IL 96707
   Phone: 16937

2. WELL LOCATION/NAME: PRINCEVILLE WELL #3 (11E-01)  
   Island: KAUAI
   Address:  
   Tax Map Key: 5-3-01:13

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

3. (a) PROPOSED WORK:  
   - Drill New Well
   - Modify Existing Well
   - Deepen
   - Install New Pump
   - Modify Pump
   - Abandon/Seal
   - Replace Pump
   * Be sure to complete and submit well abandonment report upon completion of work.

(b) WELL TYPE:  
   - Dug
   - Bored
   - Driven
   - Drilled
   - Radial
   Is this well a part of a battery of wells?  
   Yes  
   No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:  
   Rated Pump Capacity: _______ gallons per minute
   Pump Type:
   - Deep Well Turbine
   - Rotary
   - Submersible
   - Centrifugal
   - Rotary-Displacement
   - Rotary-Gear
   - Propeller
   - Reciprocating
   - Impulse
   If Pump Replacement, Existing Pump Capacity: _______ gallons per minute
   Motor:
   - Electric, rated horsepower:

5. PROPOSED USE:  
   - Municipal (including hotels, stores, etc.)
   - Military
   - Domestic (individual, noncommercial water sys.)
   - Industrial
   - Irrigation (crop)
   - Other (explain)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: _______ gallons per day

(b) METHOD OF FLOW MEASUREMENT:  
   - Flow-meter
   - Open-pipe
   - Orifice Plate
   - Weir

7. PENDING ACTIONS:  
   - CDUA
   - SMA
   - EIS
   - EA
   - NONE
   - Other (explain)

8. REMARKS, EXPLANATIONS:  
   For DRIVERS COMPLIANCE REPORT THIS WELL WAS NOT SEEN DURING HURRICANE INIKI. TESTING BY THE OWNER CONFIRMED THE AQUIFER FOR OUR WELLS #1 & #2 WERE CONNECTED TO #3 AND #4.

   (If more space is needed, continue on back)

I 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 30 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.

Well Owner: PRINCEVILLE WATER Co Inc  
Landowner: PRINCEVILLE WATER Co Inc  
Contractor: ROSS TO OR NAME

Signature:  
Date  

For Official Use Only:  
Date Received  
Date Accepted  
Field Checked By  
Date  

Latitude  
Longitude  
Aquifer System Name  
State Well No.

11/06/05 WCIP Form
9. PROPOSED WELL SECTION

Elevation at top of casing
____________________ ft., msl.

Ground Elevation: __________ ft., msl

Cement Grout: __________ ft.

Rock Packing: __________ ft.

Solid Casing:
Material ___________________________ ft.
Length ___________________________ ft.
Diameter ___________________________ in.
Wall thickness ________________________ in.

Hole Diameter: __________ in.

Total Depth: __________ ft.

Casing: ☐ Perforated  ☐ Screen
Material ___________________________ ft.
Length ___________________________ ft.
Diameter ___________________________ in.
Wall thickness ________________________ in.
Openings __________________ sq. in./A.F.

Open Hole:
Length ___________________________ ft.
Diameter ___________________________ in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports."
DOCUMENT NO.  UAC OR ATTACHED WORKSHEET  DATE: JUN 21 1996

<table>
<thead>
<tr>
<th>F</th>
<th>YR</th>
<th>APP</th>
<th>D</th>
<th>SRC/ Cost</th>
<th>OBJ</th>
<th>CTR</th>
<th>PROJECT</th>
<th>PH</th>
<th>ACT</th>
<th>AMOUNT</th>
<th>NAME/DESCRIPTION (HAND INPUT)</th>
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<td>G</td>
<td>00</td>
<td>000</td>
<td>C</td>
<td>1026</td>
<td>0752</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1) $25.00</td>
<td>Princeville Corporation</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>TOTAL $25.00</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS: LINE (1) Well no. 1127-01 (WC)
LINE (2)
LINE (3)
LINE (4)

DATE | DESCRIPTION | INVOICE NO. | AMOUNT | DISCOUNT | DEDUCTIONS | NET AMOUNT
---|-------------|-------------|--------|----------|------------|------------
Filing Fee-Application for Permit | 8010.1705.003 | 25.00    |
Mr. Michael Y.M. Loo, Vice President
Princeville Utilities Company, Inc.
P.O. Box 3040
Princeville, HI 96722

Dear Mr. Loo:

Well Abandonment Report
Princeville Well #3 (Well No. 1127-01)

We received a well completion report for Princetville Well #3 (Well No. 1127-01) from Roscoe Moss Hawaii, Inc., indicating that the subject well has been abandoned since September 1992.

Pursuant to §13-168-16 HAR, the owner or operator of an abandoned well is required to properly fill and seal the well with cement in a manner approved by the Commission to prevent potential contamination of ground water resources. Be advised that the work may not commence until an application has been made and a well construction permit has been obtained from the Commission on Water Resource Management. We have attached a well construction permit application for your use. In addition, we have enclosed the section from our proposed Well & Pump Installation Standards regarding well abandonment/sealing.

If you have any questions, please contact Lenore Nakama at 587-0218 or toll free at 1-800-468-4644, extension 70218.

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss
Attachments
### WELL COMPLETION REPORT

**INSTRUCTIONS:** Please print or type and submit completed report within 30 days of well completion to the Division of Water & Land Development, P.O. Box 273, Honolulu, HI 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, please phone 948-1441, Hydrology, Geology Section for assistance.

<table>
<thead>
<tr>
<th>A. STATE WELL NO.</th>
<th>1127-01</th>
<th>B. LOCATION</th>
<th>PRINCEVILLE WELL #3</th>
<th>C. WELL OWNER</th>
<th>PRINCEVILLE CORP</th>
<th>D. DRILLING OR PUMP INSTALLATION CONTRACTOR</th>
<th>ROSCOE MOSS HAWAII, INC.</th>
<th>E. TYPE OF RIG</th>
<th>150 FAILING AIR ROTARY</th>
<th>F. DATE OF WELL COMPLETION</th>
<th>JAN. 1993</th>
<th>G. DATE OF PUMP INSTALLATION</th>
<th>JAN. 1993</th>
</tr>
</thead>
</table>

**GROUND ELEVATION:** (ma) 411 ft. Top of Drilling Platform (ma) 414 ft. Height of drilling platform above ground surface 3 ft. Bench mark and method used to determine ground elevation TANK ELEV ft. RESERVOIR ON SITE

**TOTAL DEPTH OF WELL BELOW GROUND:**

<table>
<thead>
<tr>
<th>I. HOLE SIZE</th>
<th>16 inch dia. from 0 ft. to 20 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 1/2 inch dia. from 0 ft. to 20 ft. below ground</td>
</tr>
</tbody>
</table>

**CASING INSTALLED:**

| J. CASING INSTALLED | 14 in. l.d. x .3125 in. wall solid section to 20 ft. below ground |
|---------------------|-----------------------------------------------------------------
|                     | 12.75 in. l.d. x .3125 in. wall perforated section to 20 ft. below ground |

**ANNULUS:**

GROUTED from 0 ft. to 20 ft. below ground

**PERMANENT PUMP INSTALLATION:**

<table>
<thead>
<tr>
<th>L. PERMANENT PUMP INSTALLATION</th>
<th>Capacity ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUMP type, make, serial No.</td>
<td></td>
</tr>
<tr>
<td>Motor type, H.P., voltage, r.p.m.</td>
<td></td>
</tr>
<tr>
<td>Depth of pump intake setting</td>
<td>ft. below which elevation is ft.</td>
</tr>
<tr>
<td>Depth of bottom of airlift</td>
<td>ft. below which elevation is ft.</td>
</tr>
</tbody>
</table>

**PROPOSED USE:**

**INITIAL WATER LEVEL:** ft. below ground. Date and time of measurement

**INITIAL CHLORIDE:** ppm. Date and time of sampling

**PUMPING TESTS:** Reference point (R.P.) used: which elevation is ft.

<table>
<thead>
<tr>
<th>Date</th>
<th>Start water level</th>
<th>End water level</th>
<th>Depth of well</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start water level</td>
<td>ft. below R. P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End water level</td>
<td>ft. below R. P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth of well</td>
<td>ft. below R. P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time (hours)</td>
<td>Rate (ppm) down (ft.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rate (ppm) down (ft.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rate (ppm) down (ft.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q. DRILLER’S LOG:</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth, ft.</td>
<td>Rock Description &amp; Remarks</td>
</tr>
<tr>
<td>0 to 51</td>
<td>red soft dirt</td>
</tr>
<tr>
<td>51 to 68</td>
<td>grey brn hard</td>
</tr>
<tr>
<td>68 to 115</td>
<td>grey brn hard</td>
</tr>
<tr>
<td>115 to 140</td>
<td>brn soft</td>
</tr>
<tr>
<td>140 to 166</td>
<td>brn little red</td>
</tr>
<tr>
<td>166 to 185</td>
<td>grey brn hard</td>
</tr>
<tr>
<td>165 to 338</td>
<td>grey brn hard</td>
</tr>
<tr>
<td>338 to 363</td>
<td>grey brn med soft</td>
</tr>
<tr>
<td>363 to 390</td>
<td>grey brn med hard</td>
</tr>
<tr>
<td>390 to 588</td>
<td>blue grey hard</td>
</tr>
<tr>
<td>588 to 615</td>
<td>grey brn med hard</td>
</tr>
</tbody>
</table>

| REMARKS:           |                  |

**SUBMITTED by (print):** TRACY RUNNELLS

**SIGNATURE:**

**TITLE:** DRILLING OPERATIONS MANAGER

**DATE:** 4/1/96
Remarks, Explanations (cont'd):

Hurricane Enriki: New drill rig over well has been abandoned since. Hole is now approx. 300 ft. deep. I understand Princeville would like to fill hole with concrete. Attached pump tests indicated existing wells in valley were affected by this well thus new source was found.

Lance Kendall

1121-01

AS BUILT WELL SECTION

Elevation at top of casing: 412 ft., rel.

Ground Elevation: 411 ft., rel.

Cement Grout: 20 ft.

Rock Packing: ______ ft.

Solid Casing:
Material:
Length: 20 ft.
Diameter: 14".
Wall thickness: 3/16" inch.

Hole Diameter: ______ in.

Total Depth: ______ ft.

Casing: [ ] Perforated [ ] Screen
Material:
Length:
Diameter:
Wall thickness:
Openings: ______ sq. in./L.F.

Open Hole:
Length:
Diameter:

*Approximate elevation at time of filing application. Ground elevation above mean sea level (rel) by a surveyor licensed by the State must be submitstart of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
Devin Co. 1127-01

JULY 20, 1992

Experiment to determine if new well at 750' depth is in the same compartment as the first two wells.

(1) Install 14 drill rods - 438' length.
(2) Measure DTW = f 500' Solinst.

DTW = 422 to top of rod.

(3) Set Westdata pressure transducer, 26' from transducer to bend of logcer: set @ 402 feet.

(4) Pumps on @ 9:06 and 9:10 approximately.

(5) Failed logcer out @ 9:40 - file "PV1"... nothing apparent: restart logcer.

(6) Restart well No. 1 @ 10:01 AM.

- two existing wells - 350' apart
- 1300' to the new well from No. 2

(7) Coordinated shutdown. Both pumps off at 11:40 AM.
(8) Got recovery data until 12:10 AM.

 subsidiaries off w.r.to file "PV2".

JULY 22

4½ yrs calc up to 664'

Couldn't make value totaling data... will try tomorrow.

SAMPLES:

NEW WELL → 20 MCL ... 190
EXISTING WELL NO. 2 → 24 ... 210
11/27-01
FRANCOVILLE OPEN HOLE PUMP TEST
JULY 15, 1992
BY PHONE/ELTON

Artline w @ 475 ± 10 psi.
Static psi = 23
GPM @ 412
SWL = (-) 10 ft!!

DWDN = 4.6 ft @ 330 ± GPM

\[ a = 4.48 \times 10^{-3} \]
\[ b = 2.308 \times 10^{-2} \]
\[ v_0^2 = 0.82 \]

<table>
<thead>
<tr>
<th>GPM</th>
<th>DWDN</th>
<th>3/4</th>
<th>W.P.M.</th>
<th>WATER SAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>245</td>
<td>2.43</td>
<td>0.0092</td>
<td>CONS. TEMP.</td>
<td>SALT CHLORIDE</td>
</tr>
<tr>
<td>335</td>
<td>3.35</td>
<td>0.0136</td>
<td>NEW WELL:</td>
<td>245</td>
</tr>
<tr>
<td>335</td>
<td>4.04</td>
<td>0.0126</td>
<td>EXISTING NO. 2:</td>
<td>272</td>
</tr>
</tbody>
</table>
PUMPTEST OF JULY 24, 1992

WELL IS ISOLATED BACK TO 664FT:

- Static @ 50'652 psi (DTW = 369'368 bedwell, 500'365' ML)
- @ 410 GPM, goes to zero psi in 41.5 minutes... recovery slows
- Static @ 160 GPM/28-ft drawdown.
\[ a = a \Phi + b \Phi^2 \]

\[
\begin{align*}
2.43 &= a (245) + b (245)^2 \\
4.04 &= a (335) + b (335)^2 \\
2.43 &= a (245) + b (600.25) \\
4.04 &= a (335) + b (1122.25) \\
\end{align*}
\]

\[
\begin{align*}
\Phi &= .004 \\
b &= 2.379 e^{-5} \\
\end{align*}
\]

\[
\begin{align*}
.004 (245) &= .98 \\
2.379 e^{-5} (600.25) &= 1.42 \\
\end{align*}
\]

Using the Puckman - Kollman method:

\[
K = \frac{\Phi \ln \left( \frac{1.6}{T_{ew}} \right)}{2\pi L \Delta \omega}
\]

\[
\begin{align*}
\Phi &= 245 \text{ gpm} = 47,040 \text{ ft}^3/d \\
L &= 328' \\
\Delta \omega &= .98 \\
T_{ew} &= .52 \\
\end{align*}
\]

\[
K = \frac{47,040 \text{ ft}^3/d \ln \left( \frac{1.6}{.52 \text{ ft}} \right)}{2 \pi \cdot 328 \cdot .98 \text{ ft}}
\]

\[
K = 161 \text{ ft}/d
\]

\[
T = \text{assume } 328' \cdot 161 \text{ ft}/d = 51,841 \text{ ft}^2/d
\]
Mr. Michael Y.M. Loo, Vice President  
Princeville Utilities Company, Inc.  
P.O. Box 3040  
Princeville, Hawaii 96722

Dear Mr. Loo:

Well Completions Reports  
Princeville Wells 3 & 4  
(Well Nos. 1127-01 & 02)

Thank you for transmitting the well completion report for Princeville Well 4 (Well No. 1127-02). It appears complete. We look forward to the report from Well 3 (Well No. 1127-01).

If you have questions, please call Charley Ice at 587-0251.

Sincerely,

^Signature^  
RAE M. LOUI  
Deputy Director

CI:ss
<table>
<thead>
<tr>
<th>TO</th>
<th>INIT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y. SHIROMA</td>
<td></td>
</tr>
<tr>
<td>F. Ching</td>
<td></td>
</tr>
<tr>
<td>R. Jinnai</td>
<td></td>
</tr>
<tr>
<td>M. Ohye</td>
<td></td>
</tr>
<tr>
<td>I. Kunimura</td>
<td></td>
</tr>
<tr>
<td>S. Swanson</td>
<td></td>
</tr>
<tr>
<td>K. Yoda</td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE:**

- See Me
- Call
- Review & Comment
- Take Action
- Investigate & Report
- Draft Reply
- Acknowledge Receipt
- Type Draft
- Type Final
- Xerox ___ copies

**FOR YOUR:**

- R. LOUI
- S. Kokubun
- E. SAKODA
- E. HIRANO

**OPERATION BRANCH**
Commission on Water Resource Management

FROM: __________________ DATE: __/__/____ FILE IN: __________________

**REMARKS:**

[Taken for files]

[12/26-01:00 finishing up]

[unsigned, illegible text]
1. STATE WELL NO. 1127-02  
   WELL NAME PRINCEVILLE #4  
   ISLAND KAUAI

2. LOCATION: Address POWER LINE ROAD  
   Tax Map Key 5-3-01:2

3. DRILLING OR PUMP INSTALLATION CONTRACTOR: ROSCOE MOSS HAWAII, INC.

4. CONTRACTOR'S C-57 LICENSE NUMBER: C-16437

5. NAME OF DRILLER WHO PERFORMED WORK: JOHN CARROLL, PETE RATH

6. TYPE OF RIG/CONSTRUCTION: AIR ROTARY & CABLE TOOL RIGS

7. DATE OF WELL DRILLING COMPLETION: 8/24/95

   (NOTE: Report must be submitted within 30 days after this date)

8. GROUND ELEVATION (msl) 570.95 ft.  
   Top of Drilling Platform (msl) 570.95 ft.  
   Height of Drilling Platform above Ground surface (ft.) UTILITIES SURVEY PRINCEVILLE

9. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 56</td>
<td>red soft dirt</td>
<td></td>
<td>182 to 196</td>
<td>gray brown med hard</td>
<td>56'</td>
</tr>
<tr>
<td>56 to 90</td>
<td>brown soft dirt</td>
<td></td>
<td>196 to 210</td>
<td>blue gray very hard</td>
<td>56'</td>
</tr>
<tr>
<td>90 to 139</td>
<td>firm brown hard</td>
<td></td>
<td>210 to 305</td>
<td>layered basalt blue/gray</td>
<td>90'</td>
</tr>
<tr>
<td>139 to 176</td>
<td>blue rock hard</td>
<td></td>
<td>305 to 311</td>
<td>brown med soft</td>
<td>90'</td>
</tr>
<tr>
<td>176 to 182</td>
<td>gray brown very soft</td>
<td></td>
<td>311 to 338</td>
<td>blue gray hard</td>
<td>90'</td>
</tr>
</tbody>
</table>

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

10. TOTAL DEPTH OF WELL BELOW GROUND (ft.)

11. HOLE SIZE:

<table>
<thead>
<tr>
<th>Diameter (in.)</th>
<th>Length (ft.)</th>
<th>Depth of Pump Intake Setting (ft.)</th>
<th>Depth of bottom of well (ft.)</th>
<th>Pumping Head (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>12 1/4</td>
<td>ft. below ground to 0</td>
<td>ft. below ground to 725</td>
<td>ft. below ground</td>
</tr>
</tbody>
</table>

12. CASING INSTALLED:

<table>
<thead>
<tr>
<th>Diameter (in.)</th>
<th>Length (ft.)</th>
<th>Wall Material</th>
<th>Type of Perforation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>375</td>
<td>solid</td>
<td>FULL FLO LOUVER</td>
</tr>
</tbody>
</table>

13. ANNULUS:

<table>
<thead>
<tr>
<th>Type of Annulus</th>
<th>Diameter (in.)</th>
<th>Length (ft.)</th>
<th>Depth of bottom of well (ft.)</th>
<th>Pumping Head (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grouted from</td>
<td>0</td>
<td>ft. below ground to 155</td>
<td>ft. below ground to NA</td>
<td>ft. below ground</td>
</tr>
</tbody>
</table>

   | Gravel packed from | Diameter (in.) | Length (ft.) | Depth of bottom of well (ft.) | Pumping Head (ft.) |
   | NA               | 375           | ft. below ground to NA              | ft. below ground to NA       | ft. below ground  |

14. INITIAL WATER LEVEL 332.2 ft. below ground. Date and time of measurement 8/9/95

15. INITIAL CHLORIDE 13.3 mg/l Date and time of sampling

16. INITIAL TEMPERATURE 71.5 °F Date and time of sampling

17. DATE OF PUMP INSTALLATION

18. PUMP INSTALLATION:

<table>
<thead>
<tr>
<th>Motor Type, Model, Serial No.</th>
<th>Pump Type, Make, Serial No.</th>
<th>Capacity (gpm)</th>
<th>Date of Pumping Test Used</th>
<th>Reference Point (R.P.) used</th>
<th>Which elevation is (ft.)</th>
<th>Which elevation is (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. PUMPING TESTS:

<table>
<thead>
<tr>
<th>Date 8/9/95</th>
<th>Start water level 336.73 ft. below R.P.</th>
<th>End water level 345.97 ft. below R.P.</th>
<th>Depth of well 1250 ft. below R.P.</th>
<th>Pumping Time (hours)</th>
<th>Rate (gpm)</th>
<th>Drawdown (ft.)</th>
<th>Cl. (ppm)</th>
<th>Temp. °F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

   Remarks: DATA ATTACHED

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

   Contractor (print) ROSCOE MOSS HAWAII, INC. Title FIELD SUPERINTENDENT

   Signature ____________________

   Date 9/27/95

   For Official Use:  
   Well No. 1127-02  
   Longitude 159 27 32  
   Latitude 22 11 18
### DRILLER'S LOG (contd):

<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>492 to 441</td>
<td>blue rock very hard</td>
<td>324'</td>
</tr>
<tr>
<td>450 to 431</td>
<td>brown gray hard</td>
<td>328'</td>
</tr>
<tr>
<td>491 to 535</td>
<td>gray brown, little red</td>
<td></td>
</tr>
<tr>
<td>575 to 500</td>
<td>blue gray loose</td>
<td></td>
</tr>
<tr>
<td>575 to 500</td>
<td>blue rock very hard</td>
<td></td>
</tr>
</tbody>
</table>

### PUMPING TESTS (contd):

<table>
<thead>
<tr>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Drawdown (ft)</th>
<th>Cl- (ppm)</th>
<th>Temp. F</th>
<th>Elapsed Time (hours)</th>
<th>Rate (gpm)</th>
<th>Drawdown (ft)</th>
<th>Cl- (ppm)</th>
<th>Temp. F</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks (contd):</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 810 835 blue rock hard 339'8" 1117 1135 soft gray rock
- 835 849 blue rock little green 339'8" 1135 1141 decomposed rock
- 849 900 blue rock 339'8" 1141 1145 decomposed rock
- 900 938 blue brown hard 343'1" 1145 1178 med hard rock
- 938 950 blue gray brown 342'2" 1178 1194 hard rock
- 950 955 gray muddy 1194 1225 rock & boulders
- 955 1005 sticky red/gray clay 1225 1243 cinders
- 1005 1007 hard black rock 1243 1250 redish brown caving
- 1007 1015 sticky clay
- 1015 1020 fractured rock
- 1020 1030 decomposed rock
- 1030 1045 brown & gray clay
- 1045 1065 decomposed rock
- 1065 1077 broken rock
- 1077 1088 rock and sandstone
- 1088 1090 hard broken rock
- 1090 1095 red cinders
- 1095 1107 decomposed rock
- 1107 1117 hard rock
9. PROPOSED WELL SECTION

Elevation at top of casing 573 ft., msl.

Ground Elevation: 570.95 ft., msl

Cement Grout: 155 ft.

Solid Casing:
- Material: steel
- Length: 320 ft.
- Diameter: 12" I.D.
- Wall thickness: .375".

Casing:
- Perforated X
- Material: steel
- Length: 400 ft.
- Diameter: 12" I.D.
- Wall thickness: .375"
- Openings: 62.3 sq. in./L.F.
- 3/16" openings

Hole Diameter: 18 in.

Total Depth: 1250 ft.

Open Hole:
- Length: 530 ft.
- Diameter: 10 ft.

Remarks, Explanations (cont'd):

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment report.
<table>
<thead>
<tr>
<th>TIME</th>
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<th>Q</th>
<th>POUND</th>
<th>MIN.</th>
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<td>140.9</td>
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<tr>
<td>10:26</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10:27</td>
<td>WATER UP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28:45</td>
<td>121.5</td>
<td>600/544=2246cm</td>
<td>64.4</td>
<td>2.75</td>
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<tr>
<td>31:00</td>
<td>114.8</td>
<td></td>
<td>79.9</td>
<td>5.3</td>
</tr>
<tr>
<td>33:20</td>
<td>112.0</td>
<td>600/1042=277</td>
<td>88.4</td>
<td>2.3</td>
</tr>
<tr>
<td>35:20</td>
<td>111.2</td>
<td>460/1.57=296</td>
<td>88.2</td>
<td>4</td>
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<tr>
<td>38:40</td>
<td>100.3</td>
<td></td>
<td>90.3</td>
<td>12.3</td>
</tr>
<tr>
<td>41:20</td>
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<td>90.3</td>
<td>12.3</td>
</tr>
<tr>
<td>41:48</td>
<td></td>
<td>1000/3:428=260</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46:20</td>
<td>100.7</td>
<td></td>
<td>89.4</td>
<td>20.5</td>
</tr>
<tr>
<td>50:00</td>
<td></td>
<td>400/127=27</td>
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<tr>
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<td>110.7</td>
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<td>80.2</td>
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<td>111.1</td>
<td></td>
<td>88.7</td>
<td>27</td>
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<td>55:00</td>
<td>111.2</td>
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<td>Q</td>
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</tr>
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<td>12HON</td>
<td>MIN</td>
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<tr>
<td>12:06</td>
<td>600/1:28 = 405</td>
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(Additional columns for other parameters not visible in the image.)
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<tr>
<th>TIME</th>
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<th>PRESSURE</th>
<th>TEMP.</th>
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<td>1:10</td>
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<td>880/1590</td>
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</tr>
</tbody>
</table>

Note: Temperature, pressure, and humidity measurements are approximate and subject to fluctuations.
PUMPING TEST RECORD

for

Princeville

Well

(Name) (No.)

Key:

Island 20-978 Project or Job No. 19

Description of Well—being injected

1. Elevation: ground surface ft., top of casing ft., rotary table ft., referenced to benchmark.
2. Total depth of well 1250 ft.; or ft. elevation, msl
3. In. solid casing to ft. depth, perforated to ft. depth
4. Static water level on 19 ft. below ground surface, top of casing; or ft. elevation msl measured method

Description of Pump Injection source

5. Turbine-type pump with stage bowl assembly
6. Gasoline (diesel) electric, power with horsepower
7. Shaft speed: rpm at gpm flow
8. Depth of pump intake: 700 ft. below; or ft. elev. msl
9. Depth of airline bottom: 660 ft. below; or ft. elev. msl
10. Center of gage: ft. elev., msl. Flow measured with

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Sample No.</th>
<th>Pumping rate (gpm)</th>
<th>Airline Down well PSI</th>
<th>Vault level from ground (ppm)</th>
<th>Chlorides Temp. (°F)</th>
<th>Cond. (mmhos 25°C)</th>
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<td>56.6</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>4:00</td>
<td>400 +</td>
<td>56.5</td>
<td></td>
<td></td>
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<tr>
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<td>56.9</td>
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<td></td>
</tr>
<tr>
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<td>400 +</td>
<td>56.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00</td>
<td>400 +</td>
<td>56.5</td>
<td></td>
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</tr>
<tr>
<td>8:00</td>
<td>400 +</td>
<td>56.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00</td>
<td>400 +</td>
<td>56.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>400 +</td>
<td>56.5</td>
<td></td>
<td></td>
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<tr>
<td>11:00</td>
<td>400 +</td>
<td>56.5</td>
<td></td>
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<tr>
<td>12:00</td>
<td>400 +</td>
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<tr>
<td>1:00 AM</td>
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<td>56.0</td>
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</tr>
<tr>
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<td>56.0</td>
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<tr>
<td>3:00</td>
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<td>56.5</td>
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<td>400 +</td>
<td>56.0</td>
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<tr>
<td>5:00</td>
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<tr>
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Sample 5:

Shutdown 9:20 AM
Fax to: Tracy Runnels
From: Tom

Water temperature was 71.5°F (±0.2°F) throughout the test. Chlorides in the table below.

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STEP-DRAWDOWN TEST RESULTS FOR
PRINCEVILLE WELL NO. 4, AUG. 9, 1985
Diagram and recovery for the
analysis of SE 547 pumpers on
Bear Valley WEU No. 4.
**Commission on Water Resource Management**

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**Regulation Branch**

- E. Sakoda
- R. Hardy
- L. Nakama
- D. Higa
- C. Ice

**Planning Branch**

- S. Edmunds
- L. Mizuno

**Survey Branch**

- R. Loui
- S. Kokubun
- F. Ching
- S. Subia
- K. Yoda
- K. Oshiro

**Field Services & Technical Support**

- Y. Shiroma
- R. Jinnai
- M. Ohye
- I. Kunimura
- S. Swanson

---

*Garvey, April 22, 1994, for comments on for*

*Expires: April 30, 1994 = OK*

*File - no need to reply, Ed* 10/94
January 23, 1995

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
P. O. Box 621
Honolulu, HI 96819

Subject: Princeville Well #4 (Well #1127-02)

Gentlemen:

This is to inform you that our contractor, Roscoe Moss - Hawaii is mobilizing to commence drilling the first week of February 1995.

Please call me at 826-3310 should you have any questions on this matter.

Sincerely,

Michael Y. M. Loo
Vice President

cc: Tom Nance
Roscoe Moss
April 8, 1994

State of Hawaii
Department of Land and Natural resources
P. O. Box 621
Honolulu, Hawaii 96809

Attention: Keith W. Ahue

Gentlemen:

Attached for your records is the signed Well Construction Permit for Princeville Well No. 2.

Sincerely,

Michael Y. M. Loo
Vice President

Attachment

cc: Tom Nance

WELLPERM.ML:sw
TO: Princeville Water Systems, Inc.
P.O. Box 3040
Princeville, HI 96722

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Princeville Well 2 (Well No. 1127-02), is approved subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The permit shall be for construction and testing of the well only. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A one-inch diameter (minimum) galvanized pipe shall be permanently installed, in a manner acceptable to the Commission, to accurately measure water levels. No permanent pump may be installed and no water withdrawn from the well without first obtaining a pump installation permit from the Commission.

3. 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 a well shall not constitute a determination of correlative water rights.

4. The following shall be submitted to the Commission within 30 days after completion of the work:

   a. Well Completion Report.

   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.

   c. As-built sectional drawing of the well.
WELL CONSTRUCTION PERMIT
Well No. 1127-02

d. Plot plan and map showing the exact location of the well.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

5. The applicant shall comply with all applicable laws, rules, and ordinances.

6. The permit application and staff submittal approved by the Commission at its meeting on March 16, 1994 shall be incorporated herein by reference.

7. The applicant shall contact the State Historic Preservation Division (Telephone: 587-0006) before starting any work on the project. The applicant shall obtain a written statement from the State Historic Preservation Division indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission before work is started on the project.

8. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit approval.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

MAR 23 1994
Date of Issuance

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.

Applicant’s Signature: Michael Y. Loo
Date: 29 March 1994

Printed Name: Michael Y. Loo

Firm or Title: U.S. Department of Housing and Urban Development

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

cc: USGS
Department of Health
Safe Drinking Water Branch
Wastewater Branch
Ground Water Protection Program
Kauai Department of Water
Tom Nance Water Resources Engineering
January 21, 1994

Mr. Michael Loo
Princeville Utilities Co.
P.O. Box 3040
Princeville, Kauai, Hawaii 96722

Dear Mr. Loo:

SUBJECT: Historic Preservation Review -- Water Well
(Princeville Utilities Co.)
Princeville, Hanalei, Kauai

Our staff archaeologist has inspected this project area. The area appears to have been cleared during the ranching days. Thus, we believe that this application will have "no effect" on significant historic sites.

If you have any questions, please contact Ms. McMahon, our staff archaeologist for the County of Kauai, at 587-0006.

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

NM:jen
To: ED SAKUDA - WATER COMMISSION

From: Tom Nance

Subject: PRINCEVILLE WELL CONSTRUCTION PERMIT

The location you show for Princeville's permit extension is an old one. In a Nov. 24, 1994 letter, Mike has asked to move it to the location shown on the map follow-up. The old location is labeled as such; this new location is shown as "DESIRED LOCATION.

Can this change be handled for the March 16th agenda? I can fax you copies of Mike's Nov. 24th letter, as well as another on Dec. 22nd, if that will be of assistance.

Thanks,

Tom

680 Ala Moana Boulevard, Suite 406 • Honolulu, Hawaii 96813-5411 • Phone: (808) 537-1141 • Fax: (808) 538-7757
State of Hawaii Water Resources Commission  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii  96809  

Re: Princeville Water Systems Well Construction Permit for Well No. 1127-02

Ladies and Gentlemen:

Princeville Water Systems, Inc. (PWS) has been attempting to locate another potable water source since 1991 under permits issued by the Commission. The first exploratory boring was completed under Permit No. 1127-01 and test results indicated that it had penetrated the same aquifer serving our existing system. The contractor was preparing to cap this well, and remobilize at another site selected by our hydrogeologist, Tom Nance Water Resources, Inc., when Hurricane Iniki struck Kauai. Iniki’s winds toppled the drill rig onto the adjacent concrete reservoir, damaging it and the tank. The drilling equipment was eventually shipped off the island for repairs. Both the reservoir and drill rig have now been repaired. We intend to make Well No. 1127-01 a monitoring well.

On November 24, 1993, PWS filed an application to relocate to an alternate site. (See attached letter.) We inadvertently failed to concurrently request an extension to this permit, which expired on December 20, 1993. PWS, like almost all businesses and residences on Kauai, suffered extensive damage to its facilities and records, severely hampering normal operations. As we approach normalcy, this is to request a two year extension to our permit. An extension would allow us time to obtain the required conservation district use permit and Hawaii Public Utilities Commission approvals as well as reorganize our drilling contract.

Thank you for your consideration of our situation. Please feel free to call me at 826-3310 should you have any questions on this matter.

Sincerely,

Michael Y.M. Lo  
Vice President and Manager

Enclosure

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

Re: Princeville Well No. 1127-02, Princeville, Kauai

Gentlemen:

The Commission on Water Resource Management issued well drilling permits for Wells No. 1126-03 and 1127-01 to Princeville Water Systems, Inc. on December 20, 1991. Work was started on Well No. 1127-01. Sufficient data was gathered from the pilot hole to allow our consultant, Tom Nance, to conclude that this well had penetrated the same aquifer as our existing wells.

Subsequently, we filed for and received authorization to relocate Well No. 1126-03 to the site you designated as Well No. 1127-02. Hurricane Iniki toppled and severely damaged the drill rig, disrupting our operations, but we are now preparing to proceed with our exploration. As a result of further analysis, we concluded that we needed to move Well No. 1127-02 further mauka (south), to enhance the probability of establishing a successful new well.

Therefore, this is to request authorization to re-relocate Well No. 1127-02 to the location indicated on the attached map. Thank you for your early consideration of this request.

Sincerely,

Michael Y.M. Loo  
Vice President & Manager

cc: Tom Nance
November 24, 1993

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

Re: Princeville Well No. 1127-02, Princeville, Kauai

Gentlemen:

The Commission on Water Resource Management issued well drilling permits for Wells No. 1126-03 and 1127-01 to Princeville Water Systems, Inc. on December 20, 1991. Work was started on Well No. 1127-01. Sufficient data was gathered from the pilot hole to allow our consultant, Tom Nance, to conclude that this well had penetrated the same aquifer as our existing wells.

Subsequently, we filed for and received authorization to relocate Well No. 1126-03 to the site you designated as Well No. 1127-02. Hurricane Iniki toppled and severely damaged the drill rig, disrupting our operations, but we are now preparing to proceed with our exploration. As a result of further analysis, we concluded that we needed to move Well No. 1127-02 further mauka (south), to enhance the probability of establishing a successful new well.

Therefore, this is to request authorization to re-relocate Well No. 1127-02 to the location indicated on the attached map. Thank you for your early consideration of this request.

Sincerely,

Michael Y.M. Loo
Vice President & Manager

cc: Tom Nance
PRINCEVILLE UTILITIES COMPANY, INC.

LOCATION MAP FOR PROPOSED PRINCEVILLE WELL

DATE: NOV. 4, 1993
SCALE: 1" = 2000'
December 10, 1991

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Well Construction and Pump Installation Applications

Thank you for the opportunity to comment on the following applications for well construction:

- Princeville 1 and 2 (1127-01, 1126-03)
- Waimea Falls Park I and II (3803-01, -08)
- Kihei-Hill (4527-09)
- Honomuu (5206-01)
- Hawaiian Paradise Park (3400-01)
- Ooma Mauka-Nansay (4258-02)

These wells are not expected to impact Hawaiian home lands. We have no comment at this time.

Warmest aloha,

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission
December 10, 1991

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Well Construction and Pump Installation Applications

Thank you for the opportunity to comment on the following applications for well construction:

Princeville 1 and 2 (1127-01, 1126-03)
Waimea Falls Park I and II (3803-01, -08)
Kihei-Hill (4527-09)
Honomuu (5206-01)
Hawaiian Paradise Park (3400-01)
Ooma Mauka-Nansay (4258-02)

These wells are not expected to impact Hawaiian home lands. We have no comment at this time.

Warmest aloha,

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission
REGULATION BRANCH
Commission on Water Resource Management

FROM: [Signature] DATE: 9-15-92 FILE IN: _____________

TO: | INIT: | PLEASE: | REMARKS:
---|---|---|---
E. SAKODA | K. Oshiro | See Me | Change of well no.
D. Higa | | Call |
R. Hardy | | Review & Comment |
I. Zhang | | Take Action |
G. Glenn | | Investigate & Report |
M. Mitchell | | Draft Reply |

FOR YOUR:
R. LOUI | Approval |
S. Kokubun | Signature |
G. MATSUMOTO | Information |
Y. SHIROMA | Information |

Xerox ___ copies
Princeville Water Systems, Inc.
P.O. Box 3040
Princeville, HI 96722

Gentlemen:

Request for Relocation of the Princeville Backup Well
(Revised Well No. 1127-02)

We acknowledge receipt of your letter requesting relocation of the Princeville backup well based on the results obtained from drilling and testing the primary well (Well No. 1127-01). By this letter, we are approving your request. Relocation of the well changes the well number of the backup well from Well No. 1126-03 to Well No. 1127-02.

Very truly yours,

WILLIAM W. PATY

C: Tom Nance Water Resources Engineering
Mr. William Paty  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Paty:

Relocation of the Site for  
Permitted Well 1126-03 at Princeville, Kauai

On December 20, 1991, the Commission on Water Resource Management granted well drilling permits for Well Nos. 1127-01 and 1126-03 to Princeville Water Systems, Inc. The new wells were required to enable pumpage from the two existing wells to be reduced and to supply planned new development. Our primary drilling site was Well No. 1127-01 next to the water system's existing tank. Well No. 1162-03 was chosen as a back-up site in the event that Well No. 1127-01 was not successful.

The pilot hole for Well No. 1127-01 has been completed. If we terminate the well in the upper, Koloa series lavas, its yield is less than 200 GPM. When it is drilled deeper to increase yield, the well penetrates the same groundwater compartment already tapped by Princeville's two existing wells. These results establish that the back-up well site will be necessary but that the site originally chosen would not be appropriate. By this letter, we request that its location be moved as shown on the enclosed map. The well number at this new site would be 1127-02. The site is in the same parcel as the previous well site, TMK 5-3-01:2, which is owned by the Princeville Development Corporation.

We would appreciate an expeditious response to this request so that we can move the drilling contractor to the new location. Thank you for your consideration.

Sincerely,

Tom Nance

cc: Mike Loo - Princeville Corp.

Enclosure
To: DWZM  
Attention: Ed Sokala  
From: Tom Nance  
Subject: Princeville Well Relocation  

This letter was mailed today. We're looking to "slide" the backup site slightly and would like some indication of its acceptability ... Roscoe Hens is standing by.  

Thanks  

Change from 1126-03 to 1127-02  

Tom
August 5, 1992
92TN-096 (154-21)

Mr. William Paty
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 821
Honolulu, Hawaii 98809

Dear Mr. Paty:

Relocation of the Site for
Permitted Well 1126-03 at Princeville, Kauai

On December 20, 1991, the Commission on Water Resource Management granted well drilling permits for Well Nos. 1127-01 and 1126-03 to Princeville Water Systems, Inc. The new wells were required to enable pumpage from the two existing wells to be reduced and to supply planned new development. Our primary drilling site was Well No. 1127-01 next to the water system’s existing tank. Well No. 1126-03 was chosen as a back-up site in the event that Well No. 1127-01 was not successful.

The pilot hole for Well No. 1127-01 has been completed. If we terminate the well in the upper, Koloa series lavas, its yield is less than 200 GPM. When it is drilled deeper to increase yield, the well penetrates the same groundwater compartment already tapped by Princeville’s two existing wells. These results establish that the back-up well site will be necessary but that the site originally chosen would not be appropriate. By this letter, we request that its location be moved as shown on the enclosed map. The well number at this new site would be 1127-02. The site is in the same parcel as the previous well site, TMK 5-3-01:2, which is owned by the Princeville Development Corporation.

We would appreciate an expeditious response to this request so that we can move the drilling contractor to the new location. Thank you for your consideration.

Sincerely,

Tom Nance

cc: Mike Loo - Princeville Corp.

Enclosure
REGULATION BRANCH
Commission on Water Resource Management

FROM: Ed
TO: INIT:
E. Sakoda
K. Oshiro
S. Samuels
R. Hardy
__

DATE: 7-29-92
FILE IN:

PLEASE:
See Me
Call
Review & Comment
Take Action
Investigate & Report
Draft Reply
Acknowledge Receipt
Type Draft
Type Final
Xerox ___ copies

REMARKS:
Clear - Tom Name called re Princeville well. Now info available - looks like not in Koloa but in Waihe. vol. ses. Call him for details.

FOR YOUR:
Approval
Signature
Information

Water found below ed sea level - not what drilled reported
Princeville Well No. 2-1127-01
July 10, 1992

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
Attention: William W. Paty
P.O. Box 621
Honolulu, HI 96809

Re: Well Construction Permit for Princeville Well 1
Well No. 1127-01, Princeville, Kauai

Gentlemen:

This is to inform you that we have commenced work on the construction of Princeville Well No. 1127-01.

Sincerely,

PRINCEVILLE WATER SYSTEMS, INC.

By
Michael Y.M. Loo
Vice President & Manager

cc: Tom Nance

PLEASE:

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

FOR YOUR:

Approval
Signature
Information

REMARKS: Hawaii

FROM: DATE: FILE IN: 1127-01 and 1176-03

DIVISION OF WATER RESOURCE MANAGEMENT

Rev. 11/90
March 9, 1992

MEMORANDUM

TO: Manabu Tagomori, Deputy Director
Commission on Water Resource Management

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Historic Preservation Review -- Well Construction and Pump Installation Permit Application (Princeville Development Corp.) (Well No. 1127-01 and 1126-03)
TMK: 5-3-01: 2
Kalihiwai, Hanalei, Kauai

In February 1992, our staff archaeologist for the county of Kauai, Ms. Nancy McMahon, met with Mr. Mike Loo of Princeville Corp. to inspect the project areas for the two well permits listed above. No historic sites were found in the area. The parcel has had its land surface extensively disturbed in the past, due to construction of a water tank. The other alternative area had its land surface disturbed in the past from cattle grazing and earlier cultivation by Mr. Titcomb during the 1800's.

Therefore, we now believe that the above projects will have "no effect" on significant historic sites.

If you have any questions please call Nancy McMahon at 587-0006.

NM:sty
<table>
<thead>
<tr>
<th>Depth Interval (ft.)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-120</td>
<td>No sample collected, however the driller reports red clay</td>
</tr>
<tr>
<td>122</td>
<td>Slightly vesicular gray aphyric aa*</td>
</tr>
<tr>
<td>122-130</td>
<td>Mixture of brown-gray dense aphyric aa and white to tan clay minerals</td>
</tr>
<tr>
<td>130-150</td>
<td>Same as above, except tan clay present</td>
</tr>
<tr>
<td>150-170</td>
<td>Mixture of dark gray-black sand-size cuttings, weathered aa with secondary minerals in vesicles and alter white aa</td>
</tr>
<tr>
<td>170-200</td>
<td>Mixture of slightly vesicular aphyric aa, tan clay, and white-tan clay minerals</td>
</tr>
<tr>
<td>200-210</td>
<td>Somewhat plastic red-brown clay with some hard cuttings present</td>
</tr>
<tr>
<td>210-230</td>
<td>Same as above, except the sample is entirely clay</td>
</tr>
<tr>
<td>230-240</td>
<td>Mixture of brown plastic clay, tan dry clay clasts, and weathered aa</td>
</tr>
<tr>
<td>240-260</td>
<td>Mixture red clay clasts that appear layered (weathered ash?) and dense gray aphyric aa</td>
</tr>
<tr>
<td>260-280</td>
<td>Mixture of dense gray aphyric aa and rounded weathered brown gravel (stream gravel of Na Pali Volcanics?)</td>
</tr>
<tr>
<td>280-290</td>
<td>Same as above except a large clast of very weathered basalt claystone present</td>
</tr>
<tr>
<td>290-300</td>
<td>Large clasts of very weathered non-vesicular basalt claystone</td>
</tr>
<tr>
<td>Interval</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>300-310</td>
<td>Mixture of red weathered rounded aa and dense gray aphyric non-vesicular aa</td>
</tr>
<tr>
<td>310-340</td>
<td>Same as above except sample contains red weathered lithified ash (?)</td>
</tr>
<tr>
<td>340-380</td>
<td>Mixture of dense gray aa, brown weathered ash (?) and white secondary silica minerals (hard)</td>
</tr>
<tr>
<td>380-390</td>
<td>Mixture of dense gray aphyric aa and weathered red and tan clay clasts</td>
</tr>
<tr>
<td>390-400</td>
<td>Gray sand-size cuttings (aa?) with white secondary minerals</td>
</tr>
<tr>
<td>400-420</td>
<td>Mixture of dense gray aphyric aa and clasts of red and tan clay</td>
</tr>
<tr>
<td>420-430</td>
<td>Mixture of dense gray aphyric aa and minor amount of brown vesicular aa</td>
</tr>
<tr>
<td>430-460</td>
<td>Mixture of dense gray aphyric aa and weathered rounded stream gravel (?) appears to be Na Pali Volcanics basalt</td>
</tr>
<tr>
<td>460-490</td>
<td>Same as above, except gray-brown pahoehoe with small round vesicles present</td>
</tr>
<tr>
<td>490-510</td>
<td>Same as above, except brown pahoehoe is transitional to aa, stream gravel is red-brown, and white clay minerals present</td>
</tr>
<tr>
<td>510-530</td>
<td>Dense brown-gray coarse sand-size cuttings, probably non-vesicular aa</td>
</tr>
<tr>
<td>530-540</td>
<td>Dense gray aphyric aa, sample contains one large clast that is pahoehoe</td>
</tr>
<tr>
<td>540-560</td>
<td>Mixture of dense gray aphyric aa and weathered brown stream gravel (?)</td>
</tr>
<tr>
<td>560-570</td>
<td>Mixture of weathered dense red-brown aphyric aa and dense gray aphyric aa</td>
</tr>
<tr>
<td>Interval</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>570-600</td>
<td>Mixture of brown-gray aphyric aa and red-brown clasts of basalt claystone with vesicles preserved. Some lined with Mn</td>
</tr>
<tr>
<td>600-610</td>
<td>Brown sand-size cuttings (aa?), white secondary minerals also in sample</td>
</tr>
<tr>
<td>610-620</td>
<td>Mixture of brown-gray aphyric aa and red-brown clast of basalt claystone</td>
</tr>
<tr>
<td>620-630</td>
<td>Dense gray aphyric aa with minor amount of weathered rounded gravel</td>
</tr>
<tr>
<td>630-640</td>
<td>Three large weathered cobbles of red aa and dense gray aphyric aa</td>
</tr>
<tr>
<td>640-650</td>
<td>Mixture of brown-gray pahoehoe transitional to aa, brown clasts of clay, and very weathered brown aa with its vesicles filled with white clay minerals</td>
</tr>
<tr>
<td>650-670</td>
<td>Mixture of dense gray aphyric aa and red clasts of clay</td>
</tr>
<tr>
<td>670-680</td>
<td>Dense dark gray slightly vesicular aa, one cutting is medium grained with weathered olivine and micropegmatitic areas of late growth minerals</td>
</tr>
<tr>
<td>680-690</td>
<td>Mixture of soft weather red-brown non-vesicular aa and dense dark gray aphyric aa, some secondary minerals also present</td>
</tr>
<tr>
<td>690-700</td>
<td>Brown dense aphyric aa with secondary minerals</td>
</tr>
<tr>
<td>700-710</td>
<td>Dense dark gray aphyric aa</td>
</tr>
<tr>
<td>710-720</td>
<td>Mixture of scoriaceous red-brown pahoehoe and red-brown aa (?) could be pahoehoe with large vesicles</td>
</tr>
<tr>
<td>720-730</td>
<td>Mixture of slightly vesicular dark gray aphyric aa, one large cutting of red aa and some secondary minerals</td>
</tr>
</tbody>
</table>
730-740  Mixture of dense dark gray aa and clasts of brown clay

740-750  Dense dark gray aphyric aa

*All samples are presumed to be Koloa Volcanics unless noted otherwise.
PRINCEVILLE WELL 2-1127-01
WATER LEVEL VERSUS DEPTH

WATER LEVEL ELEVATION (FT. MSL)

DEPTH (FT.)
January 23, 1992

Mike Loo
Princeville Corporation
P.O. Box 3040
Princeville, Hawaii 96722

Dear Mr. Loo:

SUBJECT: Historic Preservation Review -- New Potable Water Wells (Princeville Corp.)
Princeville, Hanalei, Kauai

Thank you for submitting the location maps of your proposed project.

No archaeological surveys have taken place in the project areas, so it is uncertain if significant historic sites are present. The proposed well locations and backup well location are located in areas that are rich in significant historic sites. Several heiau(s) have been found nearby (Bennett 1931).

Given the above, we recommend that an archaeological inventory survey be conducted for both project areas by a qualified archaeologist to determine if significant historic sites are in the project areas. This work should include representative subsurface testing if it appears likely that subsurface remains are present. If sites are found, their size, nature, function and age should be determined. Findings should be submitted to our office in a report format for review, and should include initial significance evaluations for any sites found. At that point we can better advise you regarding effects on significant sites and any mitigation that might be needed.

Should you have any questions regarding this review, please contact our staff archaeologist handling the County of Kaua'i, Ms. McMahon at 587-0006.

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

NM: sty

cc: Peter Nakamura, County of Kauai
Roger Evans, OCEA
Manabu Tagomori, CWRM
WELL CONSTRUCTION PERMIT

for

Princeville Well 1
Well No. 1127-01
Princeville, Kauai

TO: Princeville Water Systems, Inc.
P.O. Box 3040
Princeville, HI 96722

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Princeville Well 1 (Well No. 1127-01) at Tax Map Key: 5-3-01: 2, for private/municipal use, is approved subject to the following conditions:

1. The Division of Water Resource Management (DWRM), P.O. Box 373, Honolulu, HI, 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The applicant shall contact the State Historic Preservation Division (Telephone: 587-0006) before starting any work on the project. The applicant shall obtain a written statement from the State Historic Preservation Division indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission before work is started on the project.

3. This permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary pump installation permit from the Commission.
4. 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 a well shall not constitute a determination of correlative water rights.

5. The following shall be submitted to DWRM within 30 days after completion of the well:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record, including time, pumping rate, drawdown, chloride content, and water quality data.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

Date of Issuance

cc: USGS
   Department of Health
   Safe Drinking Water Branch
   Ground Water Protection Program
   State Historic Preservation Division
   Tom Nance Water Resources Engineering
WELL CONSTRUCTION PERMIT

for

Princeville Well 2
Well No. 1126-03
Princeville, Kauai

TO: Princeville Water Systems, Inc.
P.O. Box 3040
Princeville, HI 96722

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Princeville Well 2 (Well No. 1126-03) at Tax Map Key: 5-3-01: 2, for private/municipal use, is approved subject to the following conditions:

1. The Division of Water Resource Management (DWRM), P.O. Box 373, Honolulu, HI, 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The applicant shall contact the State Historic Preservation Division (Telephone: 587-0006) before starting any work on the project. The applicant shall obtain a written statement from the State Historic Preservation Division indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission before work is started on the project.

3. This permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary pump installation permit from the Commission.

4. 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 a well shall not constitute a determination of correlative water rights.
5. The following shall be submitted to DWRM within 30 days after completion of the well:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record, including time, pumping rate, drawdown, chloride content, and water quality data.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. This permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

[Signature]
WILLIAM W. PATY, Chairperson

[Date of Issuance]

cc: USGS
Department of Health
   Safe Drinking Water Branch
   Ground Water Protection Program
   State Historic Preservation Division
   Tom Nance Water Resources Engineering
Mr. Manabu Tagomori, 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. Tagomori:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATIONS  
PRINCEVILLE WELLS 1 AND 2  
STATE WELL NOS. 1127-01 AND 1126-03  
PRINCEVILLE, KAUAI

Thank you for the opportunity to review and comment on the subject documents. We have examined the applications and have the following comments to offer:

1. The application indicates that the subject wells will be for municipal use. If each well is to serve 25 or more individuals at least 60 days per year or will have a minimum of 15 service connections, the applicant will be required to comply with Title 11, Chapter 20, "Potable Water Systems," Hawaii Administrative Rules.

2. Section 11-20-29 of Chapter 20 requires that a new source of potable water serving a public water system be approved by the Director of Health prior to its use. Such an approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.

3. The proposed wells are situated above the Underground Injection Control (UIC) line. Land areas above the UIC line are considered to contain underground sources of drinking water. Thus, it is essential that each well be designed and constructed to prevent the possibility of groundwater contamination. For example, each well should have a concrete well pad and full grouting to prevent seepage or floodwaters from migrating down the well shaft.
If you should have any questions, please contact Stuart Yamada of the Safe Drinking Water Branch at 586-4258.

Sincerely,

THOMAS E. ARIZUMI, P.E., Chief
Environmental Management Division

SY:gm

c: Michael Loo
Princeville Water Systems, Inc.
P.O. Box 3040
Princeville, Kauai, HI 96722
### DIVISION OF WATER RESOURCE MANAGEMENT

**FROM: __________________________**  
**DATE: 11/18**  
**FILE IN: __________________________**

**TO: __________________________**  
**INITIAL: __________________________**

**PLEASE: __________________________**

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<thead>
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<tbody>
<tr>
<td></td>
<td>G. AKITA</td>
<td>See Me</td>
</tr>
<tr>
<td></td>
<td>L. Nanbu</td>
<td>Take Action By</td>
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<tr>
<td></td>
<td>E. Sakoda</td>
<td>Route to Your Branch</td>
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<tr>
<td></td>
<td>G. Matsumoto</td>
<td>Review &amp; Comment</td>
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<td></td>
<td>E. Lau</td>
<td>Draft Reply</td>
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<td></td>
<td>L. Chang</td>
<td>Acknowledge Receipt</td>
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<td>Y. Shiroma</td>
<td>Xerox copies</td>
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**FOR YOUR: __________________________**

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<td>Signature</td>
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<td>Information</td>
</tr>
</tbody>
</table>

**INITIAL: __________________________**

**FILE IN: __________________________**
MEMORANDUM

TO: Manabu Tagomori, Deputy Director
   Commission on Water Resource Management

FROM: Don Hibbard, Administrator
       State Historic Preservation Division

SUBJECT: Historic Preservation Review -- Well Construction and Pump Installation Permit Application (Princeville Development Corp.) (Well No. 1127-01 and 1126-03)
       TMK: 5-3-01: 2
       Kalihiwai, Hanalei, Kauai

No historic sites are known to be present in the area planned for the pump. But a review of our files indicates that a heiau (site 139) exists nearby. No archaeological surveys have taken place in the project area, so we are uncertain if significant historic sites are present in the project area.

Given this information, we recommend that an archaeological inventory survey be conducted to determine if significant historic sites are present. Alternatively, if the parcel has had its land surface extensively disturbed in the past, the applicant should submit a description of this disturbance.

If you have any questions please call Nancy McMahon at 587-006.
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: [Signature]

DATE: 11-0 [Redacted]

FILE IN: [Redacted]

TO: INITIAL: PLEASE: REMARKS:

___ G. AKITA ___ See Me
___ L. Nanbu ___ Take Action By___
___ E. Sakoda ___ Route to Your Branch
___ G. Matsumoto ___ Review & Comment
___ E. Lau ___ Draft Reply___
___ L. Chang ___ Acknowledge Receipt
___ Y. Shiroma ___ Xerox ___ copies

FOR YOUR:

___ Approval
___ Signature
___ Information

___ M. TAGOMORI
___ S. Kokubun
November 20, 1991

Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource Management
Dept. of Land and Natural Resources
P. O. Box 621
Honolulu, HI  96809

Re: Well Construction Permit Application: Princeville Water Systems, Inc. - Princeville 1, Well No. 1127-01 and Princeville 2, Well No. 1126-03, Princeville, Kauai, Hawaii, TMK: 5-3-01:2

We do not have any objections to the drilling of both proposed wells.

Raymond H. Sato
Manager and Chief Engineer

GF:rm
Mr. Raymond Sato  
Manager and Chief Engineer  
Department of Water  
County of Kauai  
P.O. Box 1706  
Lihue, Kauai  96766

Dear Mr. Sato:

Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment is a copy of the following permit applications:

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
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<tr>
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<td>Well Construction</td>
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</table>

Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact our Regulation Branch at 548-7541.

Sincerely,

[Signature]

MANABU TAGOMORI  
Deputy Director

NF:bm  
Enc.
Mr. Michael Loo  
Princeville Water Systems, Inc.  
P.O. Box 3040  
Princeville, Hawaii 96722

Dear Mr. Loo:

We have received your applications and filing fees for permits to construct two wells (Well Nos. 1127-01, 1126-03) at Princeville, Kauai, (TMK 5-3-01:02). We are reviewing the applications for completeness.

Should you have questions, please call the Regulation Branch of the Division of Water Resource Management at 548-7541.

Sincerely,

MANABU TAGOMORI  
Deputy Director

NF:bm
Ms. Marjorie Ziegler
Sierra Club Legal Defense Fund, Inc.
212 Merchant Street, Room 202
Honolulu, Hawaii 96813

Dear Ms. Ziegler:

Well Construction and Pump Installation Permit Applications

Transmitted for your information are copies of recent well permit applications:

<table>
<thead>
<tr>
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Should you have questions, please contact our Regulation Branch at 548-7541.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

NF:bm
Enc.
MEMORANDUM

TO: Don Hibbard, Director
    Historic Preservation Program

FROM: Manabu Tagomori, Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment is a copy of the following permit applications:

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this memo.

Should you have any questions, please contact our Regulation Branch at 548-7541.

Enc.
Mr. Clayton H. W. Hee  
Chairman & Trustee At Large  
Office of Hawaiian Affairs  
1600 Kapiolani Blvd., Suite 1500  
Honolulu, Hawaii 96814  

Attn: Ms. Linda Delaney, Land & Natural Resources Division  

Dear Mr. Hee:  

Well Construction and Pump Installation Permit Applications  

Transmitted for your review and comment is a copy of the following permit applications:  

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250  
Honolulu, Hawaii 96813

Attn: Mr. William Wong

Dear Mr. Arizumi:

**Well Construction and Pump Installation Permit Applications**

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact our Regulation Branch, at 548-7541.

Sincerely,

MANABU TAGOMORI  
Deputy Director

Enc.
Honorable Hoaliku L. Drake  
Director  
Department of Hawaiian Home Lands  
State of Hawaii  
P.O. Box 1879  
Honolulu, Hawaii  96805

Dear Mrs. Drake:

Well Construction and Pump Installation Permit Applications

Transmitted for your review and comment is a copy of the following permit applications:

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Please review the applications pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Very truly yours,

[Signature]

Enc.
APPLICATION FOR

X WELL CONSTRUCTION PERMIT

__ PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 313, Honolulu, Hawaii 96804. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources, (Filing fee waived for government agencies.) If necessary, phone 548-7543, Hydrology/Geology Section for assistance.

Princeton 1

1. WELL LOCATION

Island Kauai

Tax Map Key 5-3-01:2

Address The well would be located on open ranch land next to an existing tank.

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

2. WELL OWNER

Princeville Water Firm Name Princeville Development Corporation

Contact Person Michael Loo Contact Person Michael Loo

Address P. O. Box 3040 Address P. O. Box 3040

Princeville, Kauai, Hawaii 96722 Princeville, Kauai, Hawaii 96722

Phone 826-3310 Phone 826-3310

3. PROPOSED CONTRACTOR FOR: Well Drilling □ Pump Installation

Name The Work Will Be Competitively Bid Phone

Address

Contractor's License No.

4. PROPOSED WORK

[ ] Drill New Well [ ] Deepen [ ] Redrill

[ ] Alter [ ] Seal [ ] Abandon

[ ] Install New Pump [ ] Replace Pump [ ] Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

[ ] Municipal (including hotels, stores, etc.) [ ] Military

[ ] Domestic (individual, noncommercial water systems) [ ] Industrial

[ ] Irrigation (specify) [ ] Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 1,500,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: □ Vertical Turbine □ Submersible □ Centrifugal

Motor: □ Diesel □ Gas □ Electric: 150 Rated Horsepower

Rated Pump Capacity 1050' gallons per minute (gpm)

---

Princeville Water

Well Owner (print) Systems, Inc.

Landowner (print) Princeville Corporation

Signature Q Date Q

For Official Use Only:

Field Checked By Latitude Hydrologic Unit

Date Longitude State Well No: 1127-01

Quad Map No. K-6
Briefly describe the proposed work:
The work entails development of a new potable water well to augment supply for the privately owned Princeville water system. Drilling will begin in the overlying Koloa volcanics, but the intention is to have the well tap into the Waimea series lavas at depth.

PROPOSED SECTION OF WELL

<table>
<thead>
<tr>
<th>Description</th>
<th>432 ft., msl.</th>
<th>430 ft., msl*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing</td>
<td>432 ft., msl.</td>
<td></td>
</tr>
<tr>
<td>Ground Elev.</td>
<td>430 ft., msl*</td>
<td></td>
</tr>
<tr>
<td>Cement Grout</td>
<td>600 ft.</td>
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<tr>
<td>Hole Dia.</td>
<td>22 in.</td>
<td></td>
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<tr>
<td>Total Depth</td>
<td>800 ft.</td>
<td></td>
</tr>
<tr>
<td>Rock Packing Noneft.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Solid Casing:
- Material: Steel (ASTM A-53)
- Length: 600 ft.
- Diameter: 16 in.
- Wall thickness: 0.3125 in.

Casing: / /Perforated / /Screen
- Material: None
- Length: ___________ ft.
- Diameter: ___________ in.
- Wall thickness: ___________ in.
- Openings: ___________ sq. in./L.F.

Open Hole:
- Length: 200
- Diameter: 15 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
APPLICATION FOR

X WELL CONSTRUCTION PERMIT

PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96805. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 548-7543, Hydrology/Geology Section for assistance.

Princeville

1. WELL LOCATION

Island Kauai Tax Map Key 5-3-01:2
Address In pasture land above Princeville's existing water tank.

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

2. WELL OWNER

Princeville Water Systems, Inc.
Contact Person Michael Loo
Address P. O. Box 3040
Princeville, Kauai, Hawaii 96722
Phone 826-3310

LANDOWNER

Princeville Development Corporation
Contact Person Michael Loo
Address P. O. Box 3040
Princeville, Kauai, Hawaii 96722
Phone 826-3310

3. PROPOSED CONTRACTOR FOR:

- Well Drilling
- Pump Installation

Name The Work Will Be Competitively Bid
Address

Contractor's License No.

4. PROPOSED WORK

- Drill New Well
- Deepen
- Redrill
- Alter
- Install New Pump
- Seal
- Replace Pump
- Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

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

6. PROPOSED AMOUNT OF WITHDRAWAL 1,500,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: Vertical Turbine
Submersible
Centrifugal
Motor: Diesel
Gas
Electric: 150
Rated Pump Capacity 1050 gallons per minute (gpm)

Princeville Water Systems, Inc.
Signature
Date

Princeville Corporation
Signature
Date

For Official Use Only:

Field Checked By ___________________________ Latitude ________________ Hydrologic Unit
Date ___________________________ Longitude ________________ State Well No. 1126-03 1127-02
Quad Map No. K-6
Briefly describe the proposed work:
The permit for this well is being sought as a back-up location to the primary drill site next to Princeville's existing tank. If Waimea lavas occur at an impractical depth at the primary site, this back-up location will be used. If results from the primary drilling site are satisfactory, this back-up site will not be used.

PROPOSED SECTION OF WELL

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>382 ft., msl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elev.</td>
<td>380 ft., msl*</td>
</tr>
<tr>
<td>Cement</td>
<td>580 ft.</td>
</tr>
<tr>
<td>Grout</td>
<td></td>
</tr>
<tr>
<td>Hole Dia.</td>
<td>22 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>780 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>None ft.</td>
</tr>
</tbody>
</table>

Solid Casing:
- Material: Steel (ASTM A-53)
- Length: 580 ft.
- Diameter: 16 in.
- Wall thickness: 0.3125 in.

Casing: / /Perforated / /Screen
- Material: None
- Length: __________ ft.
- Diameter: __________ in.
- Wall thickness: __________ in.
- Openings: __________ sq. in./L.F.

Open Hole:
- Length: 200 ft.
- Diameter: 15 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
**DIVISION OF WATER RESOURCE MANAGEMENT**

**FROM:** [Name]

**TO:** [Name]

**DATE:** 01/30

**FILE IN:** 1 file for both ok

**PLEASE:**

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

**REMARKS:**

Prepare taking note.

**FOR YOUR:**

- Approval
- Signature
- Information

---

**Remarks:**

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

---

**FOR YOUR:**

- Approval
- Signature
- Information
September 27, 1991
91TN-105 (154-21)

Mr. Manabu Tagomori
Commission on Water Resource Management
Department of Land & Natural Resources
State of Hawaii
P. O. Box 373
Honolulu, Hawaii 96809

Dear Manabu:

Well Construction Permit Applications for
Princeton, Kauai, Hawaii

Enclosed are two well construction permit applications and $50 filing fee submitted on behalf of Princeton Corporation. The lower well would be drilled first. Depending on our degree of success at this site, the upper well may not be necessary. In that event, the permit for the upper well would not be exercised at this time.

If you have any questions or require additional information, please contact me or Mike Loo at Princeton (phone 826-3310). Thank you for your attention to this matter.

Sincerely,

Tom Nance

TN:It

cc: Mike Loo

Enclosures
Princeville Corporation
Post Office Box 3040
Princeville, Kauai, Hawaii 96722

<table>
<thead>
<tr>
<th>DATE</th>
<th>INVOICE AMOUNT</th>
<th>INVOICE NO.</th>
<th>DESCRIPTION</th>
<th>ACCOUNT NO.</th>
<th>NET AMOUNT</th>
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<tr>
<td></td>
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<td>WELL DRILLING APPLICATION (PWS NEW WELL PERMITS)</td>
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<td>well no. 1127-01</td>
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|      |                |             |             | 25.00       |            |