**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR PERMIT ISSUANCE 4/17/07**

<table>
<thead>
<tr>
<th>FROM:</th>
<th>DATE: 8/15/07</th>
<th>SUSPENSE DATE:</th>
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</thead>
<tbody>
<tr>
<td>RYAN</td>
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<table>
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<tr>
<th>TO:</th>
<th>INIT</th>
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<tr>
<td>CHING, F.</td>
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<td>CHONG, R.</td>
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<td>NAKAMA, L.</td>
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<td>OHYE, M.</td>
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<td>DANBARA, S.</td>
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<td>SAKODA, E.</td>
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<td>ENGLAND, D.</td>
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<td>SWANSON, S.</td>
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<td>FUJI, N.</td>
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<tr>
<td>HOAGBIN, S.</td>
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<td>YODA, K.</td>
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<td>ICE, C.</td>
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<td>IMATA, R.</td>
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<td>KIMURA, J.</td>
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**WELL NUMBER 3586-22**

**WELL NAME** Hale Akala

<table>
<thead>
<tr>
<th>application type</th>
<th>BOTH</th>
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<tr>
<td>1 WCP COVER LETTER</td>
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<td>2 WCP</td>
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</tr>
<tr>
<td>3 WELL CHECK PRINTOUT</td>
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<td>4 PIP COVER LETTER</td>
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<tr>
<td>5 PIP</td>
<td>✔</td>
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**COMMENTS:**

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

**NOTES:**

<table>
<thead>
<tr>
<th>DRILLER</th>
<th>Rod Diamond</th>
</tr>
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<tbody>
<tr>
<td>TMK</td>
<td>1-5-030:029</td>
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<tr>
<td>PUMP CAPACITY</td>
<td>12</td>
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<tr>
<td>WELL OWNER</td>
<td>Raymond Carl Echt Jr.</td>
</tr>
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<td>LAND OWNER</td>
<td>Raymond Carl Echt Jr.</td>
</tr>
<tr>
<td>COMMENT DEADLINE</td>
<td>8/10/07</td>
</tr>
</tbody>
</table>
Ref: 3586-22.wcp

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

Dear Mr. Diamond:

Well Construction Permit
Hale Akala Well (Well No. 3586-22)

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
Interim Chairperson

Enclosures

c: Raymond Carl Echt Jr. (with applicable comments – DOH SDWB, CWB)
USGS
Hawaii DWS
WELL CONSTRUCTION PERMIT
Hale Akala Well, Well No. 3586-22

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 Hale Akala Well (Well No. 3586-22) at TMK 1-5-030:029, 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 §13-168-15, Hawaiian 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/cwrm/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 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 Work 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/cwrm/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 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 §13-168-12(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 Hawaiian Administrative Rules §13-168-12(0).
15. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: August 10, 2007
Expiration Date: August 10, 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 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
Ref: 3586-22.pip

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

Dear Mr. Diamond:

Pump Installation Permit
Hale Akala Well (Well No. 3586-22)

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,

[Signature]

LAURA H. THIELEN
Interim Chairperson

Enclosure

c: Raymond Carl Echt Jr. (with applicable comments – DOH SDWB, CWB)
USGS
Hawaii DWS
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 Hale Akala Well (Well No. 3586-22) at TMK 1-5-030:029, 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 12 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: August 10, 2007
Expiration Date: August 10, 2009

LAURA H. THIELEN, Interim 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
### Data Input

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<th>Parameter</th>
<th>Value</th>
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### Results

#### Well Depth

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<td>1/4 Aquifer Thickness</td>
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#### Depth of Well below Sea Level

| Depth of Well below Sea Level | 0 | okay | Section 2.2 |

#### Well Casing

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#### Well Thickness Provided

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#### Length of Solid Casing Provided

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#### Annular Space

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<td>Thickness of Annular Space</td>
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TO: Honorable Chiyome L. Fukino, M.D., Director
Attention: Director's Office
Harold Yee, Wastewater Branch
Stuart Yamada, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Allan A. Smith, Interim Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Hale Akala Well (Well No. 3586-22)

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 August 10, 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.

Riss
Attachment(s)

RESPONSE: UC: #24 CM 7/14/07

This well qualifies as a source which will serve as a source of potable water in a public water system (defined as serving 25 or more people at least 60 days per year or 15 or more service connections) and must comply with the Commission of Health regulations and the public water system definition.

This well was not subject to any sources serving a public water system serving less than 25 people at least 60 days per year or 15 or more service connections; and if the well water is used for drinking, the private water should be tested for bacteriological and chemical presence, before starting such use and testing methods for the water quality testing. However, it cannot be used for this source to exceed the public water system definition until Driller of Health approval is received 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 all means or an approved backflow prevention, and by clearly labeling all non-potable systems with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices shall be properly maintained and tested.

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

For the applicant's information, a source of potable wastewater contamination (i.e., if not located near the proposed well site) (information attached)

An NPDES permit is required.

Other relevant DOH regulations, requirements, or recommendations are attached.

In the event that the location of the well changes in a site within the parcel described in this application, our director considers the comments of this letter to be applicable, and we do not need to review the new location.

No comments/notes

Contact Person: Ann T. Kane

Phone: 

Signed: Ann T. Kane 
Date: JUL 3 2007
CWRM Application Source: Hale Akala Well (Well No. 3586-22)

Safe Drinking Water Branch Engineering Section

No additional comments on this application.

Underground Injection Control (UIC)

In general, a shallow well, or a well that recharges quickly from local rainfall, should not be used as a potable 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.

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.
Mr. Chris Yuen, Director
Planning Department
County of Hawaii
101 Pauahi Street
Hilo, HI 96720

Dear Mr. Yuen:

Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
Hale Akala Well (Well No. 3586-22)

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 SMA permitting requirements specific to your division. Please respond by returning this cover memo form by August 10, 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 the permit application, request additional information, or request additional review time, please contact Ryan Imamura of the Commission staff at 587-0255.

Sincerely,

ALLAN A. SMITH
Interim Chairperson

RESPONSE:

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

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

No objections

Other comments:

Contact Person: Esther Imamura
Phone: (808) 961-8288, ext. 257

Signed: ____________________________ Date: 7/16/07
July 9, 2007

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:   Allan A. Smith, Interim Chairperson  
        Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
         Hale Akala Well (Well No. 3586-22)

Response:

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 program, plans, and objectives specific to your department. Please respond by returning this cover memo form by August 10, 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 Imura of the Commission staff at 808-0255.

R: ss
Attachment(s)

RESPONSE:

1) This well qualifies as a source which will serve as a source of possible water in a public water system defined as serving 25 or more people at least 60 days per year of at least 15 or more service connections. And must receive Director of Health approval to use in compliance with Hawaii Administrative Rules (HAR). Title 11, Chapter 20, Rules Relating to Public Water Systems, §11-20-20.

2) 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 of 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before installing such use and stability during the water quality period. However, if future plans use from this source threatens to upset the public water system distribution then Director of Health approval is required prior to implementation.

3) If the well is to supply both public and non-potable purposes in a single system, the user shall eliminate backflows and backflow prevention devices by physically separating potable and non-potable systems on an area of an approved backflow preventer, and by clearly labeling all non-potable systems with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

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

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

6) An NFDES permit is required.

M) Other existing DOH regulations, information, or recommendations are attached.

7) If the well location changes, the parcel examined on this application, our Division considers the comments to still be applicable, and we do not need to review the new location.

8) No comments/objections.

Contact Person:  DONNA FAY  Phone:  586-4309

Signed:  DONNA FAY  Date:  7-10-07
FROM: RYAN
DATE: 30-Apr-07
SUSPENSE DATE: 7-May-07

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<th>TO:</th>
<th>INIT.</th>
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<tr>
<td>HIGA, D.</td>
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<tr>
<td>HOAGBIN, S.</td>
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<tr>
<td>ICE, C.</td>
<td></td>
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<tr>
<td>IMATA, R.</td>
<td></td>
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<tr>
<td>KUNIMURA, I.</td>
<td></td>
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</tr>
</tbody>
</table>

PLEASE:
- See Me
- Review & Comment
- Take Action
- Type Draft acknowledgment letter
- Type Final, label file folder, update People.db
- File
- Xerox copies

WELL NUMBER "586"

WELL NAME Hale Akala

WELL CONSTRUCTION □
PUMP INSTALLATION □
BOTH □

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>TRANS. LETTER</td>
</tr>
<tr>
<td>2</td>
<td>PERMIT PROCESS TABLE</td>
</tr>
<tr>
<td>3</td>
<td>CWRM MAP</td>
</tr>
<tr>
<td>4</td>
<td>APPL. FORM (11 COPIES)</td>
</tr>
<tr>
<td>5</td>
<td>USGS MAPS (11 COPIES)</td>
</tr>
<tr>
<td>6</td>
<td>TAX MAPS (11 COPIES)</td>
</tr>
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<td>7</td>
<td>PARCEL OWNER VERIF.</td>
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<td>CONTRACTOR VERIF.</td>
</tr>
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<td>9</td>
<td>ALL INFO FILLED IN</td>
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<tr>
<td>10</td>
<td>BACKGROUND CHECK</td>
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<tr>
<td>11</td>
<td>$25 FEE DEPOSIT SLIP</td>
</tr>
<tr>
<td>12</td>
<td>DHP/DUP/SMA pre-screen</td>
</tr>
</tbody>
</table>

FOLDER:
- [ ] MADE NEW FILE FOLDER, ATTACHED
- [ ] FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

(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)

per Rod did not check w/ County (5/14)
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. 3586-22

We acknowledge receipt, on May 14, 2007, of your completed Well Construction/Pump Installation permit application and filing fee for the Hale Akala Well (Well No. 3586-22). 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), extension 70255.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Attachment

c: Raymond Echt
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: Allan A. Smith, Interim Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Hale Akala Well (Well No. 3586-22)

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 August 10, 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:

1. 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.

2. 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 musting 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.

3. 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.

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

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

6. An NPDES permit is required.

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

8. In the event that the location of the well changes but it 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: ____________
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 August 10, 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: ________________
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 August 10, 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.

**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: ________________
Mr. Chris Yuen, Director
Planning Department
County of Hawaii
101 Pauahi Street
Hilo, HI 96720

Dear Mr. Yuen:

Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
Hale Akala Well (Well No. 3586-22)

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 SMA permitting
requirements specific to your division. Please respond by returning this cover memo form by August 10,
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.

Sincerely,

ALLAN A. SMITH
Interim Chairperson

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: _______________________

Signed: ____________________________ Date: ________________________
Assessed Values reflect tax year 2007.

Search criteria: TMK Taxkey 3-1-5-30-29

<table>
<thead>
<tr>
<th>Taxkey</th>
<th>Subdiv/Condo</th>
<th>Tnr</th>
<th>Address</th>
<th>Owner/Lessee</th>
<th>Bds</th>
<th>Bths</th>
<th>Land area</th>
<th>Liv area</th>
<th>Last Sale</th>
<th>Instr</th>
<th>Pri</th>
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<tr>
<td>3-1-5-30-29</td>
<td>HAWAIIAN F 1ST ECHT JR.</td>
<td>M</td>
<td>PARADISE AVE</td>
<td>RAYMOND C</td>
<td>3</td>
<td>2</td>
<td>1.00 ac</td>
<td>1,925</td>
<td>9/28/2005</td>
<td>DEED</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.
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<th>D</th>
<th>SRC/</th>
<th>COST</th>
<th>OBJ</th>
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<td>C</td>
<td>1026</td>
<td>0752</td>
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<td></td>
<td></td>
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<td>$25.00</td>
<td>R. Echt, Jr.</td>
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<td></td>
<td>$25.00</td>
<td>Clifford Shommer</td>
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</table>

**TOTAL** $100.00

**REMARKS:**
- LINE (1) Hale Akala Well
- LINE (2) Trita Ganga Well
- LINE (3) End's Well
- LINE (4) Kai Puka Well
- LINE (5)
- LINE (6)
- LINE (7)
- LINE (8)
- LINE (9)
- LINE (10)

-
**STATE OF HAWAI'I**

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**COMMISSION ON WATER RESOURCE MANAGEMENT**

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

**Instructions:** Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 121, Honolulu, Hawaii 96803. 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 897-2228. For further information and updates to this application form, visit http://www.hawaii.gov/wrm.

---

### WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th>STATE WELL NO. (if deep well)</th>
<th>WELL NAME</th>
<th>BLAND</th>
<th>X</th>
<th>Y</th>
<th>4</th>
<th>ZONE</th>
<th>SEC.</th>
<th>LAT.</th>
<th>LONG.</th>
<th>PARC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hale Akata</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The following be attached before this application is accepted as complete (check off if attached):  
- Portion of 1:24,000 U.S.G.S. topographic map (scale 1:24,000) with well location labeled and include the name of the quad map.  
- Property tax map, showing well location referenced to established property boundaries.  
- Photograph of the proposed well site.  
- Schematic diagram showing the well site, access road and proposed well infrastructure (if applicable).

5. WELL OPERATOR’S NAME/COMPANY  
Raymond Carl Echt Jr.

6. LANDOWNER’S NAME/COMPANY  
Same

7. Well Operator’s Mailing Address  
PO Box 6172  
Hilo, HI 96720

8. Landowner’s Mailing Address  
Same

Phone: 982-5500  
Fax: 987-8100  
E-mail: 

### PROPOSED WELL CONSTRUCTION

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X. New Well</td>
<td>12</td>
<td>gallon per minute</td>
<td>Proposed Pumping Rate</td>
</tr>
<tr>
<td>Y. Construct New Well</td>
<td>250</td>
<td>gallon per day</td>
<td>Proposed Amount of Withdrawal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method of flow measurement</th>
<th>Flow meter</th>
</tr>
</thead>
</table>

### PROPOSED PUMP INSTALLATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Flow meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>X. New Pump</td>
<td>12</td>
</tr>
<tr>
<td>Y. Existing Pump</td>
<td>250</td>
</tr>
</tbody>
</table>

---

10. DOMESTIC NUMBER OF UNITS TO BE SERVED: 

11. IRIGATION (describe crop and no. of acres): 

12. MILITARY (describe area): 

---

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

21. Conservation District Use Permit (CDUP): 
   - Required, CDUP # date approved

22. Special Management Area Permit (SMAP): 
   - Required, SMAP # date approved

23. Historic Preservation District (HPD): 
   - Required, HPD # date approved

---

**NOTE:**  
Signing below indicates that the signatures understand and verify that the information provided is accurate and true to the best of their knowledge. Further, the signatures understand that upon approval: 1) the proposed work is to be completed within six (6) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work; 3) 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.

---

**24. WELL DRILLER:**
Rodney K. Diamond  
Phone: 987-8100  
Fax: 966-4129  
E-mail: 

**25. PUMP INSTALLER:**
Rodney K. Diamond  
Phone: 987-8100  
Fax: 966-4129  
E-mail: 

---

**For Official Use Only:**

RECEIVED  
07 APR 20 A 9:42
**PROPOSED WELL SECTION** (Please attach schematic if different from diagram provided below)

### Hole Diameter: 12 inches
- **Minimum of 2' Radius & 4' Thick Concrete Pad** (to contain benchmark surveyed to nearest 0.01 ft.)
- **Ground Elevation:** 45 ft., msl

### Grouting Method:
- [ ] Positive Displacement
- [ ] Other

### Cement Grout:
- [ ] 35 ft. mini.
- 70% of distance from
- ground elevation to top of
- water surface or 500 ft. whichever is less.

### Estimated Water Level Elevation:
- Est. 2' ft., msl

---

### Solid Casing:
- (90% x (Ground Elevation - Water Level Elevation))

<table>
<thead>
<tr>
<th>Material</th>
<th>Nominal Diameter</th>
<th>Wall Thickness</th>
<th>Bottom Elevation</th>
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</thead>
<tbody>
<tr>
<td>岩石或碎石垫层</td>
<td>6 in.</td>
<td>S40 in.</td>
<td>0 ft., msl</td>
</tr>
</tbody>
</table>

### Open Casing:
- [ ] Perforated
- [ ] Screen

<table>
<thead>
<tr>
<th>Material</th>
<th>Nominal Diameter</th>
<th>Wall Thickness</th>
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<td>S40 in.</td>
<td>0 ft., msl</td>
</tr>
</tbody>
</table>

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**Solid Casing Material:**
- **Carbon Steel:** compliant with (check one or more):
  - [ ] ANSI/AWWA C200
  - [ ] API Spec. 5L
  - [ ] ASTM A53
  - [ ] ASTM A139
- **Stainless Steel:** compliant with (check one or more):
  - [ ] ASTM A242 (or A500)
  - [ ] Type E
  - [ ] Type S
  - [ ] Grade B
  - [ ] Other
- **ABS Plastic:** conforming to ASTM F460 and ASTM D1527.
- **PVC Plastic:** conforming to ASTM F460 and ASTM D1785 or ASTM D2241.
- **Thermoset Plastic:**
  - [ ] 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 D329
  - [ ] Gneiss Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - [ ] PTFE Fluorocarbon Tubing conforming to ASTM D329

**Open Casing Material:**
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  - [ ] PTFE Fluorocarbon Tubing conforming to ASTM D329

---

**FOR NON-SALT WATER BASAL WELLS:**
- Bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or,
- Bottom Elevation of Well Limit = (Water Elevation -) = +18.5 ft.

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

---

**INSTALLATION STANDARDS**

- [ ] 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 D329
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**FOR NON-SALT WATER BASAL WELLS - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or,**
- **Bottom Elevation of Well Limit = (Water Elevation -) = +18.5 ft.**

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

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  - [ ] ASTM A242 (or A500)
  - [ ] Type E
  - [ ] Type S
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**Open Casing Material:**
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  - [ ] API Spec. 5L
  - [ ] ASTM A53
  - [ ] ASTM A139
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  - [ ] PTFE Fluorocarbon Tubing conforming to ASTM D329
  - [ ] Gneiss Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - [ ] PTFE Fluorocarbon Tubing conforming to ASTM D329

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**CONSTRUCTION ST ANDARDS**

- [ ] Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
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- [ ] PTFE Fluorocarbon Tubing conforming to ASTM D329
- [ ] Gneiss Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- [ ] PTFE Fluorocarbon Tubing conforming to ASTM D329

---

**For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or,**
- **Bottom Elevation of Well Limit = (Water Elevation -) = +18.5 ft.**

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