COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE 4/17/07

FROM: RYAN
DATE: 11/7/07

TO: CHING, F.
     CHONG, R.
     DANBARA, S.
     ENGLAND, D.
     FUJII, N.
     HARDY, R.
     HOAGBIN, S.
     ICE, C.
     IMATA, R.
     KIMURA, J.

TO: KUNIMURA, I.
     NAKAMA, I.
     OHYE, M.
     SAKODA, E.
     SWANSON, S.
     UYENO, D.
     YODA, K.
     YOSHINAGA, M.

FOR: Approval
     Signature
     Information

PLEASE:
     See Me
     1 Review & Comment
     3 Information
     Take Action
     Type Draft
     2 Type Final
     4 File
     Xerox copies

WELL NUMBER: 3687-54
WELL NAME: Honu

application type: BOTH
1 WCP COVER LETTER
2 WCP
3 WELL CHECK PRINTOUT

4 PIP COVER LETTER
5 PIP

COMMENTS:
6 SDWB
7 WWB
8 CWB
9 LD
10 HP
11 LUC in conservation district
12 OCCCL in conservation district
13 SMA in SMA

NOTES:
DRILLER: BC-23379
TMK: 0
PUMP CAPACITY: 16
WELL OWNER: 0
LAND OWNER: 0
COMMENT DEADLINE: 11/23/07
Ref: 3687-54.wcp

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR #3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction Permit
Honu Well (Well No. 3687-54)

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

Special Conditions

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

Please refer to the Permit Processes Worksheet (transmitted with your acknowledgement letter) for further information regarding the process of drilling a well and installing a pump.

No withdrawal of water shall be made other than for testing purposes until a certificate of pump installation completion has been issued by the Commission.

Please sign both permit originals and return one for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrm/forms.htm.

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255.

Sincerely,
LAURA H. THIELEN
Chairperson

Enclosures
c: Raymond Doblick (with applicable comments – DOH SDWB)
USGS
Hawaii DWS
WELL CONSTRUCTION PERMIT

Honu Well, Well No. 3687-54

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the construction and testing of Honu Well (Well No. 3687-54) at TMK 1-5-055:014, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96808, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrrnm/forms.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

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

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

6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during drilling, the permittee shall stop work and immediately contact the Department of Land and Natural Resources’ State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.

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

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrrn/forms.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variances.

11. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

12. If the well is to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(1) prior to any well sealing or plugging work.

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

14. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with Hawaii Administrative Rules §13-168-12(f).

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

W. Roy Family

Date of Approval: November 23, 2007
Expiration Date: November 23, 2009

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller’s Signature: __________________________ C-57 License #: C-23379 Date: __________________

Printed Name: Rod Diamond Firm or Title: Diamond Construction and Water Well Drilling

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
December 6, 2007

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR#3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Pump Installation Permit
Honu Well (Well No. 3687-54)

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

**Special Conditions**

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

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

The permittee is responsible for all conditions of the permit. This includes ensuring the submission of a completed Well Completion Report Part II form within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign both permit originals and return one for our files.

**IMPORTANT** - Pump installation shall not commence until a fully signed permit is returned to the Commission.

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255.

Sincerely,

LAURA H. THIELEN
Chairperson

Enclosure

c:  Raymond Doblick (with applicable comments -- DOH SDWB)
    USGS
    Hawaii DWS
PUMP INSTALLATION PERMIT
Hono Well, Well No. 3687-54

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Hono Well (Well No. 3687-54) at TMK 1-5-055:014, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 16 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within 60 days after completion of work. This form can be obtained by contacting staff or on the internet at www.hawaii.gov/dlnr/cwrm.

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

9. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

10. 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 the date the permit expires.

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

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

Date of Approval: November 23, 2007
Expiration Date: November 23, 2009

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Installer's Signature: __________________________ C-57, C-57a, or A License #: C-23379 Date: ____________

Printed Name: Rod Diamond Firm or Title: Diamond Construction and Water Well Drilling

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

Attachments
October 23, 2007

TO:    Honorable Chirome L. Fukino, M.D., Director
       Department of Health
       Attention:     Director's Office
       Harold Yee, Wastewater Branch
       Stuart Yamada, Safe Drinking Water Branch
       Alec Wong, Clean Water Branch

FROM: Laura H. Thielen, Chairperson
       Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Hom Well (Well No. 3687-54)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

Risks
Attachment(s)

RESPONSE: UIC: Conditions 2.4

<table>
<thead>
<tr>
<th>UIC: Conditions</th>
<th>10/29/07 CH</th>
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<tbody>
<tr>
<td>Q</td>
<td>250 gpd</td>
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<tr>
<td>use</td>
<td>domestic, 100</td>
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<td>location</td>
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<td>(above) UIC</td>
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<td>gfd. elev.</td>
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<tr>
<td>well dia.</td>
<td>6 in</td>
</tr>
<tr>
<td>well depth</td>
<td>65 ft</td>
</tr>
</tbody>
</table>

In General: #3687-54

To: 808 587 0219

From: 008/SAFE WATER BRANCH 98656-4351

Page 001 R:24
CWRM Application Source: Honu Well (no. 3687-54)

Safe Drinking Water Branch Underground Injection Control (UIC)

1. In general, a shallow well, or a well that recharges quickly from a local rainfall, should not be used as a drinking water source because such a well increases the risk of having unsatisfactory groundwater quality that when consumed may compromise health. Factors that directly influence a well's groundwater quality include wastewater disposal systems (cesspools, septic systems, drainage wells), lawn/garden/crop growing activities, and even the proximity to the ocean where salt water intrusion may occur.

2. Well water quality should be initially and periodically tested for its acceptable and intended use, especially if for human consumption. Water quality should not be presumed acceptable and unchanging. Land-based activities around the well and within the well's recharge area may, over time have an unacceptable effect on the well's water quality. Well construction materials and related equipment could also affect water quality.
WARNING! As the owner of a privately-owned well, you should NOT assume that water from your well is safe for consumption. It is your responsibility to make sure that your well water is safe to drink. The only way to do this is to have your well regularly tested for bacteriological and chemical contaminants.

There are no regulations controlling water quality in private wells serving individual residences as there are for public water systems (public or privately owned utilities supplying water to 25 or more people or 15 service connections). In other words, there are no enforceable limits for contaminants and no requirements for regular testing. Private wells are often found in rural areas, where many activities such as onsite wastewater disposal can contaminate the ground water.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) RECOMMENDATIONS

The EPA recommends that private well owners test their well water each year for such contaminants as Total Coliform Bacteria, Nitrates, as well as any other contaminants that may be of concern in your area. More frequent testing may be appropriate if you suspect a problem. EPA also suggests that you consider testing for pesticides, organic chemicals, and heavy metals before using it for the first time. Please refer to the EPA website on Private Drinking Water Wells at http://www.epa.gov/safewater/privatewells/faq.html

OTHER CONTAMINANTS

Water testing can be very expensive. It is important that you spend time to identify what other potential contaminants may be of concern. Please refer to the EPA website on Private Drinking Water Wells at http://www.epa.gov/safewater/privatewells/whatyoucanDo.html for more helpful information. Be aware of what and how you use and dispose of household and garden chemicals. Also determine the location of nearby septic tanks or cesspools, and agricultural or industrial activities in the area. General information on known chemical contamination of ground water in Hawaii can also be found at the DOH website www.hawaii.gov/health/environmental/water/sdwb/conmaps/pdf/Qoomaps05.pdf

LABORATORIES

Local commercial laboratories can be found in the yellow pages of the telephone book under "Laboratories, Analytical." Whenever possible, utilize a laboratory that is certified or approved for the specific drinking water tests and carefully follow their instructions for collecting, storing, and transporting the samples. Just be sure to ask the lab to use EPA approved methods for drinking water analysis. A list of labs certified or approved by the Department of Health can be found at www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/Testing%20Labs.pdf. As lab certification status changes constantly, confirm their status when you contact the lab. Please note that the list is limited to currently regulated contaminants in public water systems.

RESULTS

Once the lab provides you with the test results, you will be in a better position to determine if your well water is safe to drink or what contaminant you need to treat for. Generally, you should compare the results with Federal (www.epa.gov/safewater/mcl.html) and State (www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/State%20MCL.pdf) drinking water standards. Where your test results are greater than the State or Federal maximum contaminant levels, your well water should be considered as unsafe for consumption.
### Data Input

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<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
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<tr>
<td>Well Name</td>
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### Results

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<td>Well Casing</td>
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<td>Minimum Wall Thickness</td>
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<td>Minimum Thickness per standards</td>
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</tbody>
</table>
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM RYAN
DATE: 31-Jul-07
SUSPENSE DATE: 7-Aug-07

TO: CHING, F. NAKAMA, L.
   FUJII, N. NAKANO, D.
   GOODING, K. OHYE, M.
   HARDY, R. SAKODA, E.
   HIGA, D. SWANSON, S.
   HOAGBIN, S. UYENO, D.
   ICE, C. YODA, K.
   IMATA, R. YOSHINAGA, M.
   KUNIMURA, I.

PLEASE:
  See Me
  Approval
  1
  Review & Comment
  Signature
  1
  Take Action
  Information
  3
  Type Draft acknow letter
  2
  Type Final, label file folder, update People.db
  1
  File
  4
  Xerox
  copies

WELL NUMBER 7827-5
WELL NAME Honu

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

1 TRANS. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAP
4 APPL. FORM (11 COPIES)
5 USGS MAPS (11 COPIES)
6 TAX MAPS (11 COPIES)
7 PARCEL OWNER VERIF.
8 CONTRACTOR VERIF.
9 ALL INFO FILLED IN
10 BACKGROUND CHECK
11 $25 Fee DEPOSIT SLIP
12 DHIPC/DUP/SHA pre-screen

(SMA map printout http://gis.hicentral.com/website/parcelzoning/viewer.htm, or INGRID'S SMA/CD MAP)
(LUC map printout http://luc.state.hi.us/luc_maps.htm, or INGRID'S SMA/CD MAP)

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

INCOMPLETE ACTION DATES:

DATE ACTION

Send cancel letter for 7338-01
Mr. Rod Diamond  
Diamond Construction and Water Well Drilling  
HCR #3 Box 14073  
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction/Pump Installation Permit Application for Well No. 3687-54

We acknowledge receipt, on August 27, 2007, of your completed Well Construction/Pump Installation permit application and filing fee for the Honu Well (Well No. 3687-54). You can expect your application to be processed within ninety (90) days from this date.

For your information, the attached table describes the process, responsible parties, and deadline requirements for drilling or modifying a well and installing, modifying, or replacing a pump.

By this acceptance letter, we are also notifying the well operator/landowner that water may not be pumped for purposes other than testing until the certificate of well construction/pump installation completion letter is issued to the well operator and landowner. Additionally, the permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity. No certificate of pump installation will be issued until the Commission has determined that the pump capacity will not have adverse effects on the aquifer, other nearby wells, or streams. In other words, you may need to remove the pump and install a smaller pump at the Commission’s discretion before you can withdraw water for purposes other than testing.

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

Sincerely,

KEN C. KAWAHARA, P.E.  
Deputy Director

RJ:ss  
Attachment  

c:  Raymond Doblick
TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director's Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Laura H. Thielen, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Honu Well (Well No. 3687-54)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title II, 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 microbiological 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 in 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).

For the applicant's information, an NPDES permit is required.

No comments/objections.

Contact Person: Phone: Signed: Date:
October 23, 2007

TO: Russell Tsuji, Administrator
    Land Division

FROM: Ken C. Kawahara, P.E., Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Honu Well (Well No. 3687-54) TMK 1-5-055:014

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: __________

Signed: ____________________________ Date: __________
TO: Melanie Chinen, Administrator  
Historic Preservation

FROM: Ken C. Kawahara, P.E., Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Honu Well (Well No. 3687-54) TMK: 1-5-055:014

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Ryan Imai of the Commission staff at 587-0255. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RESPONSE:

[ ] This is a [ ] public (county or state) project [ ] private project and [ ] will [ ] may disturb historic sites.

[ ] We concur that the work described under this permit will not disturb historic sites.

[ ] We do not concur that the work described under this permit will not disturb historic sites. We require the following for our concurrence:

Contact Person: __________________________ Phone: ______________

Signed: __________________________ Date: ______________
Search Results

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Assessed Values reflect tax year 2007.

Search criteria: TMK Taxkey 3-1-5-55-14

PUBLIC RECORD DATA

Taxkey Subdiv/Condo Tnr Address Owner/Lessee Bds Bths Land area Liv area Last Sale Instr Pri
3-1-5-55-14 Hawaiian 1ST DOBLICK, 0 0 1.00 ac 0 1/30/2006 DEED $145,000
Paradise Park RAYMOND S/ETAL

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

Professional and Vocational Licensing (PVL) Search - General Licensee

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<td>BUSINESS ADDR: HCR #3 BOX 14073 KEAAU HI 96749</td>
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<td>MAILING ADDR:</td>
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Click here to enter search criteria for prior complaints history ->
For prior complaints and disciplinary history, contact licensing and business information center at (808) 587-3295.
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REMARKS: LINE (1) KOR Lot 3 Back-up Well
LINE (2) Honu Well
LINE (3)
LINE (4)
LINE (5)
LINE (6)
LINE (7)
LINE (8)
LINE (9)
LINE (10)
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<th>WELL LOCATION INFORMATION</th>
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<tr>
<td><strong>STATE OF HAWAII</strong></td>
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<tr>
<td><strong>DEPARTMENT OF LAND AND NATURAL RESOURCES</strong></td>
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<tr>
<td><strong>COMMISSION ON WATER RESOURCE MANAGEMENT</strong></td>
</tr>
<tr>
<td><strong>APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT</strong></td>
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**Instructions:** Please print in ink or type and send complete application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by 10 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may set incomplete applications. For assistance, call the Regulation Branch at 887-2226. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

**WELL LOCATION INFORMATION**

<table>
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<tr>
<th>1. STATE WELL NO. (Where assigned)</th>
<th>2. WELL NAME</th>
<th>3. ZONE</th>
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**11. Location of Well**

- A schematic diagram showing the well site, zones, proposed borehole, and proposed well infrastructure (if applicable).

- **WELL OPERATOR’S NAME/COMPANY:**
  - Raymond S. Doblick & Katherine S. Muhrs.

- **WELL OPERATOR’S MAIL ADDRESS:**
  - P.O. Box 7550
  - Mammoth Lakes, CA 93546

- **Well Operator’s Phone:**
  - 760-709-1094
  - 760-935-4243

- **WELL OWNER’S NAME/COMPANY:**
  - Landowner’s Contact
  - same

- **WELL OWNER’S MAIL ADDRESS:**
  - same

**PROPOSED WELL CONSTRUCTION**

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<tr>
<th>Proposed Work</th>
<th>Proposed Completion Date</th>
<th>Proposed Construction Type</th>
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<tr>
<td>X. Construct New Well</td>
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<td>X. Drilled</td>
</tr>
<tr>
<td>Y. Modify Existing Well</td>
<td></td>
<td>X. Abandoned/Sealed Well</td>
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<tr>
<td>Z. Groundwater Level</td>
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**PROPOSED PUMP INSTALLATION**

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<th>Proposed Work</th>
<th>Proposed Completion Date</th>
<th>Proposed Pumping Rate</th>
<th>Proposed Method of Flow Measurement</th>
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<tbody>
<tr>
<td>X. Install New Pump</td>
<td></td>
<td>250 gpm</td>
<td>X. Flow meter</td>
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<tr>
<td>Y. Replace Pump</td>
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**PROPOSED USE**

- 15. Municipal (water systems serving greater than 25 individuals or 15 service connections)
- 16. Domestic Number of units to be served: 1
- 17. Industrial (describe)
- 18. Irrigation (describe crop and no. of acres)
- 19. Military (describe)

**Additional Information**

- **OIL OR OTHER REQUIREMENTS:**
  - If required, items 22 and 23 must be obtained before the Commission can legally issue a permit.

- **CONSOLIDATION DISTRICT USE PERMIT (CDUP):**
  - Required, CDUP No. 16JUL2007 date approved
  - Not Required, attach documentation from County agency
  - I have not consulted with the CDUP regarding potential impacts of well construction activities on historic sites.
  - I have not consulted with the CDUP regarding potential impacts of well construction activities on historic sites.

- **SPECIAL MANAGEMENT AREA PERMIT (SMAP):**
  - Required, SMAP No. 16JUL2007 date approved
  - Not Required, attach documentation from County agency
  - I have not consulted with the SMAP regarding potential impacts of well construction activities on historic sites.
  - I have not consulted with the SMAP regarding potential impacts of well construction activities on historic sites.

**HISTORIC PRESERVATION DIRECTION (HPD):**

- I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.

**ADDITIONAL REMARKS:**

For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

**MUNICIPAL WATER SYSTEMS SERVING GREATER THAN 25 INDIVIDUALS OR 15 SERVICE CONNECTIONS**

**DOMESTIC USE**

- Number of units to be served: 1

**INDUSTRIAL USE**

- (describe)

**IRRIGATION USE**

- (describe crop and no. of acres)

**MILITARY USE**

- (describe)

**OTHER REQUIREMENTS**

- Required, CDUP No. 16JUL2007 date approved
  - Not Required, attach documentation from County agency
  - I have not consulted with the CDUP regarding potential impacts of well construction activities on historic sites.
  - I have not consulted with the CDUP regarding potential impacts of well construction activities on historic sites.

- Required, SMAP No. 16JUL2007 date approved
  - Not Required, attach documentation from County agency
  - I have not consulted with the SMAP regarding potential impacts of well construction activities on historic sites.
  - I have not consulted with the SMAP regarding potential impacts of well construction activities on historic sites.

- Required, HPD No. date approved
  - Not Required, attach documentation from County agency
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.

- Required, attach documentation from County agency
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.

**ADDRESS**

- Rodney K Diamond
- Box 14073
- Keaau, HI 96749
- 16JUL2007
- PRINT

- 987-8100
- 966-4129
- E-mail: Rodney K Diamond

**PUMP INSTALLER**

- 26 PUMP INSTALLER

- Required, HPD No. 16JUL2007 date approved
  - Not Required, attach documentation from County agency
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.

- Required, HPD No. date approved
  - Not Required, attach documentation from County agency
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.

- Required, HPD No. date approved
  - Not Required, attach documentation from County agency
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.
  - I have consulted with the HPD regarding potential impacts of well construction activities on historic sites.

**ADDRESS**

- Rodney K Diamond
- Box 14073
- Keaau, HI 96749
- 16JUL2007
- PRINT

- 987-8100
- 966-4129
- E-mail: Rodney K Diamond
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 91 ft. msl

Hole Diameter: 12 inches

Minimum of 2 Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)

Ground Elevation: 60 ft. msl

Cement Grout: 45.5 ft. (min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Accurate space between hole and casing (1.5" for positive displacement, 3" for other methods):

- 3 in.

Total Depth: 66 feet

Rock or Gravel Packing: 19.5 ft.

Material:
- Crushed Basalt
- Rounded Gravel

Estimated Water Level Elevation:

- 0 ft. msl

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

- Total Length: 61 ft.
- Nominal Diameter: 8 in.
- Wall Thickness: Schedule 40 in.
- Bottom Elevation: -0 ft. msl*

Open Casing: [Perforated] [Screen]

- Total Length: 6 in.
- Nominal Diameter: 8 in.
- Wall Thickness: Schedule 40 in.
- Bottom Elevation: -5 ft. msl*

Open Hole:

- Length: NA ft.
- Diameter: NA in.
- Bottom Elevation: NA ft. msl*

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation -)

Example: Estimated + 2 ft. Water Level Elev. Bottom Elevation of Well Limit = (2 -) = +18.5 ft.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 (or A806)  □ Type E  □ Type S  □ Grade B  □ Other
- Stainless Steel: (check one): □ ASTM A409 (production wells)  □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40  □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40  □ Schedule 80  □ Schedule 120
- Thermoset Plastic: (check one): □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3298
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 (or A806)  □ Type E  □ Type S  □ Grade B  □ Other
- Stainless Steel: (check one): □ ASTM A409 (production wells)  □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40  □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40  □ Schedule 80  □ Schedule 120
- Thermoset Plastic: (check one): □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3298
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

WCPI App. Form 10/05/04
MEMO and ROUTE SLIP (ver. B/31/2007)  
01/14/08

WCR 1 Check for Well No. 3687-53 (survey to regulation memo)

1. **Pump Tests Check**  Diane England (initial)

<table>
<thead>
<tr>
<th>Step-Drawdown Test: followed WCPI Stds analysis attached</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant Rate Test: followed WCPI Stds analysis attached</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Well Interference:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Stream Impacts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Testing or Data Required:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Test Comments Attached:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   - <70 gpm no test required
   - <51 gpm no test required


3. **Construction Check**  Mitch Ohye (initial)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>data complete followed Special Cond &amp; elevations well database updated</td>
<td></td>
</tr>
</tbody>
</table>

   - Latitude
   - Longitude

   NAD27 19 36 42 154 57 48
   NAD83 19 36 31 154 57 38

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

   - ATACHMENTS FOR PUMP INSTALLATION PERMIT (2x):
     - COVER LETTER
     - COUNTY COMMENTS (DWS/SMA)
     - DOH COMMENTS
     - DLNR COMMENTS (LD/OCC/DHP)
     - WCR 1 Accept
     - WELL CONST. COMPLETION CERTIFICATE

   - not necessary – only WCP or BOTH.
   - To be sent to driller/pump installer
   - To Landowner
   - Staff internal checks

5. Roy (initial) check (Entered WCR 1/WCCC accept date into database)

6. Susan Hoagbin (initial) finalize

7. Mitch (initial) signature (Entered PIP issue date if required)

8. Charley/Ryan File
Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR#3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Well Completion Report Parts I & II for Well No. 3687-53

We received your Well Completion Report Parts I & II for the Kawaiola Well (Well No. 3687-53) on March 5, 2008 and acknowledge that they are complete.

This completes your obligation under the well construction and pump installation permits. Certificates of well construction and pump installation completion will be issued to the well operator/landowner and you will receive a copy of each. These certificates transfer responsibility of specific aspects of well usage and maintenance from you to the well operator/landowner.

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), extension 70255.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

RI:ss

c: Ed Perry
Mr. Ed Perry  
P.O. Box 6801  
Hilo, HI 96720

Dear Mr. Perry:

Certificate of Well Construction Completion for Well No. 3687-53 (TMK 1-5-054;165)

We are pleased to inform you that the Well Construction work permitted for the Kawaiola Well (Well No. 3687-53) is complete and acceptable and welcome you as a new member to the community of well owners and groundwater users in Hawaii.

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

1. Before this well can be pumped on a regular basis, a certificate of pump installation completion must be obtained.

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

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

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

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

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

If you have any questions, please contact Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), extension 70255.

Sincerely,

KEN C. KAWAHARA, P.E.  
Deputy Director

c: Hawaii Department of Water Supply  
Diamond Construction and Water Well Drilling
Mr. Ed Perry  
P.O. Box 6801  
Hilo, HI  96720

Dear Mr. Perry:

Certificate of Pump Installation Completion for Well No. 3687-53 (TMK 1-5-054:165)

We are pleased to inform you that the Pump Installation work permitted for the Kawaiola Well (Well No. 3687-53) is complete and acceptable and welcome you as a new member to the community of well owners and groundwater users in Hawaii. This certificate of pump installation completion allows you to commence pumping your well for reasonable & beneficial water use.

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

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

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

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

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

5. Your approved pump has a capacity of 16 gpm at a head of 163 ft. In the future, pump replacements of equal or lesser capacity will not require an additional permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer. If the pump replacement is greater than the existing pump, you will need to apply for a new pump installation permit.
6. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on an annual basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR.

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

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

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

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

RI:ss
Encl: Water Use Report Forms

c: Hawaii Department of Water Supply
    Diamond Construction and Water Well Drilling
## Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

### Data Input

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Number</td>
<td>3887-53</td>
</tr>
<tr>
<td>Well Name</td>
<td>Kawailoa</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>72</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>56</td>
</tr>
<tr>
<td>Grouting Method</td>
<td>other</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>12</td>
</tr>
<tr>
<td>Total Depth</td>
<td>80</td>
</tr>
<tr>
<td>Depth to Water</td>
<td>70 calculated head</td>
</tr>
<tr>
<td>Public Water Supply Well</td>
<td>no</td>
</tr>
<tr>
<td>Solid Casing Material</td>
<td>pvc plastic</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
<td>Schedule 40</td>
</tr>
<tr>
<td>Solid Casing Length</td>
<td>72</td>
</tr>
<tr>
<td>Solid Casing Diameter</td>
<td>6</td>
</tr>
<tr>
<td>Solid Casing Wall Thickness</td>
<td>0</td>
</tr>
<tr>
<td>Open Casing Length</td>
<td>8</td>
</tr>
</tbody>
</table>

### Results

#### Well Depth

- Theoretical Thickness of Aquifer: 82
- 1/4 Aquifer Thickness: 20.5
- Depth of Well below Sea Level: 8 okay

#### Well Casing

- Minimum Wall Thickness:
  - Material: pvc plastic
  - Minimum Thickness per standards: no requirement
  - Well Thickness Provided: 0 no standard
  - Minimum Length of Solid Casing: 90% of ground to top of aquifer 63
  - Length of solid casing Provided: 72 okay
  - Casing Material: Schedule 40 (for pvc only - check for 200' limit) okay
  - Annular Space:
    - Depth of Grouting: 49
    - Depth of Grouting provided: 56 okay
    - Minimum Annular Space required: 2
    - Thickness of Annular Space: 3 okay
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State Well No.:</td>
<td>3687-53</td>
</tr>
<tr>
<td>2. Well Name:</td>
<td>Kawaiola</td>
</tr>
<tr>
<td>3. Island:</td>
<td>Hawaii</td>
</tr>
<tr>
<td>4. Address:</td>
<td>PO Box 6801, Hilo, HI 96720</td>
</tr>
<tr>
<td>5. Tax Map Key:</td>
<td>1-5-054-165</td>
</tr>
<tr>
<td>6. Drilling Company:</td>
<td>Diamond Drilling and Pump</td>
</tr>
<tr>
<td>7. Drilling method used during construction:</td>
<td>Rotary</td>
</tr>
<tr>
<td>8. Date Well Construction (drilled, cased, grouted) completed:</td>
<td>12-21-07</td>
</tr>
<tr>
<td>9. Was the subject well cored?</td>
<td>No</td>
</tr>
<tr>
<td>10. Step-Drawdown Test completed?</td>
<td>No</td>
</tr>
<tr>
<td>11. Constant Rate Aquifer Test completed?</td>
<td>No</td>
</tr>
<tr>
<td>12. Water Level Data:</td>
<td>Reference Point Elevation</td>
</tr>
<tr>
<td>13. Initial encountered during drilling (this should also be filled in on the driller's log)</td>
<td>Ground = 72 ft. msl</td>
</tr>
<tr>
<td>14. Just prior to casing installation (this information should be before any pump tests are performed with casing installed)</td>
<td>Ground = 72 ft. msl</td>
</tr>
<tr>
<td>15. Chloride: 40 ppm. Temperature: 69 °F</td>
<td></td>
</tr>
<tr>
<td>16. As-built section filled completely</td>
<td></td>
</tr>
<tr>
<td>17. Attach photograph of well and concrete pad showing benchmark on concrete pad.</td>
<td></td>
</tr>
<tr>
<td>18. GPS coordinates provided in degrees, minutes, seconds</td>
<td></td>
</tr>
<tr>
<td>19. If a pump is not planned to be installed, please describe (below in the remarks section) how well is secured to prevent unauthorized access (example: lockable cover, threaded coupling, etc.)</td>
<td></td>
</tr>
<tr>
<td>20. Remarks:</td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:**

Licensed Driller: Rod Diamond  
C-57 Lic. No.: BC 23379

Signature: [Signature]

Date: 1-4-08

WCR1 Form 6/12/07 Page 1 of 5
13. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below)

Elevation at top of casing: 73.4 ft., msl.
(min. 70% of distance from ground elevation to water surface or 500 ft., whichever is less)

Cement Grout: 56 ft.

Annular space between hole and casing (1.5" for positive displacement, 3" for other methods):
3 in.

Rock or Gravel Packing:
Material: Crushed Basalt

Open Hole:
Length: N/A
Diameter: N/A
Bottom Elevation: N/A

Solid Casing Material:
Carbon Steel: compliant with (check one or more):
□ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
And compliant with (check one or more):
□ ASTM A242 or A606  □ Type E  □ Type S  □ Grade B  □ Other

Stainless Steel: (check one):
□ ASTM A409 (production wells)  □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one)
□ Schedule 40  □ Schedule 80
PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one)
□ Schedule 40  □ Schedule 80  □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more):
□ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
And compliant with (check one or more):
□ ASTM A242 or A606  □ Type E  □ Type S  □ Grade B  □ Other

Stainless Steel: (check one):
□ ASTM A409 (production wells)  □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one)
□ Schedule 40  □ Schedule 80
PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one)
□ Schedule 40  □ Schedule 80  □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296
PUMP INSTALLATION PERMIT
Kawaiola Well, Well No. 3687-53

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the pump installation for Kawaiola Well (Well No. 3687-53) at TMK 1-5-054:165, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 16 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within 60 days after completion of work. This form can be obtained by contacting staff or on the internet at www.hawaii.gov/dlnr/cwrm.

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

9. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

10. 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 the date the permit expires.

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

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

Date of Approval: November 23, 2007
Expiration Date: November 23, 2009

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Installer’s Signature: ____________________________
Printed Name: Rod Diamond
Firm or Title: Diamond Construction and Water Well Drilling

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
**MEMO and ROUTE SLIP (ver. 11/30/07)**

**WCR 2 Check for Well No. 3687-53** (survey to regulation memo)

1. **Pump Tests Check** (special condition of PIP? Yes/No) D. England
   - [ ] Yes  [ ] No
   - If no, describe deficiency
   - Step-Drawdown Test:
     - followed WCPI Stds [ ]  [ ]
     - analysis attached [ ]  [ ]
     - proposed pump cap o.k. [ ]  [ ]
   - Aquifer Pump Test:
     - followed WCPI Stds [ ]  [ ]
     - T & S analysis attached [ ]  [ ]
     - [ ] <70 gpm no test required

2. **Pump Installation Check** Mitch Ohye
   - [ ] Yes  [ ] No
   - If no, describe deficiency
   - data complete
   - followed Special Cond & Elev.
   - well database updated

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

**ATTACHMENTS FOR ACCEPTANCE:**
- 1WCR2 ACCEPTANCE LETTER
- 2PUMP INST. COMPLETION CERTIFICATE
- 3METER INSTALL. REPORT (IF NECESSARY)
- 4WUR FORM (if necessary)

- To be sent to driller
- To be sent to landowner/operator
- Staff internal checks

4. Roy (initial) check (Entered WCR 2/PICC accept date into database)

5. Susan Hoagbin (initial) finalize

6. Faith Ching (initial) enter into WUR database

6. Charley/Ryan File
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 808-733-5565. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/ewrm/

1. State Well No.: 3687-53  Well Name: Kawaiola  Island: Hawaii
2. Address: PO Box 6801, Hilo, HI 96720  Tax Map Key: 15-054-165
3. Pump Installation Company: Diamond Drilling and Pump
4. Date Pump Installed: 12-19-07
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: SUB/ GRUNDFOS / 16S07-8
   Rated Capacity: 16 gpm at head of: 163 ft.
   Motor Type, H.P., Voltage, rpm: FRANKLIN / ¾ HP / 230 V / 3450 RPM
   Pump type (check one): X Submersible  □ Centrifugal
   Method of flow measurement: □ Flowmeter  □ Weir  □ Open Pipe  □ Orifice*
6. *attach schematic
   Fill in the as-built section on the other side of this sheet.
7. Attach the rating curve for the installed pump.
8. Attach photograph of well clearly showing the benchmark on the concrete pad, the well head, and the method of flow measurement.
9. Well Owner: Same
10. Land Owner: Ed & Vicki Perry  PO Box 6801, Hilo, HI 96720  808-966-9196
11. Pump Installation Contractor (print)  Rod Diamond  C-57/C-57a/A Lic. No. BC 23379
   Signature  Date  1-4-08
7. AS-BUILT PUMP SECTION

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

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

Elevation of top of chase tube
N/A ft. mean sea level

Pump intake depth = 78 ft.
(referenced to bench mark)

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

If airline installed,
bottom of airline elevation
N/A ft. mean sea level
FLOW RANGE: 10 - 20 GPM
OUTLET SIZE: 1¼" NPT
NOMINAL DIA. 4"

16S100-75DS (10 HP)
16S75-65DS (7½ HP)
16S60-38 (5 HP)
16S30-24 (3 HP)
16S20-18 (2 HP)
16S15-14 (1½ HP)
16S10-10 (1 HP)
16S07-8 (¾ HP)
16S05-5 (½ HP)

OPERATING RANGE: 10 to 20 GPM
CAPACITIES BELOW 10 GPM SEE MODEL 16S

3450 RPM

HEAD (FEET)

CAPACITY (GPM)

Performance conforms to ISO 9906. 1999 (E) Annex A
Minimum submergence is 2 feet.
**DRILLER'S LOG**

**WELL NUMBER:** 3687-53

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Chlorides PPM</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 80</td>
<td>Basalt, Water @72 ft., 40 PPM</td>
<td>12-13-07</td>
</tr>
</tbody>
</table>

**Remarks:**
Latitude: N 19 degrees 36 min 3.524 x 60 = 31 sec.
Longitude: W 154 degrees 57 min 6.51 x 60 = 38 sec.

8-3687-53 KAUAIOLA

SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Benchmark Elevation est. 72.4

I certify that the elevation shown above:
1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

Surveyor
License No.
Date
WELL CONSTRUCTION PERMIT

Kawaiola Well, Well No. 3687-53

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kawaiola Well (Well No. 3687-53) at TMK 1-5-054:165, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff at www.hawaii.gov/dlnr/wr/permithelp.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

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

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

6. In the event that historically significant remains such as artifacts, burial or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.

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

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/wr/permithelp.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

11. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

12. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168A-12(f) prior to any well sealing or plugging work.

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

14. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with Hawaii Administrative Rules §13-168A-12(f).

15. Special conditions in the attached cover transmission letter are incorporated herein by reference.

Date of Approval: November 23, 2007
Expiration Date: November 23, 2009

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller's Signature: ____________________________ C-57 License #: C-23379
Printed Name: Rod Diamond

Pinned or Title: Diamond Construction and Water Well Drilling

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

Attachment
FROM: RYAN
DATE: 11/7/07
SUSPENSE DATE: __________________________

TO:
CHING, F. ____________________
CHONG, R. ____________________
DANBARA, S. ____________________
ENGLAND, D. ____________________
FUJII, N. ____________________
HARDY, R. ____________________
HOAGBIN, S. ____________________
ICE, C. ____________________
IMATA, R. ____________________
KIMURA, J. ____________________

INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________

TO:
KUNIMURA, I. ____________________
NAKAMA, L. ____________________
OHYE, M. ____________________
SAKODA, E. ____________________
SWANSON, S. ____________________
UYENO, D. ____________________
YODA, K. ____________________
YOSHINAGA, M. ____________________

INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________
INIT: ____________________

FOR: Approval
Signature
Information

PLEASE:

See Me
Review & Comment
Take Action
Type Draft
Type Final
File
Xerox __ copies

WELL NUMBER 3687-53
WELL NAME Kawailoa

application type BOTH

1 WCP COVER LETTER
2 WCP
3 WELL CHECK PRINTOUT
4 PIP COVER LETTER
5 PIP

COMMENTS:
6 SDWB
7 WWB
8 CWB
9 LD
10 HP
11 LUC
12 OCCL
13 SMA

- in conservation district
- in conservation district
- in area

NOTES:
DRILLER BC-23379
TMK 0
PUMP CAPACITY 16
WELL OWNER 0
LAND OWNER 0
COMMENT DEADLINE 11/23/07
December 6, 2007

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR #3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction Permit
Kawaiola Well (Well No. 3687-53)

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

Special Conditions

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

Please refer to the Permit Processes Worksheet (transmitted with your acknowledgement letter) for further information regarding the process of drilling a well and installing a pump.

No withdrawal of water shall be made other than for testing purposes until a certificate of pump installation completion has been issued by the Commission.

Please sign both permit originals and return one for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrm/forms.htm.

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255.

Sincerely,

LAURA H. THIELEN
Chairperson

Enclosures

c: Ed Perry (with applicable comments – DOH SDWB, WWB)
USGS
Hawaii DWS
WELL CONSTRUCTION PERMIT
Kawaiola Well, Well No. 3687-53

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kawaiola Well (Well No. 3687-53) at TMK 1-5-054:165, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 521, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrrm/forms.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

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

5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate all cleared areas as soon as possible.

6. In the event that historically significant remains such as artifacts, burials, or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.

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

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrrm/forms.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. Any variances proposed as part of the HWCPIS not followed and as a consequence water is wasted or contaminated, a fine on the property may result. The permittee shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities.

11. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

12. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project 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.

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

14. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with Hawaii Administrative Rules §13-168-12(f).

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

Date of Approval: November 23, 2007
Expiration Date: November 23, 2009

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller's Signature: ___________________________ C-57 License #: C-23379 Date: ___________________________
Printed Name: Rod Diamond Firm or Title: Diamond Construction and Water Well Drilling

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

Attachment
December 6, 2007

Dear Mr. Diamond:

Pump Installation Permit
Kawaiola Well (Well No. 3687-53)

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

Special Conditions

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

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

The permittee is responsible for all conditions of the permit. This includes ensuring the submission of a completed Well Completion Report Part II form within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign both permit originals and return one for our files.

IMPORTANT - Pump installation shall not commence until a fully signed permit is returned to the Commission.

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255.

Sincerely,

LAURA H. THIELEN
Chairperson

Enclosure

c: Ed Perry (with applicable comments – DOH SDWB, WWB)
   USGS
   Hawaii DWS
PUMP INSTALLATION PERMIT
Kawaiola Well, Well No. 3687-53

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kawaiola Well (Well No. 3687-53) at TMK 1-5-054:165, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 16 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within 60 days after completion of work. This form can be obtained by contacting staff or on the internet at www.hawaii.gov/dlnr/cwrm.

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

9. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

10. 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 the date the permit expires.

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

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

Date of Approval: November 23, 2007
Expiration Date: November 23, 2009
LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Installer's Signature: Rod Diamond, C-57, C-57a, or A License #: C-23379 Date:
Firm or Title: Diamond Construction and Water Well Drilling

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

Attachments
## Well Check Program

4/1/04 - Revised for update to Well Standards (February 2004)

### Data Input

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Number</td>
<td>3687-53</td>
</tr>
<tr>
<td>Well Name</td>
<td>Kawailoa</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>80</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>59.5</td>
</tr>
<tr>
<td>Grouting Method</td>
<td>Other</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>12</td>
</tr>
<tr>
<td>Total Depth</td>
<td>85</td>
</tr>
<tr>
<td>Depth to Water</td>
<td>79 calculated head</td>
</tr>
<tr>
<td>Public Water Supply Well?</td>
<td>No</td>
</tr>
<tr>
<td>Solid Casing Material</td>
<td>PVC plastic</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
<td>Schedule 40</td>
</tr>
<tr>
<td>Solid Casing Length</td>
<td>80</td>
</tr>
<tr>
<td>Solid Casing Diameter</td>
<td>6</td>
</tr>
<tr>
<td>Solid Casing Wall Thickness</td>
<td>0</td>
</tr>
<tr>
<td>Open Casing Length</td>
<td>5</td>
</tr>
</tbody>
</table>

### Results

#### Well Depth

| Theoretical Thickness of Aquifer | 41              |
| 1/4 Aquifer Thickness           | 10.25           |
| Depth of Well below Sea Level   | -5 okay         |

#### Well Casing

| Minimum Wall Thickness Material | PVC plastic      |
| Minimum Thickness per standards | No requirement  |
| Wall Thickness Provided         | 0 too small PVC  |
| Minimum Length of Solid Casing | 71.1            |
| 90% of ground to top of aquifer|                 |
| Length of solid casing Provided | 80 okay         |
| Casing Material                | Schedule 40      |
| (for PVC only - check for 200’ limit) | In compliance |

#### Annular Space

| Calculated Depth of Grouting | 55.3            |
| Depth of Grouting provided   | 58.5 okay       |
| Minimum Annular Space required| 2               |
| Thickness of Annular Space   | 3 okay          |

Sections:
- Section 2.2
- Section 2.4(b)
- Section 2.4(c)
- Section 2.4(d)
- Section 2.6(c)
- Section 2.6(d)
TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
Attention: Director’s Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Laura H. Thielen, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kawaiola Well (Well No. 3687-53)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. **Please respond by returning this cover memo form by November 23, 2007.** If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

RI:ss
Attachment(s)

RESPONSE:

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

[ ] A source of possible wastewater contamination is not located near the proposed well site (information attached).

[ ] An NPDES permit is required.

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

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

No comments/objections

Contact Person: Jerry Nunogawa
Phone: 9330401

Date: 10-30-07
INDIVIDUAL WASTEWATER SYSTEM (IWS) PROFILE

An individual wastewater system (IWS) file has been found and the following information is provided. In general, the Department of Health has reviewed and approved of the plans based on the information submitted as verification that a treatment IWS such as a septic tank/aerobic unit was constructed and authorized to be used for wastewater disposal from a building/dwelling.

**General Information**
- Permit ID: 37168
- IWS type: Septic Tank
- Status: Plan Approved
- Submit: 1/25/2007
- Plan Approved: 8/3/2007
- Address: 
- Termination Date: 

**Site Information**
- Property Owner: Edward Perry
- Dwelling Information: Total Bedrooms: 3
- Flow Rate: 600 gpd
- Bldg Type: Residential

**IWS System Information**
- Type: Septic Tank
- Percolation: 
- Disposal: 

For further information, please feel free to call the Wastewater Branch engineer as listed:
- Johnny Ong, Oahu, Wastewater Branch (808) 586-4294  Fax 586-4300
- Roland Tejano, Maui, Maui District Health Office (808) 984-8232  Fax 984-8237
- Dane Hiromasa, Kona, Kealakekua Health Center (808) 322-1963  Fax 322-1511
- Jerry Nunogawa, Hilo, Hawaii District Health Office (808) 933-0401  Fax 933-0400
- Lori Vetter, Kauai, Kauai District Health Office (808) 241-3323  Fax 241-3566
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: RYAN  DATE: 24-Jul-07  SUSPENSE DATE: 31-Jul-07

TO: CHING, F. INIT. TO: NAKAMA, L. INIT. FOR: 1 Approval PLEASE:
FUJII, N.
GOODING, K. 3 NAKANO, D. 1 Signature
1 HARDY, R. 3 OHYE, M. 3 Information
HIGA, D. SAKODA, E.
HOAGBIN, S. SWANSON, S.
ICE, C.
IMATA, R. YODA, K.
KUNIMURA, I.

WELL NUMBER: 3687.52  WELL NAME: Kawailoa

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated
1 TRANS. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAP
4 APPL. FORM (11 COPIES)
5 USGS MAPS (11 COPIES)
6 TAX MAPS (11 COPIES)
7 PARCEL OWNER VERIF.
8 CONTRACTOR VERIF.
9 ALL INFO FILLED IN
10 BACKGROUND CHECK
11 $25 FEE DEPOSIT SLIP
12 DHP/CDUP/SMA pre-screen

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

INCOMPLETE ACTION DATES:

DATE ACTION

address yellow marks
Mr. Rod Diamond  
Diamond Construction and Water Well Drilling  
HCR #3 Box 14073  
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction/Pump Installation Permit Application for Well No. 3687-53

We acknowledge receipt, on August 27, 2007, of your completed Well Construction/Pump Installation permit application and filing fee for the Kawaiola Well (Well No. 3687-53). You can expect your application to be processed within ninety (90) days from this date.

For your information, the attached table describes the process, responsible parties, and deadline requirements for drilling or modifying a well and installing, modifying, or replacing a pump.

By this acceptance letter, we are also notifying the well operator/landowner that water may not be pumped for purposes other than testing until the certificate of well construction/pump installation completion letter is issued to the well operator and landowner. Additionally, the permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity. No certificate of pump installation will be issued until the Commission has determined that the pump capacity will not have adverse effects on the aquifer, other nearby wells, or streams. In other words, you may need to remove the pump and install a smaller pump at the Commission’s discretion before you can withdraw water for purposes other than testing.

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

c: Ed Perry
To: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director's Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

From: Laura H. Thielen, Chairperson
Commission on Water Resource Management

Subject: Well Construction/Pump Installation Permit Application
Kawaiola Well (Well No. 3687-53)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

Response:

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

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people or 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.

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

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

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

[ ] An NPDES permit is required.

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

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

[ ] No comments/objections

Contact Person: ____________________________ Phone: ____________________________
Signed: ____________________________ Date: ____________________________
October 23, 2007

TO: Russell Tsuji, Administrator
   Land Division

FROM: Ken C. Kawahara, P.E., Deputy Director
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
          Kawaiola Well (Well No. 3687-53) TMK 1-5-054:165

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255.

Response:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
October 23, 2007

TO: Melanie Chinen, Administrator
   Historic Preservation

FROM: Ken C. Kawahara, P.E., Deputy Director
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Kawaiola Well (Well No. 3687-53) TMK 1-5-654:165

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by November 23, 2007. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RI: ss
Attachment(s)

RESPONSE:

[ ] This is a [ ] public (county or state) project [ ] private project and [ ] will [ ] may disturb historic sites.

[ ] We concur that the work described under this permit will not disturb historic sites.

[ ] We do not concur that the work described under this permit will not disturb historic sites. We require the following for our concurrence:

Contact Person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
<table>
<thead>
<tr>
<th>Owner: PERRY, EDWARD T &amp; BONNIE P</th>
<th>Tenure: Fee Simple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payer: PERRY, EDWARD T</td>
<td>Annual Tax: $555.28</td>
</tr>
<tr>
<td>Tax Bill: PO BOX 6801, Hilo, HI 96720 USA</td>
<td>Zoning: A-1A</td>
</tr>
<tr>
<td></td>
<td>PITT Code: 500 - Agricultural</td>
</tr>
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**Assessed Value** | **Exemption** | **Size** | **Buildings:** | **Dwellings:** | **Subdivision:** | **Project:** | **Bedrooms/Baths:** |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Land: $66,500</td>
<td>$0</td>
<td>1.00 ac</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Hawaiian Paradise Park</td>
<td>0/0</td>
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<tr>
<td>Total: $66,500</td>
<td>$0</td>
<td>0 sq ft</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

**Total Buildings:** | **Total: $66,500** | **$0 1.00 ac** | **$0 0 sq ft** | **$0 0** | **$66,500** | **0 1.00 ac** | **$0 0** | **$0 1.00 ac** | **$0 0 sq ft** | **$0 0** | **$66,500** | **0 1.00 ac** | **$0 0 sq ft** | **$0 0** | **$66,500** |

**SALES**

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<tr>
<th>Date</th>
<th>Document Type</th>
<th>Description</th>
<th>Parcel Number</th>
<th>Assessing Officer</th>
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<tr>
<td>7/28/2003</td>
<td>DEED-M</td>
<td>WOHLSCHALGEL, FREDRICK EDWARD, H/W(Tenants By Entirety)</td>
<td>TCT 866177 BOC</td>
<td>LCD 2967566</td>
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<td>3/24/2005</td>
<td>DEED-M</td>
<td>WOHLSCHALGEL, MARLENI, H/W(Tenants By Entirety)</td>
<td>TCT 866177 BOC</td>
<td>LCD 3245042</td>
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<td>7/29/2005</td>
<td>DEED-M</td>
<td>WOFFORD, CLIFFORD THOMAS, Single Person or Individual</td>
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<td>LCD 3305799</td>
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<td>7/19/2007</td>
<td>DEED</td>
<td>GENTLE WORLD INC, A Company or Corporation</td>
<td>TCT 868177 BOC</td>
<td>LCD 3630398</td>
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**This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is therefore, not guaranteed.**
### General Licensee

<table>
<thead>
<tr>
<th><strong>LIC ID:</strong> CT-23379</th>
<th><strong>Active/Inactive:</strong> ACTIVE</th>
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<tr>
<td><strong>NAME:</strong> RODNEY K DIAMOND</td>
<td></td>
</tr>
<tr>
<td><strong>TRADE NAME:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>STATUS:</strong> CURRENT, VALID &amp; IN GOOD STANDING</td>
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<tr>
<td><strong>ENTITY:</strong> INDIVIDUAL</td>
<td><strong>BUSINESS CODE:</strong> SOLE OWNER</td>
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<tr>
<td><strong>ORIG LIC DATE:</strong> 10/12/2001</td>
<td><strong>EXPIRE DATE:</strong> 09/30/2008</td>
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<td><strong>CLASS PREFIX:</strong> BC</td>
<td><strong>SPECIAL PRIVILEGE:</strong></td>
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<td><strong>RESTRICTION:</strong></td>
<td><strong>EDUCATION CODE:</strong></td>
</tr>
<tr>
<td><strong>BUSINESS ADDR:</strong> HCR #3 BOX 14073 KEAAU HI 96749</td>
<td></td>
</tr>
<tr>
<td><strong>MAILING ADDR:</strong></td>
<td></td>
</tr>
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</table>

Click here to enter search criteria for prior complaints history -
For prior complaints and disciplinary history, contact licensing and business information center at (808) 587-3295.
<table>
<thead>
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<th>PROJECT PH ACT</th>
<th>AMOUNT</th>
<th>NAME/DESCRIPTION</th>
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<tr>
<td>08 326 C 1026 0752</td>
<td>(1)</td>
<td>$25.00</td>
<td>Su Walsh</td>
</tr>
<tr>
<td>(2)</td>
<td>25.00</td>
<td>Charles Beier</td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td></td>
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<tr>
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<tr>
<td>(10)</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$ 50.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

REMARKS:

LINE (1) Kawaiola Well
LINE (2) Hala Kahiki Well
LINE (3)
LINE (4)
LINE (5)
LINE (6)
LINE (7)
LINE (8)
LINE (9)
LINE (10)
# Application for Pump Installation Permit

**Instructions:** Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management. Application must be accompanied by 10 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at (808) 587-4225. For further information and updates to this application form, visit [hawaii.gov/water].

## State of Hawaii

**Department of Land and Natural Resources**

**Commission on Water Resource Management**

**APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT**

### WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>(If newly assigned)</td>
<td>Kawailoa</td>
<td>Hawaii</td>
<td>1</td>
<td>5</td>
<td>054</td>
<td>165</td>
<td></td>
</tr>
</tbody>
</table>

- Property tax map, showing well location referenced to established property boundaries.
- Photograph of the proposed well site.
- A schematic diagram showing the well site, access road and proposed well infrastructure (if applicable).

<table>
<thead>
<tr>
<th>Well Operator’s Name/Company</th>
<th>Well Operator’s Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed &amp; Vicky Perry</td>
<td>Ed Perry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Landowner’s Name/Company</th>
<th>Landowner’s Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Well Operator’s Mailing Address**

P.O. Box 6801
Hilo, HI 96720

**Well Operator’s Phone**

808-966-9196

**Well Operator’s Fax**

808-966-9196

**Landowner’s Phone**

808-966-9196

**Landowner’s Fax**

808-966-9196

**Landowner’s E-mail**


## PROPOSED WELL CONSTRUCTION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X New Well</td>
<td>X Drilled</td>
<td>X Pretreatment of well site</td>
</tr>
<tr>
<td>X Modly Existing Well</td>
<td>X Drilled</td>
<td>X Pretreatment of well site</td>
</tr>
<tr>
<td>X Abandon/Seal Well</td>
<td>X Drilled</td>
<td>X Pretreatment of well site</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X New Well</td>
<td>X Plant New Pump</td>
</tr>
<tr>
<td>X Reuse Old Well</td>
<td>X Install New Pump</td>
</tr>
<tr>
<td>X Modly Existing Well</td>
<td>X Manage Old Pump</td>
</tr>
<tr>
<td>X Abandon/Seal Well</td>
<td>X Manage Old Pump</td>
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</tbody>
</table>

### PROPOSED PUMP INSTALLATION

<table>
<thead>
<tr>
<th>12. Proposed Pumping Rate, gpm (gallons per minute)</th>
<th>13. Method of flow measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>X Flow meter</td>
</tr>
<tr>
<td>250</td>
<td>X Open Pipe</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. Proposed Amount of Withdrawal, gpd (gallons per day)</th>
<th>15. Method of well construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>X Pretreatment of well site</td>
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</table>

<table>
<thead>
<tr>
<th>16. Proposed Pumping Rate, gpm (gallons per minute)</th>
<th>17. Method of well construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>X Pretreatment of well site</td>
</tr>
</tbody>
</table>

## Regulatory Requirements

- Conservation District Use Permit (CDUP)
  - Required
  - Date approved

- Special Management Area Permit (SMAP)
  - Required
  - Date approved

- Non-Conservation District Use Permit (NCUDP)
  - Required
  - Date approved

- Special Management Area Permit (SMAP)
  - Required
  - Date approved

- Special Use Permit (SUP)
  - Required
  - Date approved

- Waiver
  - Required
  - Date approved

## Other Requirements

- Conservation District Use Permit (CDUP)
  - Required
  - Date approved

- Special Management Area Permit (SMAP)
  - Required
  - Date approved

- Non-Conservation District Use Permit (NCUDP)
  - Required
  - Date approved

- Special Management Area Permit (SMAP)
  - Required
  - Date approved

- Special Use Permit (SUP)
  - Required
  - Date approved

- Waiver
  - Required
  - Date approved

## Additional Remarks, Explanations, Etc.

### Site Photo

![Site Photo](image-url)

### Pump Installation

<table>
<thead>
<tr>
<th>25. Pump Installer (Must be filled out if application is for Pump Installation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rodney K Diamond</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCR #3 Box 14073 Keaau HI 96749</td>
<td>987-8100</td>
<td>966-4129</td>
<td></td>
</tr>
</tbody>
</table>

**For Official Use Only:**

- Received
- Date: 07 JUL 16 09:37

**WCPI App. Form 10/05/04**

---

**Other Legal Requirements**

- conservation district use permit (CDUP)
- special management area permit (SMAP)
- non-conservation district use permit (NCUDP)
- special management area permit (SMAP)
- special use permit (SUP)
- waiver

---

**Notes:**

- Signing below indicates that the signatures understand and agree that the information provided is accurate and true to the best of their knowledge. Further, the signatures understand that upon permit approval:
  - The proposed work is to be completed within two (2) years of the approved date.
  - The contractor shall submit to the Commission a well completion/bond document report within 60 days after the completion date of the permitted work.
  - In the event that the application is not completed correctly, any permit may be suspended until the item is brought into compliance, and any work done while the permit is in suspension may result in fines of up to $5000/day.
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 81 ft., masl

Hole Diameter: 12 inches.

Minimum of 4 ft radius & 4 in thick concrete pad to be placed at top of casing (to contain benchmark surveyed to nearest 0.01 ft).

Ground Elevation: 80 ft., masl

Cement Grout: 59.5 ft.

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

Grouting method:
☐ Positive Displacement
☐ Other

Annular space between hole and casing (4.5" for positive displacement, 3" for other methods): 3 in.

Total Depth: 65 ft.

Rock or Gravel Packing: 25.5 ft.

Material:
☐ Crushed Basalt
☐ Rounded Gravel

Estimated Water Level Elevation: Est. -0 ft., masl*

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

Total Length: __ ft.

Nominal Diameter: 6 in.

Wall Thickness: S40 in.

Bottom Elevation: _____ ft., masl

Open Casing: ☐ Perforated ☐ Screen

Total Length: _____ ft.

Nominal Diameter: 6 in.

Wall Thickness: S40 in.

Bottom Elevation: _____ ft., masl

Open Hole:

Length: NA ft.

Diameter: _____ in.

Bottom Elevation: _____ ft., masl

Solid Casing Material:

Carbon Steel: compliant with (check one or more):
☐ ANSI/AWWA C200
☐ API Spec. 5L
☐ ASTM A53
☐ ASTM A139

And compliant with (check one or more):
☐ ASTM A420 (production wells)
☐ ASTM A312 (monitor wells)

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)
☐ Schedule 40
☐ Schedule 80

PVC Plastic conforming to ASTM F460 and (ASTM D1785 or ASTM D2241): (check one)
☐ Schedule 40
☐ Schedule 80

Thermoset Plastic: (check one)
☐ Filament Wound Resin Pipe conforming to ASTM D2996
☐ Centrifugally Cast Resin Pipe conforming to ASTM D2997
☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
☐ PTFE Fluorocarbon Tubing conforming to ASTM D3296
☐ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:

Carbon Steel: compliant with (check one or more):
☐ ANSI/AWWA C200
☐ API Spec. 5L
☐ ASTM A53
☐ ASTM A139

And compliant with (check one or more):
☐ ASTM A420 (production wells)
☐ API Spec. 5L
☐ ASTM A312

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)
☐ Schedule 40
☐ Schedule 80

PVC Plastic conforming to ASTM F460 and (ASTM D1785 or ASTM D2241): (check one)
☐ Schedule 40
☐ Schedule 80

Thermoset Plastic: (check one)
☐ Filament Wound Resin Pipe conforming to ASTM D2996
☐ Centrifugally Cast Resin Pipe conforming to ASTM D2997
☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
☐ PTFE Fluorocarbon Tubing conforming to ASTM D3296
☐ FEP Fluorocarbon Tubing conforming to ASTM D3296

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

For non-salt water Basalt Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation - )

Example: Estimated = 2 ft. Water Level Elev. Bottom Elevation of Well Limit = (2 - ) = -18.5 ft.

WPCI App. Form 10/05/04
Por. BLOCK "P" KEAAU, PUNA, HAWAI'I 14-1 APP. 1051 MHD 38

SUBJECT TO CHANGE

ROAD (MAUKA)

WELL

OSEPTIC