### PUBLIC RECORD DATA

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<td>6.92 ac</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.
Michael Robertson  
Wailani Drilling, Inc.
1885 Main Street, Suite 408
Wailuku HI 96793

Dear Mr. Robertson:

Extension of Well Construction Permit  
Ke Alii Wells 1&2 (Well Nos. 4326-11 & 12)

Thank you for confirming our November 30, 2006 inquiry about extending the captioned permit. By this letter, we approve an extension of six months. The new expiration date for the wells is June 5, 2007. If the work cannot be done within that period, you may reapply at any time with no penalty or prejudice.

All other conditions for this permit remain the same. Please keep a copy of this letter filed with the original permit.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400 extension 70251.

Sincerely,

[Signature]

DEAN A. NAKANO  
Acting Deputy Director

Cl:ss
Several well construction permits are expiring soon. Please provide updated status:

- 2 Dec 06  JNRS 8001 (5477-04, 5478-01) Need Survey
- 3 Dec 06  Bualani (5479-12) do
- 12 Dec 06  Kahili (4324-14, 12) do — Need Survey
- St. Theresa (4527-16) Not Dilled yet
- 18 Dec 06  Kuhio (3519-05) do
- 20 Dec 06  Koaouli (4526-01) do
- 24 Dec 06  Kilau-Jones (5519-04) Not Dilled

Please extend all for 6 more months.
WELL CONSTRUCTION PERMIT
Ke Alii Well 1 (Villas), Well No. 4326-11

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 13-166, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Ke Alii Well #1 (Villas), Well No. 4326-11 at TMK 3-9-20-20, Mau, subject to the Hawaii Well Construction & Pump Installation Standards (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 will be allowed to inspect installation activities in accordance with §13-166-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1½-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

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

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

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

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

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, MSL) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (February 2004; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-166-12(d) prior to any well sealing or plugging work.

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

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

Date of Approval: May 5, 2004
Expiration Date: May 5, 2006

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: [Signature]
Date: May 2, 2004

Printed Name: Masaoka, Takeshi
Firm or Title: Ukilani, L.B. Alii Villas (C)

Driller's Signature: Michael Robertson
C-57 License # : 2015
Date: 10/4/04

Printed Name: Michael Robertson
Firm or Title: Ukilani Drilling, Inc.

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

Attachment
C

USGS
Department of Health Safe Drinking Water, Wastewater, and Clean Water Branches
State Department of Water Supply
Wailuku, Maui, Hawaii
Mr. Michael Robertson  
Wailani Drilling, Inc.  
1885 Main Street 408  
Wailuku, HI 96793  

Dear Mr. Robertson:  

Extension of Well Construction Permit  
Ke Alii Wells 1&2 (Well Nos. 4326-11 & 12)  

Thank you for confirming our April 6, 2006 inquiry about extending the captioned permit. By this letter, we approve an extension to the end of this year. The new expiration date for the wells is December 12, 2006. If the work cannot be done within that period, you may reapply at any time with no penalty or prejudice.

All other conditions for this permit remain the same. Please keep a copy of this letter filed with the original permit.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400 extension 70251.

Sincerely,

DEAN A. NAKANO  
Acting Deputy Director  

Cl:ss
May 12, 2004

Ref: 4326-11&12.wcp

Mr. Takeshi Matsutaka  
Ke Alii Villas, LLC  
220 South King Street, #1270  
Honolulu, HI 96813

Dear Mr. Matsutaka:

Well Construction Permit  
Ke Alii Wells 1 & 2 (Villas, Ke Alii Kai II) (Well No. 4326-11&12)

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

Special Conditions

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

2. The well casing shall meet the minimum thickness required in the Hawaii Well Construction and Pump Installation Standards (HWCPIS, February 2004).

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (February 2004) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."
If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

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

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400 extension 70251.

Sincerely,

[Signature]

Peter T. Young
Chairperson

Enclosures

c: Wailani Drilling, Inc.
WELL CONSTRUCTION PERMIT

Ke Alii Well #2 (Ke Alii Kai II), Well No. 4326-12

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Ke Alii Well #2 (Ke Alii Kai II) (Well No. 4326-12) at TMK 3-9-19:4, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (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, Hawaii Administrative Rules.

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

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

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

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

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

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (February 2004, HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-166-12(f) prior to any well sealing or plugging work.

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

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

W. Roy Ishimaru

Date of Approval: May 5, 2004
Expiration Date: May 5, 2006

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: ___________________________ Date: __________

Printed Name: ___________________________ Firm or Title: __________

Driller's Signature: ___________________________ C-57 License #: __________ Date: __________

Printed Name: ___________________________ Firm or Title: __________

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

Attachment
USGS
Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Wallani Drilling, Inc.
**Commission on Water Resource Management**

**Route Slip for Permit Issuance**

**From:** CHARLEY

**Date:** 11 May 04

**Suspense Date:**

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<td>MATHIAS, T.</td>
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<td>NAKANO, D.</td>
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**WELL NUMBER** 4326-11&12  **WELL NAME** Ke Alii Wells 1&2

**WELL CONSTRUCTION**

**Attachments for Well Construction Permit:**

1. COVER LETTER
2. PERMIT (2x)
3. SDWB
4. WWB
5. CWB
6. HEER
7. LD
8. HP
9. PUMP TEST
10. WCR I FORM

**To be sent to applicant**

**FOR OFFICE USE ONLY**

**PUMP INSTALLATION**

**Attachments for Pump Installation Permit:**

1. COVER LETTER
2. PERMIT (2x)
3. SDWB
4. WWB
5. CWB
6. HEER
7. LD
8. HP
9. WCR II FORM
10. WUR FORM

---

**For Office Use Only**
### Well Check Program

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

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<td>Minimum Thickness per standards</td>
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<td>Wall Thickness Provided</td>
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<tr>
<td>Minimum Length of Solid Casing</td>
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<td>Length of Solid Casing Provided</td>
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<td>Casing Material</td>
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<td>Depth of Grouting provided</td>
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<tr>
<td>Minimum Annular Space required</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
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April 20, 2004

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Ke Alii 1 & 2 (Well Nos. 4326-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

RESPONSE:

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

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

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

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

An NPDES permit is required.

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

An NPDES permit is required.

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

No comments/objections. No Records.

Contact Person: Lori M. Kajiwara Phone: 586-4294
Signed: Lori M. Kajiwara Date: 5-4-2004
TO: Honorable Chyome L. Fukino, M.D., Director
   Department of Health
   Attention: Harold Yee, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Ke Alii 1 & 2 (Well Nos. 432-11 & 12)

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 May 10, 2004. 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 Charley Ike of the Commission staff at 587-0251.

Ct:ss
Attachment(s)

RESPONSE:

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

An NPDES permit is required.

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

No comments/objections

Contact Person: William Wong

Signed: William Wong

Phone: 586-4258
Date: MAY - 4 2004
April 20, 2004

TO: Dede Mamiya, Administrator
    Land Division

FROM: Ernest Y.W. Lau, Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
          Ke Alii 1 & 2 (Well Nos. 4326-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

RESPONSE:

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

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

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

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

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

[ ] No objections

[ ] Other comments: Original source of private title is Grant No. 1015 issued prior to Statehood in 1959

Contact Person: Gary Martin
                Phone: 587-0421

Signed: ___________________________  Date: APR 27 2004
April 20, 2004

TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Harold Yee, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
          Ke Ali'i 1 & 2 (Well Nos. 5726-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

Class:
Attachment(s)

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 11, Chapter 20, Rules Relating to Potable Water Systems, §11-35-29.

[1] 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 owner should test for bacteriological and chemical presence before using the well and routinely monitor the water quality thereafter. However, if the water is not used for drinking then Director of Health approval is required prior to implementation.

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

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

An NPDES permit is required.

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

No comments/objections

Contact Person: Alec Wong
   Phone: 586-6309

Signed: AM Wong
   Date: 4/13/04

PETER T. YOUNG
Chairperson

Meredith J. Chang
Clayton W. Dela Cruz
James A. Frazier
Chiyome L. Fukino, M.D.
Stephanie A. Whalen

ERNST Y.W. LAU
Deputy Director

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. Box 931
HONOLULU, HAWAII 96809

April 20, 2004

Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Ke Ali'i 1 & 2 (Well Nos. 5726-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

Class:
Attachment(s)

RESPONSE:

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An NPDES permit is required.

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

No comments/objections

Contact Person: Alec Wong
   Phone: 586-6309

Signed: AM Wong
   Date: 4/13/04

PETER T. YOUNG
Chairperson

Meredith J. Chang
Clayton W. Dela Cruz
James A. Frazier
Chiyome L. Fukino, M.D.
Stephanie A. Whalen

ERNST Y.W. LAU
Deputy Director

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. Box 931
HONOLULU, HAWAII 96809
The Department of Health, Clean Water Branch has the following comments:

1. **For Well-Drilling Activities**

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules, Title 11, Chapter 55, Appendix I, effective September 22, 1997. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewaters, and well purge wastewaters. This general permit does not cover well pump testing. The applicable Notice of Intent Forms and filing fee shall be submitted at least thirty (30) days before the start of discharge to the Department of Health, Clean Water Branch at 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814-4920 or P.O. Box 3378, Honolulu, Hawaii 96801-3378. Inquiries may be directed to the Clean Water Branch at (808) 586-4309 or by fax at (808) 586-4352.

2. **For Well Pump Testing**

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

JS/cr
April 20, 2004

Mr. Takeshi Matsutaka
Ke Alii Villas, LLC
220 S. King Street, Suite 1270
Honolulu, HI 96813

Dear Mr. Matsutaka:

Well Construction/Pump Installation Permit Application for Well Nos. 4326-11 & 12

We acknowledge receipt, on April 19, 2004, of your completed Well Construction/Pump Installation permit application and filing fee for the Ke Alii 1 & 2 (Well Nos. 4326-11 & 12). You can expect your application to be processed within ninety (90) days from this date.

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

If you have any questions about your permit application, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

W. Roy Wank

ERNEST Y.W. LAU
Deputy Director

Cl:ss

c: Wailani Drilling, Inc.
TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Harold Yee, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Ke Alii 1 & 2 (Well Nos. 4326-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

Clss
Attachment(s)

RESPONSE:

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

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

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

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

[ ] An NPDES permit is required.

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

[ ] No comments/objections

Contact Person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
April 20, 2004

TO: Dede Mamiya, Administrator
    Land Division

FROM: Ernest Y.W. Lau, Deputy Director
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Ke Alii 1 & 2 (Well Nos. 4326-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

CI:ss
Attachment(s)

RESPONSE:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our
division.
[ ] A water lease/permit is not required of this applicant.
[ ] A water lease/permit has been obtained by the applicant through lease no. ____________________________.
[ ] This well project [ ] requires [ ] does not require a CDUP. If a CDUP is required it [ ] has
    [ ] has not been approved and [ ] is [ ] is not currently active.
[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.
[ ] No objections
[ ] Other comments:

Contact Person: ______________________________ Phone: __________________

Signed: ______________________________ Date: __________________
April 20, 2004

TO: Holly McEldowney, Acting Administrator
    Historic Preservation

FROM: Ernest Y.W. Lau, Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Ke Alii 1 & 2 (Well Nos. 4326-11 & 12)

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 May 10, 2004. 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 Charley Ice of the Commission staff at 587-0251.

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: ________________

Signed: ____________________________ Date: ________________
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: CHARLEY
DATE: 5-Mar-04
SUSPENSE DATE: 12-Mar-04

TO:

Bauer, G.
Ching, F.
Fujii, N.
Hardy, R.
Higa, D.
Hirano, E.
Ice, C.
Imata, R.
Jinnai, R.
Kunimura, I.

INIT.

Lum, A.
Nakama, L.
Nakano, D.
Nishioka, L.
Ohye, M.
Sakoda, E.
Subia, S.
Swanson, S.
Uyeno, D.
Yoda, K.

FOR:

3 Approval
3 Signature
4 Information

PLEASE:

1 Review & Comment
Take Action
5 Type Draft acknow letter
2 Type Final, label new file folder
5 File
Xerox ______ copies

WELL NUMBER 4326

WELL NAME Ke Alii 1 & 2 "Ocean Villas"

□ WELL CONSTRUCTION □ PUMP INSTALLATION □ BOTH

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

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

INCOMPLETE ACTION DATES:

DATE ACTION

19Apr 04 filled in

Ke Alii 1 (Ke Alii Villas)
Ke Alii 2 (Ke Alii Kai II)
COUNTY OF MAUI
DEPARTMENT OF PLANNING

February 3, 2004

Mr. Takeshi Matsukata
Ke Ali'i Villas, LLC
220 S. King Street, Suite 1270
Honolulu, Hawaii 96813

Dear Mr. Matsukata:


In response to your application received on November 18, 2003, and amended on December 30, 2003, and in accordance with the Special Management Area Rules for the Maui Planning Commission, Sections 12-202-12 and 12-202-14, a determination has been made relative to the above project that:

1. The project is a development;
2. The project has a valuation not in excess of $125,000.00; (Valuation: $95,762.26)
3. The project has no significant adverse environmental or ecological effect, taking into account potential cumulative effects; and
4. The project is consistent with the objectives, policies, and Special Management Area guidelines set forth in the Hawaii Revised Statutes (HRS), Chapter 205-A, and is consistent with the County General Plan and Zoning.

In consideration of the above determination, you are hereby granted a Special Management Area Minor Permit approval. Said approval is to enable you to obtain the necessary well permits for the proposed wells and are subject to the following conditions:

1. That construction is limited to the irrigation and percolation wells and shall be in accordance with preliminary plans submitted on November 18, 2003.
Mr. Takeshi Matsukata  
February 3, 2004  
Page 2

2. That appropriate well permits shall be obtained prior to the initiation of construction.

3. That construction of the improvements shall be initiated by February 28, 2005, and shall be completed within one (1) year of said initiation. Construction of the irrigation and percolation wells shall be coordinated with the Ke Alii Villas project, as much as is practicable.

4. That a qualified archaeological monitor shall be present during all ground-altering activities in order to identify and document any historic properties which may be encountered during the proposed undertaking and to provide appropriate mitigation measures as necessary. An acceptable archaeological monitoring plan will need to be submitted to the State Historic Preservation Division for review, prior to the commencement of any ground-altering activities. That Division shall also submit to the County in writing verification of the successful completion of that monitoring.

5. That full compliance with all other applicable governmental requirements shall be rendered.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Colleen Suyama, Staff Planner, of this office at 270-7735.

Sincerely,

MICHAEL W. FOLEY  
Planning Director

MWF:CMS:smb

c: Wayne Boteilho, Deputy Planning Director  
Clayton Yoshida, AICP, Planning Program Administrator  
Aaron Shinmoto, PE, Planning Program Administrator (2)  
Colleen Suyama, Staff Planner  
Glenn Tadaki, Munekiyo & Hiraga, Inc.  
John Nakagawa, CZM Program, Office of Planning Development Services Administration (2)  
2004/SM2 Minor Permit File  
General File  
(K:\WP_Docs\Planning\SM2\2004\0011_KeAliiVillasWellsMinorPermit.wpd)
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: **CHARLEY**  
DATE: **5-Mar-04**  
SUSPENSE DATE: **12-Mar-04**

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WELL NUMBER: **4326 - A**  
WELL NAME: **Ke Alii Villas**

**Ke Alii 1 & 2**  
(4326-12)

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<th>ATTACHMENTS FOR APPLICATION PROCESSING</th>
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INCOMPLETE ACTION DATES:

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**Ke Alii 1 (Ke Alii Villas)**  
**Ke Alii 2 (Ke Alii Kai II)**
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<td></td>
</tr>
</tbody>
</table>

**TOTAL** $75.00

**REMARKS:**

LINE (1) Ke Alii Well #1, tmk: 3-9-19:47
LINE (2) Ke Alii Well #2, tmk: 3-9-20:27
LINE (3) Waiohuli Church Well, tmk: 3-9-09:28
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

If in Well Construction and/or Pump Installation

Application: Please read the instructions on the application form. An application with electronic submission to the Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96806. Application must be accompanied by 6 copies and a non-refundable filing fee of $500.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Technical Staff at 800-523-4256. For any information updates, please call our office at 808-587-0514. For more information about water resource management, visit www.state.hi.us/wrm.

APPLICANT INFORMATION: Fill out all fields, if applicable, and please check next to the primary contact.

1. (a) Well Name:
Ke Ali'i Village LLC
Contact Person: Takeshi Matsukawa
Address: 220 S King St. Suite 1270 Honolulu HI 96813

(b) Mailing Address: 220 S King St. Suite 1270 Honolulu HI 96813
Fax: 808-272-6723
E-mail: info@kealivillage.com
Phone: 808-272-6723

(c) CONTRACTOR: Waiʻale Drilling Co. Contact Person: Michael Roberts, Phone: 808-523-4256
Address: 174-181 Easland Ave. Kula HI 96790
Fax: 808-523-4256
E-mail: info@kealivillage.com

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

2. WELL NAME: Ke Aliʻi Well #21
Address: S Kiheki Rd
Ten Map Key: 3 9

3. PROPOSED WORK:
(check all that apply)
Ⅲ Construct New Well
Ⅲ Install New Pump
Ⅲ Abandon Well
Ⅲ Repair Well

4. CONSTRUCTION:
Drilled □ Dug □ Shaft □ Tunnel

5. PROPOSED PUMPING RATE: 350 gallons per minute

6. PROPOSED USE:
(check all that apply)
□ Domestic (individual, noncommercial water system)
□ Irrigation (crop)
□ Industrial
□ No.
□ No, or service connection?
□ Nonresidential, commercial, institutional
□ Other

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 2,000 gallons per day
(b) METHOD OF FLOW MEASUREMENT:
□ Floatmeter □ Open-pipe □ Weir □ Office □ Other

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.

Conservation District Use Permit (CDUP): To find out if a CDUP is necessary, call DLNR Land Division at 808-523-4256
□ Not Required □ Required, if needed, date approved

Environmental Impact Statement (EIS) or Environmental Assessment (EA): To determine if an EIS or EA is necessary, call CEC at 808-523-4256
□ Not Required □ Required, if needed, date approved

Special Management Area Permit (SMAP): To determine if an SMAP is necessary, call CEC at 808-523-4256; on Maui, call 808-523-4256; on Kauai call 808-523-4256
□ Not Required □ Required, if needed, date approved

9. REMARKS, EXPLANATIONS:

For official use only
Latitude
Longitude
State Well No.

WCPA Form 821-01
11. PROPOSED WELL SECTION

Elevation at top of casing: 81 ft., mas* (Survey to nearest 0.01 ft.)

Hole Diameter: 12.5 in.

Minimum of 2 Radii & 4" Thick Concrete Pad

Minimum annular space between hole and casing ≥ 3".

Cement Grout: 70 ft. (min. 70% of distance from ground elevation to top of water surface or 800 ft., whichever is less.)

Rock or Gravel Packing: A) ½ ft. mas*

Material: □ Crushed Base □ Rounded Gravel

Minimum gravel thickness: 1 ft. mas*

Water Level Elevation: 2.5 ft. mas*

Total Depth: 1,000 ft.

90% x (Ground Elev. – Water Level Elev.)

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

Material: Circle

Diameter: 10 in.

Wall Thickness: 1.5 in.

Bottom Elevation: -20 ft., mas*

Material: □ Perforated □ Screen

Length: 60 ft.

Diameter: 3 in.

Wall Thickness: 1.5 in.

Open Hole: A) ½ ft. mas*

Length: 3 ft.

Diameter: 3 ft.

Bottom Elevation: -20 ft., mas*

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to assure that your construction plans are in compliance with all existing regulations.

For non-well water Basel Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation – 0.25 Water Level Elevation)

Example: Estimated = 2 ft. Water Level Elevation. → Bottom Elevation of Well Limit = (2 – 0.25 x 2 ft.) = -1.5 ft.

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

Solid Casing Material:

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 A241 □ Type E □ Type S □ Grade B □ Other

Stainless Steel: (check one): □ ASTM A409 □ ASTM A312

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

Thermoset Plastic: (check one) □ FRP Reinforced Resin Pipe conforming to AWWA C900

☐ Centrifugally Cast Resin Pipe conforming to ASTM D2597

☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3917

☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C900

☐ PTFE Fluorocarbon Tubing conforming to ASTM D3258

☐ FEP Fluorocarbon Tubing conforming to ASTM D3258

Open Casing Material:

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 A241 □ Type E □ Type S □ Grade B □ Other

Stainless Steel: (check one): □ ASTM A409 □ ASTM A312

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

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For non-well water Basel Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation – 0.25 Water Level Elevation)

Example: Estimated = 2 ft. Water Level Elevation. → Bottom Elevation of Well Limit = (2 – 0.25 x 2 ft.) = -1.5 ft.

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

Solid Casing Material:

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 A241 □ Type E □ Type S □ Grade B □ Other

Stainless Steel: (check one): □ ASTM A409 □ ASTM A312

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

Thermoset Plastic: (check one) □ FRP Reinforced Resin Pipe conforming to AWWA C900

☐ Centrifugally Cast Resin Pipe conforming to ASTM D2597

☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3917

☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C900

☐ PTFE Fluorocarbon Tubing conforming to ASTM D3258

☐ FEP Fluorocarbon Tubing conforming to ASTM D3258

Open Casing Material:

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 A241 □ Type E □ Type S □ Grade B □ Other

Stainless Steel: (check one): □ ASTM A409 □ ASTM A312

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

Thermoset Plastic: (check one) □ FRP Reinforced Resin Pipe conforming to AWWA C900

☐ Centrifugally Cast Resin Pipe conforming to ASTM D2597

☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3917

☐ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C900

☐ PTFE Fluorocarbon Tubing conforming to ASTM D3258

☐ FEP Fluorocarbon Tubing conforming to ASTM D3258
ingrid: let-long show well as follows

survey done after well 1
orig photo of pod for Well 2
reads el = 79.77; changed
to "1" in hand
(photo shows Mauna Estates)
survey sheet calls it "11"
well 2 photo shows stencil
"4326 - 4"
January 13, 2010

Mr. Dana Powers
Ke Alii Ocean Villas AOAO
20 Lolupe Lane
Kihei, HI 96753

Dear Mr. Powers:

Correct Well Identification
Ke Alii Ocean Villas Well (Well No. 4326-11)

Thank you for your help in discovering and clearing up a mix-up in the identification of the Ke Alii project wells. It is apparent that the original and correct number for your well was incorrectly stenciled on the wellhead pad. Please make the minor adjustment necessary to identify your well as Well No.4326-11. It seems the developer got all the way through the permitting process, then stenciled the well information in reverse order.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218, or toll free from Maui at 984-2400, extension 70218.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

C: ss
January 13, 2010

Mr. Takeshi Matsukata  
Ke Alii Kai II, LLC  
220 South King Street, Suite 1270  
Honolulu, HI 96813

Dear Mr. Matsukata:

Correct Well Identification and Water Use Reporting  
(Well Nos. 4326-11 & 12)

We have learned that in the final step of completing the wells for the Ke Alii project’s two wells (Ocean Villas and Moana Estates), the well numbers were incorrectly stenciled in reverse. We are notifying the water use reporter for Ocean Villas (originally Ke Alii Villas Well #1) of this error and requesting correction of the stenciling to correctly read “Well No. 4326-11”. We need to have this error corrected for the Moana Estates Well (Well No. 4326-12), in addition. Please follow up on this well.

We have also failed to receive any water use reporting for Well No. 4326-12. Well owners are obligated to do so under Hawaii Administrative Rules Sec. 13-168-7, under potential penalty of fines up to $5,000 per day.

If the well ownership has changed, our practice is to transmit to new owners a certificate of completion, which outlines their responsibilities as owners, including the water use reporting requirements. Please respond to this letter, identifying who should bear these responsibilities, and forward a copy of this letter to the current owners of Well Nos. 4326-11 & 12, serving Ke Alii Villas (TMK: (2) 3-9-019:004) and Moana Estates (TMK: (2) 3-9-020: 020 & 027), as we understand it.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218, or toll free from Maui at 984-2400, extension 70218.

Sincerely,

KEN C. KAWAHARA, P.E.  
Deputy Director

CI:ss
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WATER METER INSTALLATION REPORT

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 821, 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 808-586-0325. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlr/swm/

State Well Number: 43 26 - 12
Method of flow measurement:

- Flowmeter w/totalizer
- Other, explain below and attach schematic
- Photograph as-built attached (required)

Manufacturer: Badger
Model no.: ?
Size: 2 inch

Remarks/explanations/comments:

* Serial Number: 35723213

The "new meter" is the exact same as the old one.

Landowner (print): Ke Alii Ocean Villas
Signature: [Signature]
Date: 12-30-09
<table>
<thead>
<tr>
<th>FROM: Charley</th>
<th>DATE: 18 Dec 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO:</td>
<td>INIT.</td>
</tr>
<tr>
<td>IMATA, R.</td>
<td></td>
</tr>
<tr>
<td>MILLS, D.</td>
<td></td>
</tr>
<tr>
<td>UYENO, D.</td>
<td></td>
</tr>
<tr>
<td>CHONG, R.</td>
<td></td>
</tr>
<tr>
<td>CHENG, C.</td>
<td></td>
</tr>
<tr>
<td>LAROUX, E.</td>
<td></td>
</tr>
<tr>
<td>OHYE, M.</td>
<td></td>
</tr>
<tr>
<td>FUJII, N.</td>
<td></td>
</tr>
<tr>
<td>YOSHINAGA, M.</td>
<td></td>
</tr>
<tr>
<td>SWANSON, S.</td>
<td></td>
</tr>
<tr>
<td>KUNIMURA, I.</td>
<td></td>
</tr>
<tr>
<td>ENGLAND, D.</td>
<td></td>
</tr>
<tr>
<td>TO:</td>
<td>INIT.</td>
</tr>
<tr>
<td>KAWAHARA, K.</td>
<td></td>
</tr>
<tr>
<td>HARDY, R.</td>
<td></td>
</tr>
<tr>
<td>SAKODA, E.</td>
<td></td>
</tr>
<tr>
<td>NAKAMA, L.</td>
<td></td>
</tr>
<tr>
<td>TORRES, R</td>
<td></td>
</tr>
<tr>
<td>TO:</td>
<td></td>
</tr>
<tr>
<td>HOAGBIN, S</td>
<td></td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
</tr>
<tr>
<td>DANBARRA, S.</td>
<td></td>
</tr>
<tr>
<td>YODA, K.</td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE:**

- Review & Comment
- Type Draft
- Type Final
- File
- Copies: ___
- Take Action:
  - Please See Me

---

This came to me by chance when Ingrid asked if I'd seen the report.
December 22, 2009

Mr. Dana Powers
Ke Alii Ocean Villas AOAO
20 Lolupe Lane
Kihei, HI 96753

Dear Mr. Powers:

Water Meter Installation Replacement Report

Thank you very much for your latest water use report and the installation of an improved meter for this purpose.

Your system installer filed the original required meter installation information for your previous meter, and we need you to file a replacement report (enclosed).

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218, or toll free from Maui at 984-2400, extension 70218.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Cl: ss
Enclosure
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

Name: Mr. Dana Powers
Company: Ke Alii Ocean Villas AOAO
Address: 20 Lokus Lane
Kaili, HI 96733
Telephone No.: 874-3415
Fax No.: 874-3465
Report Month: __________ Year: __________

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96808. For assistance, please call (808) 681-3888.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd)</th>
<th>Period End Date (mm/dd)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft above NGVD29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4325-11</td>
<td>Ke Alii Ocean Villas</td>
<td>11-5-09</td>
<td>12-10-09</td>
<td>Flow meter 1275</td>
<td></td>
<td>70.2</td>
<td>82' 10''</td>
<td></td>
</tr>
</tbody>
</table>

New meter installed 10-26-09

---

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):  

Submitted by (name): Dana Powers  
Title: Site Mgr.  
Date: 12-12-09
Ke Alli'i Ocean Villas  
20 Lolupe Lane  
Kihei, Maui Hi.  
Office: (808) 874-34125  
Fax: (808) 8743465

Fax-Cover Sheet

TO: Charles Ize
FROM: Dana Powers
DATE: 12-14-09
PAGES SENT: 2

*******************************************************************************

Charlie,

We put a "new meter" in on 10-26-09. The old one was not working right.  
So hopefully we will have more accurate reading from now on.  
I'll try and take the reading at the same time of the month - every month.  

Aloha Dana
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM:

ROY

DATE: MAY 27 2008

TO:

CHENG, C.
CHING, F.
DANBARA, S.
ENGLAND, D.
FUJII, N.
HOAGBIN, S.
KIMURA, J.
KUNIMURA, I.
MUROHARA, K.
NAKAMA, L.
OHYE, M.
ISHIRO, K.
SAKODA, E.
SWANSON, S.
TORRES, R.
UYENO, D.
YODA, K.
YOSHINAGA, M.

INIT: TO:

INIT: FOR:

KUNIMURA, I.

INIT: FOR:

Approval
Signature
Information
Review & Comment
Take Action
Type Final
File

PLEASE:

See the

TO:

COMPLETE NOW.

(03/08)
Wailani Drilling, Inc.
Michael Robertson • Lic. #C57-20115
P.O. Box 790299 • Paia, HI 96779
Phone: 808-579-8768 • Fax: 579-8769
E-mail: waikane2@msn.com

Ke Alii Kai 2 Well #4326-12 "Ocean Villas"

GPS N 20° 43.223' /
W 156° 26.613'
Well Elevation

Benchmark Elevation 82.87

Attach photos of completed well and concrete pad showing benchmark location.

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

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 887-0228. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/wrm/.

1. State Well No.: 4320-12  
2. Well Name: Keauhi Well 2 (Keauhi Kei)  
3. Island: Maui
4. Drilling Company: Westma Drilling
5. Drilling method used during construction: Rotary
6. Date Well Construction (drilled, cased, grouted) completed: 11-14-04
7. Was the subject well cored? Yes
8. Step-Drawdown Test completed? Yes
9. Constant Rate Aquifer Test completed? Yes
10. Water Level Data:

<table>
<thead>
<tr>
<th>Water Level Data</th>
<th>Reference point elevation</th>
<th>Depth to water (feet)</th>
<th>Water Level</th>
<th>Date/time of measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Initial encountered during drilling</td>
<td>Ground = 82.87 ft. nsl.</td>
<td>80.40</td>
<td>1.41</td>
<td>11-31-04</td>
</tr>
<tr>
<td>10. Just prior to casing installation</td>
<td>Ground = 82.87 ft. nsl.</td>
<td>80.40</td>
<td>1.41</td>
<td>12-1-04</td>
</tr>
<tr>
<td>11. After casing installation (this information should be before any pump tests are performed with casing installed)</td>
<td>If this reference point is not the benchmark, the difference between the benchmark and this point is 0.82 ft. nsl.</td>
<td>80.40</td>
<td>1.41</td>
<td>12-21-04</td>
</tr>
</tbody>
</table>

Chloride: 1280 ppm, Temperature: 62.6 °F

Note: For all elevations referenced to mean sea level, take the ground elevation (surveyed or estimated if survey not required at this time) and subtract the depth to the water level.

12. As-built section filled in completely

13. Photograph of well and concrete pad showing benchmark on concrete pad attached

14. GPS coordinates provided in degrees, minutes, seconds

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

16. Remarks:

Licensed Driller (print) ____________________________

Signature

C-57 Lic. No. 20115

Date 12-21-04

APR-08-2008 01:46PM FAX: PAGE:002 R=95%
12. AS-BUILT WELL SECTION

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

Elevation at top of casing: 69.8 ft, msl (to nearest 0.01 ft.)

Minimum of 2' radius & 4' thick concrete pad

Ground Elevation: 82.89 ft, msl

Surveyed  Estimated

Cement Grout: 60 ft
(min. 70% of distance from ground elevation to top of water surface or 500 ft, whichever is less.)

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

Rock or Gravel Packing:

Material:
- Crushed Basalt
- Rounded Gravel

Water Level Elevation: 19.8 ft, msl
(item 11 from page 1)

Total Depth: 100 ft

*msl = mean sea level

Solid Casing Material:

Carbon Steel: compliant with (check one or more):  □ ANSI/AWWA C200  □ API Spec. 5L  □ ASTM A53  □ ASTM A139
And compliant with (check one or more):  □ ASTM A242 or A586  □ Type E  □ Type S  □ Grade B  □ Other
Stainless Steel: (check one):
- □ ASTM A409 (production wells)
- □ ASTM A312 (monitor wells)

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

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

Thermoplastic: (check one)
- □ Filament Wound Resin Pipe conforming to ASTM D2908
- □ 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 C960
- □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
- □ FEP Fluorocarbon Tubing conforming to ASTM D3298

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 A586  □ Type E  □ Type S  □ Grade B  □ Other
Stainless Steel: (check one):
- □ ASTM A409 (production wells)
- □ ASTM A312 (monitor wells)

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

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)
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- □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
- □ FEP Fluorocarbon Tubing conforming to ASTM D3298

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

Closed Casing: (50% x (Ground Elev-Water Level Elev))
- Length: 60 ft
- Nominal Diameter: 6 in
- Well Thickness: 0.250 in
- Bottom Elevation: 9.04 ft, msl

Open Casing: (Perforated □ Screen)
- Length: 20 ft
- Nominal Diameter: 6 in
- Well Thickness: 0.250 in
- Bottom Elevation: -12.13 ft, msl

Open Hole:
- Length: n/a ft
- Diameter: n/a in
- Bottom Elevation: n/a ft, msl

WCR Form 0/12/07 Page 2 of 2
**DRILLER'S LOG**

WELL NUMBER: 4324-12  

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

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<th>Rock Description</th>
<th>Water Level</th>
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**Remarks:**

Hit water at 82'
## CONSTANT-RATE PUMP TEST DATA

(not required for wells producing < 50 gpm)

- **Pumped Well No.**: 42-210-12
- **Pumped Well Name**: KeAtii Well #2
- **Target Q**: 400 gpm
- **Observation Well No.**: n/a
- **Distance between Obs. & Pumped Well**: n/a ft.
- **Reference pt. for depth to water**: 01.9 ft. msl
- **Static Water Level @ start of test**: 0 ft. msl
- **Water level measurements by**: 1 electrical sounder 0 pressure transducer 0 airline
- **START TEST Date**: 04-21-04
- **Time of day**: 09:30
- **Flow Meter Reading Start**: 2735 gallons

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<th>EC (uMho)</th>
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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

Max possible duration, water level or quality did not stabilize for any 24 period

Begin recovery data next page
Flow meter reading at end of pumped period: 13085.59 gals
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END TEST Date: 6-23-04 Time of day: 11:45

ADDITIONAL REMARKS: 

Person in charge of pump test (print): Michael Robertson

Signature: Michael Robertson

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

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

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Pumped Well Name: Ke Ati, Well #2

Target Q: 400 gpm

Distance between Obs. & Pumped Well: n/a ft.

Reference pt. for depth to water: 81.9 ft.

Static Water Level @ start of test: 1.9 ft.

Water level measurements by: [ ] Electrical sounder  [ ] Pressure transducer  [ ] Airline

START TEST Date: 04/08/08  Time of day: 0400

Flow Meter Reading Start: 5 gallons

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APR-08-2008 01:47PM  FAX:  ID: DLHR CWRM  PAGE: 008  R=55%
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- Pumped Well
- Observation Well

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1. starting pumping rate Q
2. minimum length of step period of constant pumping rate
3. minimum mandatory Chloride (CT) measurement/sampling at end of every step
4. Use same ending drawdown figure as start for recovery

Max possible duration, water level or quality did not stabilize for any 24 hour period.

Begin recovery data next page
Flow meter reading at end of pumped period: 24885 gallons
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END TEST Date: 10-19-04 Time of day: 12:13 pm

ADDITIONAL REMARKS: [person in charge of pump test (print)]

Signature:

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
Wailani Drilling, Inc.
Michael Robertson • Lic. # C57-20115
P.O. Box 790299 • Paia, HI 96779
Phone: 808-579-8768 • Fax: 579-8769
E-mail: waikane2@msn.com

FAX COVER

DATE: April 8, 2008

ATTN: Charley Ice

FROM: Leah

PAGES: 11
(including cover)

SUBJECT: Ke Alii Kai 2 Well #4326-12

MESSAGE: Attached is WCR1, step draw down test, and constant rate test. Please let me know by fax or email that this was received.
August 27, 2008

Mr. Takeshi Matsukata
Ke Alii Kai II, LLC
220 South King Street, #1270
Honolulu, HI 96813

Dear Mr. Matsukata:

Certificate of Pump Installation Completion for Ke Alii Kai II Well 2
Well No. 4326-12 (TMK 3-9-019:004)

We are pleased to inform you that the Pump Installation work permitted for the Ke Alii Kai II Well 2 (Well No. 4326-12) 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 prior to the change.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/forms.htm.
5. Your approved pump has a capacity of 300 gpm at a head of 249 ft. In the future, pump replacements of equal or lesser capacity will not require an additional permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer. If the pump replacement is greater than the existing pump, you will need to apply for a new pump installation permit.

6. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. Blank water use report forms are also available at www.hawaii.gov/dlnr/cwrm/resources_permits.htm

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.

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

If you have any questions, please contact Charley Ice of the Commission staff at 587-0218 or toll-free 984-2400 (Maui), extension 70218.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Encl: Water Use Report Forms

c: Maui Department of Water Supply
Wailani Drilling, Inc.
August 27, 2008

Mr. Michael Robertson  
Wailani Drilling, Inc.  
P.O. Box 523  
Puunene, HI 96784

Dear Mr. Robertson:

Well Completion Report Part II for Well No. 4326-11 & 12

We received the last requirement for your Well Completion Report Part II for the Ke Alii Wells 1 & 2 (Well Nos. 4326-11 & 12) on June 20, 2008 and acknowledge that it is complete.

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

If you have any questions, please contact Charley Ice of the Commission staff at 587-0218 or toll-free at 984-2400 (Maui), extension 70218.

Sincerely,

KEN C. KAWAHARA, P.E.  
Deputy Director

CC: Ke Alii Villas, LLC  
Ke Alii Kai II, LLC
MEMO and ROUTE SLIP (ver. 04/03/2008) 05/28/08

WCR 2 Check for Well No. 4326-12 (survey to regulation memo)

1. **Pump Tests Check (special condition of PIP? Yes/No)** D. England
   
<table>
<thead>
<tr>
<th>Step-Drawdown Test:</th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>followed WCPI Stds</td>
<td>□</td>
<td>□</td>
<td>□ &lt;70 gpm no test required</td>
</tr>
<tr>
<td>analysis attached</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aquifer Pump Test:</th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>followed WCPI Stds</td>
<td>□</td>
<td>□</td>
<td>□ &lt;50 gpm no test required</td>
</tr>
<tr>
<td>T &amp; S analysis attached</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Potential Well Interference: □

   Potential Stream Impacts: □

   Additional Testing or Data Required: □

   Pump Test Comments Attached: □

   Proposed Pump Capacity is OK: □

2. **Pump Installation Check** Mitch Ohye (initial) R. Torres (initial)
   
<table>
<thead>
<tr>
<th>data complete</th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>followed Special Cond &amp; Elev.</td>
<td>□</td>
<td>□</td>
<td>□ Pump check for different pump</td>
</tr>
</tbody>
</table>

   | well database updated |     |    |                           |

   **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

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

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

5. Susan Hoagbin (initial) finalize

6. Ken (initial) signature

7. Faith Ching (initial) enter into WUR database

8. Charley Ryan File
## 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 821, 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 808-586-2225. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrmm/

### 1. State Well No.: 432U-12  
Well Name: KeAlii Well #2 (KeAlii Kai)  
Island: Maui

### 2. Address: S Kiihe Rd, Kiihe 11  
Tax Map Key: 3·9·19·4

### 3. Pump Installation Company: Wai`alani Drilling Inc.

### 4. Date Pump Installed: 7·21·04

### 5. PERMANENT PUMP INFORMATION

- **Pump Type, Make, Serial No.:** Grundfos, 148E0001 - P10442 V66E3
- **Rated Capacity:** 300 gpm at head of 249 ft.

#### Motor Type, H.P., Voltage, rpm:
- **Motor Type:** Submersible, 460 V, 25 H.P., 3450 RPM, 3 Phase

#### Pump type (check one):
- [ ] Deep Well Turbine
- [ ] Rotary
- [X] Submersible
- [ ] Rotary-Displacement
- [ ] Propeller
- [ ] Rotary-Gear
- [ ] Reciprocating
- [ ] Centrifugal
- [ ] Impulse

#### Method of flow measurement:
- [X] Flowmeter w/ totalizer  
  Manufacturer: Badger  
  Model no.: BA-3  
  Size: 3"
- [ ] Other, explain and attach schematic

### 6. 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 Company: KeAlii Villas LLC  
Contact: Takeshi Matsuoka  
Address: 220 S King St, Suite 1270, Honolulu, HI 96813  
Phone:  
Fax:

### 10. Land Owner Company: Same  
Contact:  
Address:  
Phone:  
Fax:

### 11. Remarks

This pump was tested at the maximum of 400 gpm. This well will be run at 90 psi and will use approximately 300 gpm at a head of 249 due to significant pressure loss from the irrigation system.

### Pump Installation Contractor (print): Michael Roberts  
License: 0-57/C-577/A  
Lic. No.: 20115  
Date: 10·27·04

WCR2 Form 02/26/07 Page 1 of 2
7. **AS-BUILT PUMP SECTION**  
(Please attach as-built if different from diagram provided below)

- **Bench mark elevation** surveyed to nearest 0.01 ft. = 82.0 ft. mean sea level
- **Elevation of top of chase tube** 12.42 ft. mean sea level
- **Pump intake depth** = 9.3 ft.  
  (referenced to bench mark)
- **Chase tube depth** = 9.2 ft.  
  (referenced to bench mark)
- If airline installed,  
  bottom of airline elevation = 14.6 ft. mean sea level
### 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 96802. The Commission may not accept incomplete reports. This form shall be submitted within 90 days of the completion of work.

For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-687-0225. For updates to this form or additional information, please visit our website at [http://www.hawaiicomm/wrm/](http://www.hawaiicomm/wrm/)

**1. State Well No.:** 432-U12  
**Well Name:** Ke'Alii Well #2 (Ke'Alii K'ai)  
**Island:** Maui

**2. Address:** S. Khei Rd, Khei HI  
**Tax Map Key:** 3-9-19-4

**3. Pump Installation Company:** Wai'Ani Drilling Inc.

**4. Date Pump Installed:** 7/21/04

**5. PERMANENT PUMP INFORMATION**

- **Pump Type, Make, Serial No.:** 300S250-FBA, Grundfos, IHBE001 - P10442 V003, serial # 04119

- **Rated Capacity:** 300 gpm at head of: 249 ft.

- **Motor Type, H.P., Voltage, rpm:** Submersible, 400V, 25 H.P., 3450 RPM, 3 Phase

- **Pump type (check one):**
  - [ ] Deep Well Turbine
  - [x] Submersible
  - [ ] Rotary
  - [ ] Rotary-Displacement
  - [ ] Centrifugal
  - [ ] Rotary-Gear
  - [ ] Propeller
  - [ ] Impulse

- **Method of flow measurement:**
  - [x] Flowmeter w/ totalizer
  - Manufacturer: Badger  
  - Model no.: BA-3  
  - Size: 3"

- [ ] Other, explain and attach schematic

**6. Method of flow measurement:**

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

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

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

**10. Well Owner**

- **Company:** Ke'Alii Villas LLC  
- **Contact:** Takashi Matsukata  
- **Address:** 220 S. King St, Suite 1270, Honolulu HI 96813
- **Phone**  
- **Fax**

**11. Land Owner**

- **Company:**  
- **Contact:**  
- **Address**  
- **Phone**  
- **Fax**

**12. Remarks**

- [ ]

**Pump Installation Contractor (Print):** Michael Roberts  
**Signature:**  
**Date:** 10-27-04

WCR2 Form 02/26/07 Page 1 of 2

**Received via email 23 May 08, 5:02 pm**
7. **AS-BUILT PUMP SECTION** (Please attach as-built if different from diagram provided below)

- **Bench mark elevation surveyed to nearest 0.01 ft. = 32.04 ft. mean sea level**

- **Elevation of top of chase tube = 32.42 ft. mean sea level**

- **Pump intake depth = 43.0 ft. (referenced to bench mark)**

- **Chase tube depth = 42.0 ft. (referenced to bench mark)**

- **If airline installed, bottom of airline elevation = 42.0 ft. mean sea level**
Performance Curves

FLOW RANGE: 60 - 410 GPM
OUTLET SIZE: 3" & 4" NPT*
NOMINAL DIA. 6"

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

4" MOTOR STANDARD, 7.5 HP/3450 RPM.
6" MOTOR STANDARD, 15-60 HP/3450 RPM.
8" MOTOR STANDARD, 75 HP/3525 RPM.
3" NPT 2-6 STAGES, 4" NPT 7-18 STAGES.

Performance conforms to ISO 9906 Annex A
© 8 ft. min. submergence.
FLOW RANGE: 30 - 220 GPM
OUTLET SIZE: 3" NPT

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

4" MOTOR STANDARD, 2-10 HP/3450 RPM
6" MOTOR STANDARD, 7.5-60 HP/3450 RPM,
8" MOTOR STANDARD, 75 HP/3525 RPM.
* Alternate motor sizes available.

Performance conforms to ISO 9906
@ 0.5 ft. min. submergence.

GRUNDFOS
Here's the last PIP! PIP.pdf
PUMP INSTALLATION PERMIT
Ke Alii Kai 2, Well No. 4326-12

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 Ke Alii Kai 2 (Well No. 4326-12) at TMK 3-9-019:004, Kihei, Maui, 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 400 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: May 27, 2008
Expiration Date: November 27, 2008
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:  
Printed Name: Michael Robertson  
Firm or Title: Wailani Drilling, Inc.

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

Attachments
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.

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.

Finally, this letter is notice that we have accepted your Well Completion Report - Part I as complete as of May 27, 2008.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251.

Sincerely,

Laura H. ThieLEN
Chairperson

Enclosure
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 Ke Alii Kai 2 (Well No. 4326-12) at TMK 3-9-019:004, Kihei, Maui, 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 400 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.

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-20115 Date: 

Printed Name: Michael Robertson Firm or Title: Wailani Drilling, Inc.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
June 13, 2008

Mr. Takeshi Matsukata
Ke Alii Kai, LLC
220 South King Street, #1270
Honolulu, HI 96813

Dear Mr. Matsukata:

Certificate of Well Construction Completion for Well No. 4326-12 (TMK 3-9-019:004)

We are pleased to inform you that the Well Construction work permitted for the Ke Alii Kai 2 Well (Well No. 4326-12) 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/d1nr/cwnnlforms.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 to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

CC:

C: Maui Department of Water Supply
Wailani Drilling, Inc.
MEMO and ROUTE SLIP (ver. 04/03/2008)

WCR 1 Check for Well No. 4326-12 (survey to regulation memo)

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

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>( \text{if no, describe deficiency} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Step-Drawdown Test:</strong> followed WCPI Stds analysis attached</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Constant Rate Test:</strong> followed WCPI Stds analysis attached</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Potential Well Interference:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Potential Stream Impacts:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Additional Testing or Data Required:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Pump Test Comments Attached:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Proposed Pump Capacity is OK.:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>( \text{w/ caveat (see comments)} )</td>
</tr>
</tbody>
</table>

2. **Well Log Check**  Geology Code for Well Index: TK  Fm Name: Kula Volc D. England (initial)

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

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

   **Latitude**  **Longitude**

   \( \text{NAD27} \)

   \( 20 \ 43 \ 25 \ 156 \ 26 \ 47 \)

   \( \text{NAD83} \)

   \( 20 \ 45 \ 15 \ 156 \ 26 \ 37 \)

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

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

6. Susan Hoagbin (initial) finalize

7. Ken (initial) signature

8. Mitch (initial) signature (Entered PIP issue date if attached/required)

9. Charley/Ryan File

---

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT (2):**

- COVER LETTER
- COUNTY COMMENTS (DWS/SMA)
- DOH COMMENTS
- DLNR COMMENTS (LD/OCCL/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

**Remember WCR acceptance pending (5/23/08 reqd).**
Pump Test Analysis – Comments

Well ID: 4326-12
Analysis Date: 5/2/08
Test Date: 6/21/04
Geologist: Diane England

Step Drawdown Test

Deviations From Pump Test Requirements
1. No deviations from WCPI Standards

Constant Rate Pumping Test

Deviations From Pump Test Requirements
1. No deviations from WCPI Standards

Drawdown Curve Comments
2. Estimated \( K = 31 \) ft/d. Estimated \( T = 2,500 \) ft\(^2\)/d.

Well Interference & Stream Impacts

<table>
<thead>
<tr>
<th>Drawdown Prediction (ft) - One Mile Radius</th>
<th>Storage Coefficient = 0.001</th>
<th>Storage Coefficient = 0.1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50yr</td>
<td>100yr</td>
</tr>
<tr>
<td></td>
<td>20.72</td>
<td>22.48</td>
</tr>
<tr>
<td></td>
<td>9.09</td>
<td>10.83</td>
</tr>
</tbody>
</table>

1. Over 30 active wells within a one-mile radius. No streams are located within a one-mile radius. See discussion below regarding potential well impacts.

Other Comments

The step drawdown and constant rate drawdown curves reflect an aquifer response more commonly seen in alluvial sediments, specifically a delayed response to changes in pumping rate and high overall drawdown. However, the driller’s log clearly indicates the well is screened in basalt and not alluvial sediments. The anomalous well response likely indicates (1) improper well construction or grouting resulting in reduced flow into the well, (2) the presence of unknown hydrogeologic conditions in the vicinity of the well that influence groundwater flow, or (3) both. Well 4326-12 is located near a geologic boundary with alluvial sediments that may be impacting groundwater flow. In addition, other subsurface geologic boundaries that affect groundwater flow may be present.

A review of pump test data for nearby wells indicate that the majority were tested at lower pump rates (i.e. 150-250 gpm) than 4326-12 and experienced maximum drawdowns on the order of 1.5 ft or less. However, pump test results are not uniform throughout the area. One mile to the south of 4326-12 is well 4226-13 which
drawdown at 450gpm. However, just a little further south, well 4226-14 experienced only 3.2ft of drawdown at a pumping rate of 700gpm. And one mile to the north, well 4426-02 experienced only 4.2 ft of drawdown at a pumping rate of 2,200gpm.

These pump test data, combined with the pump test data for well 4326-12 appear to indicate, a high degree of heterogeneity in the aquifer along this section of coastline. The K & T estimated for well 4326-12 may reflect conditions only in the immediate vicinity of the well and not overall aquifer properties. Therefore, there is a higher than usual degree of uncertainty surrounding the one-mile predicted drawdowns for well 4326-12.

Based on the above information, approval of the proposed pumping rate is recommended with the permit stipulation that the CWRM may require either (1) a reduction in pump rate or (2) complete cessation of pumping at the well if the associated drawdown impairs the utility of pre-existing wells within a one-mile radius.

**Proposed Pump Capacity OK? :** YES - with caveat (see above)
WELL ID: 4326-12

INPUT

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<td>Annulus dia. ($d_w$)</td>
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<td>Screen Length ($L$)</td>
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Depths to:

| water level (DTW)                  | 81.96 Feet |
| Top of Aquifer                     | 81.96 Feet |
| Base of Aquifer                    | 160.27 Feet|

Annular Fill:

| across screen -- Open Hole         |       |
| above screen -- Cement             |       |
| Aquifer Material -- Permeable Basalt|       |

FLOW RATE 400 GPM

COMPUTED

Aquifer thickness = 78 Feet

Slope = 5.746032 Feet/log10

Input is consistent.

$K = 31$ Feet/Day

$T = 2500$ Feet$^2$/Day

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

Analysis Program: USGS Aquifer Test Analysis Spreadsheets v.1.2, Open File Report 02-197
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Average: 400.00
Step Drawdown Test
Well 4326-12 (6-18-04)

Pumping Rate
Well 4326-12 (6-18-04)
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Step Change
SURF CONDOMINIUM

330 STALLS REQUIRED
409 STALLS PROVIDED

APPROXIMATE EARTHWORK QUANTITIES
EXCAVATION = 82,300 CU. YD.
EMBANKMENT = 4,780 CU. YD.

CONCEPTUAL SITE PLAN
Mr. Takeshi Matsukata  
Ke Ali'i Villas, LLC  
220 S. King Street, Suite 1270  
Honolulu, Hawaii 96813

Dear Mr. Matsukata:


In response to your application received on November 18, 2003, and amended on December 30, 2003, and in accordance with the Special Management Area Rules for the Maui Planning Commission, Sections 12-202-12 and 12-202-14, a determination has been made relative to the above project that:

1. The project is a development;

2. The project has a valuation not in excess of $125,000.00; (Valuation: $95,762.26)

3. The project has no significant adverse environmental or ecological effect, taking into account potential cumulative effects; and

4. The project is consistent with the objectives, policies, and Special Management Area guidelines set forth in the Hawaii Revised Statutes (HRS), Chapter 205-A, and is consistent with the County General Plan and Zoning.

In consideration of the above determination, you are hereby granted a Special Management Area Minor Permit approval. Said approval is to enable you to obtain the necessary well permits for the proposed wells and are subject to the following conditions:

1. That construction is limited to the irrigation and percolation wells and shall be in accordance with preliminary plans submitted on November 18, 2003.
Mr. Takeshi Matsukata  
February 3, 2004  
Page 2

2. That appropriate well permits shall be obtained prior to the initiation of construction.

3. That construction of the improvements shall be initiated by February 28, 2005, and shall be completed within one (1) year of said initiation. Construction of the irrigation and percolation wells shall be coordinated with the Ke Alii Villas project, as much as is practicable.

4. That a qualified archaeological monitor shall be present during all ground-altering activities in order to identify and document any historic properties which may be encountered during the proposed undertaking and to provide appropriate mitigation measures as necessary. An acceptable archaeological monitoring plan will need to be submitted to the State Historic Preservation Division for review, prior to the commencement of any ground-altering activities. That Division shall also submit to the County in writing verification of the successful completion of that monitoring.

5. That full compliance with all other applicable governmental requirements shall be rendered.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Colleen Suyama, Staff Planner, of this office at 270-7735.

Sincerely,

MICHAEL W. FOLEY  
Planning Director

MWF:CMS:smb  
c: Wayne Boteilho, Deputy Planning Director  
Clayton Yoshida, AICP, Planning Program Administrator  
Aaron Shinmoto, PE, Planning Program Administrator (2)  
Colleen Suyama, Staff Planner  
Glenn Tadaki, Munekiyo & Hiraga, Inc.  
John Nakagawa, CZM Program, Office of Planning  
Development Services Administration (2)  
2004/SM2 Minor Permit File  
General File  
(K:\WP_DOCS\PLANNING\SM2\20040011_KeAliiVillasWellsMinorPermit.wpd)