1. **Pump Tests Check** special condition of PIP? Yes ☐ No ☐

   Glenn Bauer ___ (initial if yes)

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

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

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

   **Stream Surface Water Impacted:**
   - ☐ ☐ ← if yes, identify most probable stream

   **Geology Code for Well Index:**

2. **Pump Installation Check**

   Mitch Ohye ___ (initial)

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

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

4. Roy ___ (initial) check

5. Subia ___ (initial) finalize

6. Dean ___ (initial) signature

7. Charley/Lenore/Ryan File

---

- **Pump Replacement**
- How come we didn't see WCRZ & WCRZ?
- I'm not sure. Kinda weird.
- the PIP app date = 4/18/02, which is = WCRZ date!
- It had a variance in 1/30/02 too, to install pump prior to PIP issuance. No problem there. Another...
October 15, 2003

Mr. Tyler Smith
Kekaha Venture, Inc.
PMB 428 75-1027 Henry Street
Kailua-Kona, HI 96740

Dear Mr. Smith:

Well Completion Report for Well No. 4757-04

We received your Well Completion Report Part II for the Kaupulehu #4 Well (Well No. 4757-04) on June 20, 2003 and acknowledge that it is complete.

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

Sincerely,

ERNEST Y.W. LAU
Deputy Director

RI:ss

c: Wai'eli Drilling
**State of Hawaii**  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART II  
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dnr/cwrm/](http://www.state.hi.us/dnr/cwrm/)

---

1. State Well No.: 4757-4  
Well Name: Kaupulehu #4  
Island: Hawaii

2. Address: Kaupulehu, Hawaii  
Tax Map Key: 7-2-3:03

3. Pump Installation Company: Wai'eli Drilling & Development

4. Date Pump Installed: 6/16/03

5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)

<table>
<thead>
<tr>
<th>Pump Type, Make, Serial No.</th>
<th>Sub., Crown, S/N 12774</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Capacity, gpm at head of</td>
<td>550 ft.</td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm</td>
<td>Sub. 240HP, 2550V, 3500 RPM</td>
</tr>
<tr>
<td>Type of flow meter</td>
<td>Turbine, which measures in Gal/Min</td>
</tr>
<tr>
<td>Model Number, Water Specialties, Serial Number</td>
<td>02-02857-6</td>
</tr>
</tbody>
</table>

6. Method of flow measurement:

- [ ] Flowmeter  
- [ ] Weir  
- [ ] Open Pipe  
- [ ] Orifice  
- [ ] Other*, explain below  

*attach schematic

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

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

9. Other remarks/comments:

   Replaced submersible motor only - Re-ran pump.

---

Pump Installation Contractor: Wai'eli Drilling  
C-57/C-57a/A Lic. No.: C-16543

Signature: [Signature]  
Date: 6/17/03

Permittee (print): Kekaha Venture, Inc.  
Signature: [Signature]  
Date: 6/17/03
Bench mark elevation surveyed to nearest 0.01 ft. = 915.16 ft. mean sea level

Elevation of top of chase tube = 915.16 ft. mean sea level

Pump intake depth = 955.92 ft. (referenced to bench mark) = 40.76

Chase tube depth = 955.28 ft. (referenced to bench mark) = 40.12

If airline installed, bottom of airline elevation = 955.28 ft. mean sea level = 40.12
April 25, 2002

Mr. Tyler Smith  
Kekaha Venture Inc.  
PMB 428  
75-1027 Henry Street  
Kailua-Kona, HI 96740

Dear Mr. Smith:

Pump Installation Permit  
Kaupulehu #4 Well (Well No. 4757-04)

Thank you for your application for the Kaupulehu #4 Well. We acknowledge your application as complete on April 8, 2002.

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, well operator, and/or well owner are responsible for all conditions of the permit. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is enclosed for your use.

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

Finally, this letter is notice that we have accepted your Well Completion Report - Parts I & II as complete.

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

Aloha,

GILBERT S. COLOMA-AGARAN  
Chairperson

Enclosure  
c: Waimea Water Services
PUMP INSTALLATION PERMIT
Kaupulehu #4 Well, Well No. 4757-0

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 Kaupulehu #4 Well (Well No. 4757-04) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 550 gpm rated capacity or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

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

Date of Approval: April 8, 2002
Expiration Date: April 8, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: ____________________________ Date: 5/28/02
Printed Name: ___________________________________________________________________________
Firm or Title: ___________________________________________________________________________

Installer's Signature: ____________________________ Date: 5/30/02
Printed Name: ___________________________________________________________________________
Firm or Title: ___________________________________________________________________________

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

Attachments
C: USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Waimea Water Services
PUMP INSTALLATION PERMIT
Kaupulehu #4 Well, Well No. 4757-04

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 Kaupulehu #4 Well (Well No. 4757-04) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
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10. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
11. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

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Commission on Water Resource Management

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Permittee's Signature: ___________________________ Date: ___________________________
Printed Name: ___________________________ Firm or Title: ___________________________
Installer's Signature: ___________________________ C-57, C-57a, or A License #: ___________________________ Date: ___________________________
Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachments
C: USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Waimea Water Services
April 25, 2002

Mr. Tyler Smith
Kekaha Venture Inc.
PMB 428
75-1027 Henry Street
Kailua-Kona, HI 96740

Dear Mr. Smith:

Pump Installation Permit
Kaupulehu #3 Well (Well No. 4757-03)

Thank you for your application for the Kaupulehu #3 Well. We acknowledge your application as complete on March 18, 2002.

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.

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Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is enclosed for your use.

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

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosure

c: Waimea Water Services
PUMP INSTALLATION PERMIT
Kaupulehu #3 Well, Well No. 4757-00

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 Kaupulehu #3 Well (Well No. 4757-03) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 550 gpm rated capacity or less, pump in the well.

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

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

Date of Approval: March 18, 2002
Expiration Date: March 18, 2004
GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: Date: 5/25/02
Printed Name: Firm or Title: Kakaako Venture, Inc

Installer's Signature: Date: 5/20/2000
Printed Name: Firm or Title: Wei 'Eli Dewatering & Corp.

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

Attachments

USGS
Department of Health's Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Waimea Water Services
PUMP INSTALLATION PERMIT
Kaupulehu #3 Well, Well No. 4757-01

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 Kaupulehu #3 Well (Well No. 4757-03) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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Commission on Water Resource Management

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Permittee’s Signature:

Date: 5/30/02

Printed Name: Kofahi Venture, Inc

Installer’s Signature:

Date: 5/30/02

Printed Name: Wai Kei Drilling & Well

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

Attachments
USGS Department of Health/ Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Waihele Water Services
Memo to file
From: Ryan Imata
Date: 5/14/02
Subject: Kaupulehu 4 Well (Well No. 4757-04)

Called Dale Stromquist of Wai'eli Drilling 5/14/02 and asked him for new check for $40 for this well, since check bounced ($25 + $15 filing fee). He told me he would send one in right away.
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<th>FYR</th>
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<th>SRC/CTR</th>
<th>OBJ</th>
<th>COST</th>
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<td></td>
<td>(2) 25.00</td>
<td>Tiffany Forward</td>
</tr>
<tr>
<td>2002</td>
<td>326</td>
<td>C1026</td>
<td>0752</td>
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<td></td>
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<td>Stormy Inc.</td>
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REMARKS: LINE (1) David Love Well (WCPA)
LINE (2) Well No. 4957-03 (PIPA)
LINE (3) Well No. 4757-04 (PIPA)
April 25, 2002

Mr. Tyler Smith
Kekaha Venture Inc.
PMB 428
75-1027 Henry Street
Kailua-Kona, HI 96740

Dear Mr. Smith:

Pump Installation Permit
Kaupulehu #3 Well (Well No. 4757-03)

Thank you for your application for the Kaupulehu #3 Well. We acknowledge your application as complete on March 18, 2002.

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, well operator, and/or well owner are responsible for all conditions of the permit. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is enclosed for your use.

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

Finally, this letter is notice that we have accepted your Well Completion Report - Parts I & II as complete.

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

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosure

c: Waimea Water Services
PUMP INSTALLATION PERMIT
Kaupulehu #3 Well, Well No. 4757-03

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 Kaupulehu #3 Well (Well No. 4757-03) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 550 gpm rated capacity or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The permittee, well operator, and/or well owner shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within sixty (60) days after completion of work.

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-1(f) prior to any well sealing or plugging work.

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

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

Date of Approval: March 18, 2002
Expiration Date: March 18, 2004

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

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

Permittee's Signature: ___________________________ Date: __________
Printed Name: ______________________________ Firm or Title: ______________________________

Installer's Signature: __________________________ C-57, C-57a, or A License #: __________ Date: __________
Printed Name: ______________________________ Firm or Title: ______________________________

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

Attachments
C: USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Waimea Water Services
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**REMARKS:**

**LINE (1)**: David Love Well (WCPA)

**LINE (2)**: Well No. 4957-03 (PIPA)

**LINE (3)**: Well No. 4757-04 (PIPA)
Mr. Tyler Smith  
Kekaha Venture Inc.  
PMB 428  
75-1027 Henry Street  
Kailua-Kona, HI 96740

Dear Mr. Smith:

Pump Installation Permit  
Kaupulehu #4 Well (Well No. 4757-04)

Thank you for your application for the Kaupulehu #4 Well. We acknowledge your application as complete on April 8, 2002.

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.

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Please sign and have the contractor sign both permit originals and return one for our files. A copy of your water use report form is enclosed for your use.

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

Finally, this letter is notice that we have accepted your Well Completion Report - Parts I & II as complete.

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

Aloha,

GILBERT S. COLOMA-AGARAN  
Chairperson

Enclosure

c: Waimea Water Services
Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kaupulehu #4 Well (Well No. 4757-04) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 550 gpm rated capacity or less, pump in the well.

3. The permittee, well operator, and/or well owner shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee, well operator, and/or well owner are notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

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

Date of Approval: April 8, 2002
Expiration Date: April 8, 2004

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

Permittee's Signature: _______________________________ Date: ______________

Printed Name: _______________________________ Firm or Title: _______________________________

Installer's Signature: _______________________________ C-57, C-57a, or A License #: _______________________________ Date: ______________

Printed Name: _______________________________ Firm or Title: _______________________________

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

Attachments
USGS
Department of Health's Safe Drinking Water & Wastewater Branch
Hawaii Department of Water Supply
Waimanalo Water Services
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR PERMIT ISSUANCE**

**FROM:** RYAN BAUER, G.
**DATE:** 4/12
**SUSPENSE DATE:**

**PLEASE:**

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

**TO:**

1. BAUER, G.
2. CHING, F.
3. DANBARA, S.
4. FUJII, N.
5. HARDY, R.
6. HIGA, D.
7. HIRANO, E.
8. ICE, C.
9. IMATA, R.
10. JINNAI, R.
11. JUNIMURA, I.
12. MATHIAS, T.
13. NAKAMA, L.
14. NAKANO, D.
15. NISHIOKA, L.
16. OHYE, M.
17. SAKODA, E.
18. SUBIA, S.
19. SWANSON, S.
20. UYENO, D.
21. YODA, K.

**WELL NUMBER:** 4757-04  **WELL NAME:** Kaupulehu 4

- WELL CONSTRUCTION
- PUMP INSTALLATION

**ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:**

1. COVER LETTER
2. PERMIT (2x)
3. DOH COMMENTS
4. LAND DIV. COMMENTS
5. PUMP TEST
6. WCR FORM

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT:**

1. COVER LETTER
2. PERMIT (2x)
3. WCR FORM
4. WUR FORM
5. DOH COMMENTS
6. LAND DIV. COMMENTS

**TO BE SENT TO APPLICANT**

**FOR OFFICE USE ONLY**

**Application approval.**

Susan deposit check, unused to route for comments (variance from Comm. mls.)

check. approv date 4/1/02 < app date 4/9/02

O.K.
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE

FROM: RYAN
DATE: 4/22/07
SUSPENSE DATE: ______________

TO:

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WELL NUMBER 4751-03
WELL NAME Kaupulehu 3

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 PUMP TEST
6 WCR FORM

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 WCR FORM
4 WUR FORM
5 DOH COMMENTS
6 LAND DIV. COMMENTS

TO BE SENT TO APPLICANT
FOR OFFICE USE ONLY

☐ WELL CONSTRUCTION

☐ PUMP INSTALLATION
FROM: **RYAN**  
DATE: **11-Apr-02**  
SUSPENSE DATE: ________________

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WELL NUMBER **4757-04**  
WELL NAME **Kaupulehu 4**

- [ ] WELL CONSTRUCTION  
- [ ] PUMP INSTALLATION  
- [ ] BOTH

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

1 TRANS. LETTER
2 CWRM MAP
3 APPL. FORM (3X)
4 USGS MAPS (3X)
5 TAX MAPS (3X)
6 PARCEL OWNER VERIF. MLS PRINTOUT
7 CONTRACTOR VERIF. DCCA LICENSE SCREEN PRINTOUT
8 ALL INFO FILLED IN
9 BACKGROUND CHECK

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

INCOMPLETE ACTION DATES:

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April 5, 2002

Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809  
Attention: Ryan Imata

RE: Kaupulehu Well #4

Ryan,

Here are the originals of the completion reports and application for permit on Kaupulehu Well #4 that were faxed to you on Monday 4/1/02. Included is a check for $25.00.

Also, we have not received the permit on the variance as of yet.

Please contact Dale, or Bob at the office if you have any questions.

Sincerely,

Tiffany Forward  
Office Manager
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 4757-04 (survey to regulation memo)

1. **Pump Tests Check**
   - Glenn Bauer (initial)
   - Yes No
   - If no, describe deficiency

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

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

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

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

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

   - data complete
   - followed WCPI Stds
   - well database updated

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

   **ATTACHMENTS FOR PUMP INSTALLATION PERMIT:**
   - COVER LETTER
   - PERMIT (2x)
   - DOH COMMENTS
   - LAND DIV. COMMENTS
   - WCR 2 FORM
   - WUR FORM

4. Roy (initial) check
5. Subia (initial) finalize
6. Linnel (initial) signature
7. Charley/Lenore/Ryan File

---

4/03/02

---

Chloride analysis.
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 4757-03 (survey to regulation memo)

1. **Pump Tests Check** Glenn Bauer (initial)
   - Yes \(\square\) \(\checkmark\) \(\square\)
   - No \(\square\) \(\square\) \(\square\)
   - If no, describe deficiency
     - Step-Drawdown Test:
       - followed WCPI Stds \(\square\) \(\checkmark\) \(\square\)
       - analysis attached \(\square\) \(\checkmark\) \(\square\)
       - proposed pump cap o.k. \(\square\) \(\checkmark\) \(\square\)
     - Aquifer Pump Test:
       - followed WCPI Stds \(\square\) \(\checkmark\) \(\square\)
       - T & S analysis attached \(\square\) \(\checkmark\) \(\square\)
     - Well Interference:
       - estimated Steady-State drawdown at 1-mile radius is \(\square\) \(\checkmark\) \(\square\)
       - analysis attached \(\square\) \(\checkmark\) \(\square\)
     - Stream Surface Water Impacted: \(\square\) \(\checkmark\) \(\square\)
       - If yes, identify most probable stream

2. **Construction Check** Mitch Ohye (initial)
   - Yes \(\square\) \(\checkmark\) \(\square\)
   - No \(\square\) \(\square\) \(\square\)
   - If no, describe deficiency
   - data complete \(\square\) \(\checkmark\) \(\square\)
   - followed WCPI Stds \(\square\) \(\checkmark\) \(\square\)
   - well database updated \(\square\) \(\checkmark\) \(\square\)

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

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT:**

- 1 COVER LETTER
- 2 PERMIT (2x)
- 3 DOH COMMENTS
- 4 LAND DIV. COMMENTS
- 5 WCR 2 FORM
- 6 WUR FORM
- 7 GIS MAP
- 8 FARMER'S CHECK
- 9 DATABASE PRINTOUT
- 10 GLENN'S WORKSHEET
- 11 WELL CHECK PRINT

- not necessary – only WCP.
- To be sent to applicant

4. Roy ______ (initial) check
5. Subia ______ (initial) finalize
6. Linnel ______ (initial) signature
7. Charley/Lenore/Ryan File
April 5, 2002

Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809
Attention: Ryan Imata

RE: Kaupulehu Well #4

Ryan,

Here are the originals of the completion reports and application for permit on Kaupulehu Well #4 that were faxed to you on Monday 4/1/02. Included is a check for $25.00.

Also, we have not received the permit on the variance as of yet.

Please contact Dale, or Bob at the office if you have any questions.

Sincerely,

Tiffany Forward
Tiffany Forward
Office Manager
**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 587-0225. For updates to this form or additional information, please visit our website at [http://www.state.hi.us/dlnr/cwrm/](http://www.state.hi.us/dlnr/cwrm/).

<table>
<thead>
<tr>
<th>1. State Well No.:</th>
<th>4757-4</th>
<th>Well Name:</th>
<th>Kaupulehu #4</th>
<th>Island:</th>
<th>Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>Kaupulehu</td>
<td>Tax Map Key:</td>
<td>7-2-3:03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Drilling Company:</td>
<td>Wai'eli Drilling &amp; Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Drilling method used:</td>
<td>Rotary</td>
<td>Percussion</td>
<td>Other (describe)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed:</td>
<td>2/15/02</td>
<td>Attach Driller's Log (7/26/99 DL Form)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In addition to the driller’s log, if a geologic log was prepared, please submit with this form.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Was the subject well cored?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Initial water-level encountered</td>
<td>912.6 ft. below ground</td>
<td>Date and time of measurement:</td>
<td>2/21/02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Step-Drawdown Test completed?</td>
<td>No</td>
<td>Yes</td>
<td>Attach Step-Drawdown Test form (12/17/97 SDPTD Form)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed?</td>
<td>No</td>
<td>Yes</td>
<td>Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameters prior to pump test:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Water-level:</td>
<td>@ 912.6 (+2.56) ft. above msl</td>
<td>Date and time of measurement:</td>
<td>2/21/02 10:00 a.m.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Chloride:</td>
<td>240 ppm</td>
<td>Date and time of sampling:</td>
<td>2/21/02 10:00 a.m.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Temperature:</td>
<td>71 °F</td>
<td>Date and time of measurement:</td>
<td>2/21/02 10:00 a.m.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Fill in the as-built section on the other side of this sheet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Remarks:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Licensed Driller (print):**

Cale Stromquist  
C-57 Lic. No. C-16543  
Signature  
Date 3/29/2007

**Surveyor (print):**

DONALD C. McINTOSH  
L.P.L.S. Lic. No. 4968-HAWAII  
Signature  
Date 3/29/02

**Permittee (print):**

Kekaha Vartear Inc.  
Signature  
Date 3/29/2002

---

WCR1 Form 9/29/00
13. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below)

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

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

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

**Ground Elevation:**
- 915.16 ft., msl

**Minimum of 2' Radius & 4' Thick Concrete Pad**
- 914.01 ft., msl

**Hole Diameter:**
- 19 in.

**Total Depth:**
- 1013 ft.

**Elevation at top of casing:**
- 915.16 ft., msl (to nearest 0.01 ft.)

**See As-Built Sketch**

*msl = mean sea level
Top of E1: 916.99

14' Open Hole

Cement
TOTAL 640'
TO SURFACE

12 3/4" O.D. Casing

Lmb. Vol.
0.29 cu yd
(15 cu ft)
Charge
18.5 yds (charge) + 9
127 @ 50% @ 80 ft

Top of 8 and 3 Casing Sect
@ 640'

Top of Screen
5273 @ 650

Top Basket @ 655

Lower Basket @ 6600

14" Hole

Casing @ 913.4'

Top of Pk6
@ 978.5

TD 1013
### Driller's Log (7/26/99 DL Form)

<table>
<thead>
<tr>
<th>Depths (ft)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 to 85</td>
<td>Loose/Paity</td>
<td></td>
</tr>
<tr>
<td>85 to 120</td>
<td>Med/Fluid</td>
<td></td>
</tr>
<tr>
<td>120 to 130</td>
<td>Hard</td>
<td></td>
</tr>
<tr>
<td>130 to 148</td>
<td>Mixed layers, med/fm</td>
<td></td>
</tr>
<tr>
<td>148 to 205</td>
<td>Hard</td>
<td></td>
</tr>
<tr>
<td>205 to 236</td>
<td>Soft/Fluid</td>
<td></td>
</tr>
<tr>
<td>236 to 282</td>
<td>Med</td>
<td></td>
</tr>
<tr>
<td>282 to 394</td>
<td>Hard</td>
<td></td>
</tr>
<tr>
<td>294 to 339</td>
<td>Med/Soft</td>
<td></td>
</tr>
<tr>
<td>339 to 360</td>
<td>Paity</td>
<td></td>
</tr>
<tr>
<td>360 to 381</td>
<td>Med/Fm</td>
<td></td>
</tr>
<tr>
<td>381 to 411</td>
<td>Soft</td>
<td></td>
</tr>
<tr>
<td>411 to 465</td>
<td>Mixed layers, med/soft</td>
<td></td>
</tr>
<tr>
<td>465 to 495</td>
<td>Med/Fm</td>
<td></td>
</tr>
<tr>
<td>495 to 540</td>
<td>Soft</td>
<td></td>
</tr>
<tr>
<td>540 to 597</td>
<td>Med/Hard</td>
<td></td>
</tr>
<tr>
<td>597 to 644</td>
<td>Soft/layer</td>
<td></td>
</tr>
<tr>
<td>644 to 596</td>
<td>Soft/Cinder</td>
<td></td>
</tr>
</tbody>
</table>

### Remarks:

___
1. State Well No.: 4757-04  
   Well Name: Kaupulehu #4  
   Island: Hawaii

2. Address: Kaupulehu  
   Tax Map Key: 7-2-303

3. Pump Installation Company: Wai'eli Drilling & Development

4. Date Pump Installed: 3/27/02

5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Turbine Crown S/N 12774  
   Rated Capacity: 550 gpm  
   Motor Type, H.P., Voltage, rpm: Submersible 200HP 3500  
   Type of flow meter: Turbine which measures in Gals

6. Method of flow measurement: Water Specialty
   Flowmeter Manufacturer Make Same Size 6"
   Weir* Open Pipe* Orifice* Other*, explain below
   *attach schematic

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

Other remarks/comments:

Pump Installation Contractor (print): Wai'eli Drilling & Development  
C-57/C-57a/A  Lic. No. C-16543

Signature ___________________________ Date 3/29/2007

Permittee (print): Kealakekua Stones, Inc.  
Signature ___________________________ Date 3/29/2007
9. AS-BUILT PUMP SECTION

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

Bench mark elevation surveyed to nearest 0.01 ft. = 915.16 ft. mean sea level

Elevation of top of chase tube = 915.16 ft. mean sea level

Pump intake depth = 958.93 ft.
(referenced to bench mark)

Chase tube depth = 949.83 ft.
(referenced to bench mark)

If airline installed, bottom of airline elevation = -41.81 ft. mean sea level
ELEVATION CERTIFICATION
IRRIGATION WELL NO. 4

NANE A GOLF CLUB
TMK: (3) 7-2-03:Por. 03

I CERTIFY that the following elevations were obtained upon the existing Well Structure as of March 25, 2002.

8X8 feet slab........................................ 914.67 feet
3X3 feet slab....................................... 915.16 feet
1.1 feet wide metal cap.......................... 915.18 feet

THIS CERTIFICATION made on March 25, 2002 is based upon the temporary bench mark on the concrete slab of Well #5 by R. M. Towill Corporation. The elevations are referenced to mean sea level and are recorded on March 25, 2002 in Field Book T35, Page 58 and in Job File 3178-02.

Kailua-Kona, Hawaii
Job No: 3178-02
April 3, 2002
# State of Hawaii
**COMMISSION ON WATER RESOURCE MANAGEMENT**
Department of Land and Natural Resources

**APPLICATION FOR PERMIT**

- **Well Construction** and/or **Pump Installation**

### Instructions:
Please print in ink or type and hand completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by 5 copies and a non-refundable filing fee of $35.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225.

For further information and updates to this application form, visit [http://www.state.hi.us/dlnr/cwrm](http://www.state.hi.us/dlnr/cwrm).

### APPLICANT INFORMATION:
(Fill out all three, if applicable, and place a check next to the primary contact)

1. **WELL OWNER**: Kekaha Venture, Inc.  
   **Contact Person**: Tyler Smith  
   **Phone**: 887-0264
   **Mailing Address**: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   **Fax**: 887-0125  
   **E-mail**:

2. **LAND OWNER**: Kamehameha Schools  
   **Contact Person**: Rick Robinson  
   **Phone**: 322-5300
   **Mailing Address**: 72-6831 Alii Dr. Suite 232, KAILUA-KONA, HI 96740
   **Fax**: 587-322-3946  
   **E-mail**: RRobinson@KSBE.EDU

3. **CONTRACTOR**: Wai'eli Drilling  
   **Contact Person**: Dale Stromquist  
   **Phone**: 324-1420
   **Mailing Address**: 78-6740 Makolea St. Kailua-Kona, HI 96740
   **Fax**: 322-0928  
   **E-mail**:

### WELL & PUMP INFORMATION:
(Answer the questions below in this form)

1. **WELL NAME**: Kaupulehu #4  
2. **Island**: Hawaii
3. **Address**: Kaupulehu  
   **Tax Map Key**:
   - **Zone**: 03  
   - **Sec**: 2  
   - **Parcl**: 7  
4. **CONSTRUCTION**:
   - **Proposed Work**:
     - [ ] Construct New Well  
     - [ ] Install New Pump*  
     - [ ] Modify Existing Well*  
     - [ ] Modify Pump*  
     - [ ] Abandon/Seal*  
   - **Well No.**: 4757-04  
   - (Refer to the regulatory map to determine the correct classification.)
5. **Proposed Pumping Rate**: 550 gallons per minute
6. **Proposed Use**:
   - [ ] Municipal (including hotels, stores, etc.)  
   - [ ] Domestic (individual, noncommercial water system)  
   - [ ] Irrigation (crop)  
   - [ ] Golf Course  
   - [ ] Other (explain):  
7. **Proposed Amount of Withdrawal**: .6 Million gallons per day
8. **Method of Flow Measurement**:
   - [ ] Flowmeter  
   - [ ] Open-pipe  
   - [ ] Well  
   - [ ] Office  
   - [ ] Other (explain):

### OTHER IMPORTANT INFORMATION:

- **LEGAL REQUIREMENTS**: If required, these permits must be obtained before the Commission can legally issue a permit.
   - Conservation District Use Permit (CDUP): To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   - Environmental Impact Statement (EIS) or Environmental Assessment (EA): To determine if an EIS or EA is necessary, call OEGC at 586-4185
   - Special Management Area Permit (SMAP): To determine if an SMAP is necessary, call OEGC at 586-4185

### REMARKS, EXPLANATIONS:

- **Well Owner**: Kekaha Venture, Inc.  
- **Landowner**: Kamehameha Schools  
- **Contractor**: Wai'eli Drilling

- **Signature**:  
  - **Date**: 2-5-02

### For official use only
- **Latitude**:  
- **Longitude**:  
- **Aquifer System No.**:  
- **State Well No.**:

---

*Note: The form contains additional fields and sections that are not visible in the image.*
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 915.16 ft, msl
Hole Diameter: 19 in

Cement Grout: 640 ft (min. 70% of distance from ground elevation to top of water surface or 500 ft, whichever is less)

Solid Casing (90% x (Ground Elev. - Water Level Elev.))
Total Length: 972.5 ft
Nominal Diameter: 12 in
Wall Thickness: .375 in
Bottom Elevation: 75.84 ft, msl

Open Casing:
Perforated Screen
Total Length: 40.5 ft
Nominal Diameter: 12 in
Wall Thickness: .375 in
Bottom Elevation: 57.34 ft, msl

Note: Neither bentonite nor mud should be used in calculated mean station elevations

Solid Casing Material:
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A129
- Other

Stainless Steel: (check one):
- ASTM A409 (produitch well)
- ASTM A312 (monitor wells)

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

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

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

Open Casing Material:
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139
- Other

Stainless Steel: (check one)
- ASTM A409 (produitch well)
- 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

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- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = \left(\text{Water Elevation} - \frac{1}{4} \times \text{Water Level Elev.}\right)
Example: Estimated + 2 ft. Water Level Elev. \rightarrow Bottom Elevation of Well Limit = (2 - \frac{1}{4}) = 1.75 ft.

Solid Casing Material:
Carbon Steel: compliant with (check one or more):
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139
- Other

Stainless Steel: (check one):
- ASTM A409 (produitch well)
- ASTM A312 (monitor wells)

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

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Open Casing Material:
Carbon Steel: compliant with (check one or more):
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139
- Other

Stainless Steel: (check one):
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- ASTM A312 (monitor wells)

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- Schedule 40
- Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)
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- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.
APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) □ WELL OWNER: Keakahena Venture, Inc. Contact Person: Tyler Smith Phone: 887-0264
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   Fax: 887-0125
   E-mail:

(b) □ LAND OWNER: Kamehameha Schools Contact Person: Rick Robinson Phone: 322-5300
   Mailing Address: 78-681 Alii Dr. Suite 272 KAILUA-KONA, HI 96740
   Fax: 808-322-0446
   E-mail: RKROBINSON@KSB.Edu

(c) □ CONTRACTOR: Wailei Drilling Contact Person: Dale Stromquist Phone: 324-1420
   Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
   Fax: 322-0928
   E-mail:

Lic # C-16543
(circle one: C-57, C-57a, or A)

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

2. WELL NAME: Kaupulehu #4 Island: Hawaii
   Address:
   Tax Map Key: Zone: 7 Sec: 2 Plat: 3 Parcel: 03
   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

3. PROPOSED WORK: (check all that apply)
   $ Construct New Well
   $ Modify Existing Well
   $ Abandon/Seal
   $ Install New Pump
   $ Modify Pump
   *State Well No.: 4757-04 (if unknown, please call Commission at 587-0225)

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

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE: (check all that apply)
   □ Municipal (including hotels, stores, etc.) □ Domestic (individual, noncommercial water systems)
   □ Industrial □ Military
   □ Irrigation (crop) Golf Course □ No of Acres: 120
   □ Other (explain)

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: .6 Million gallons per day
   (b) METHOD OF FLOW MEASUREMENT: □ Flowmeter □ Open-pipe □ Weir □ Orifice □ Other(explain)

OTHER INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   □ Not Required If required, date approved
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEQC at 856-4150
   □ Not Required If required, date published in OEQC bulletin
   Special Management Area Permit (SMAP) To determine if a SMAP is necessary: on Oahu, call 527-5374; on Hawaii, call 961-8289; for Maui county, call 270-7235; on Kauai, call 241-6877
   □ Not Required If required, date approved

9. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 48 days after the completion date of the permitted work; 3) unnecessary well use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $100/day.

Well Owner Keakahena Venture, Inc.
Signature
Date

Landowner Kekaha Venture, Inc.
Signature
Date

Contractor Wailei Drilling
Signature
Date

For official use only

Latitude Aquifer System No.
Longitude State Well No.
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Solid Casing: 90% x (Ground Elev. - Water Level Elev.)
Total Length: 972.5 ft
Nominal Diameter: 12 in
Wall Thickness: .375 in
Bottom Elevation: -57.34 ft, msl

Open Casing: & Perforated □ Screen
Total Length: 40.5 ft
Nominal Diameter: 12 in
Wall Thickness: .375 in
Bottom Elevation: -97.84 ft, msl
Note: Neither bentonite nor mud should be used in unconsolidated sand or silt

Open Hole:
Length: N/A ft
Diameter: N/A in
Bottom Elevation: N/A ft, msl

For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or:
Bottom Elevation of Well Limit = (Ground Elev. - Water Level Elev.)

Example: Estimated + 2 ft. Water Level Elev. = Bottom Elevation of Well Limit = (2.4 ft/2) = 1.8 ft

Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
Stainless Steel: (check one) □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one) □ Filament Wound Resin Pipe conforming to ASTM D2995 □ Centrifugally Cast Resin Pipe conforming to ASTM D2997 □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517 □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950 □ PTFE Fluorocarbon Tubing conforming to ASTM D3296 □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
Stainless Steel: (check one) □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one) □ Filament Wound Resin Pipe conforming to ASTM D2995 □ Centrifugally Cast Resin Pipe conforming to ASTM D2997 □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517 □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950 □ PTFE Fluorocarbon Tubing conforming to ASTM D3296 □ FEP Fluorocarbon Tubing conforming to ASTM D3296

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.
APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) WELL OWNER: Kekaha Venture, Inc/Contact Person: Tyler Smith
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   Phone: 887-0264

   Fax: 887-0125

   (b) LAND OWNER: Kamehameha Schools
       Contact Person: Rick Robinson
       Mailing Address: 78-687 ALII DR. SUITE 272, KAILUA-KONA, HI 96740
       Phone: 808-322-9446

       Fax: 808-322-9446

   (c) CONTRACTOR: Wai'e'i Drilling
       Contact Person: Dale Stromquis
       Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
       Phone: 324-1420

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

2. WELL NAME: Kaupulehu #4 Island: Hawaii
   Address: Kaupulehu
   Tax Map Key: 7[Zone] 2[Sec] 3[File] 0[Parel]
   Attach: (a) portion of a 7.5-Minute USGS topographic map (scale 1:24,000)
   with well location labeled and include the name of the grid map
   (b) a property tax map, showing well location referenced to established property boundaries

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

   "State Well No.: 4757-04
   (if unknown, please call Commission at 808-225)

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

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE:
   (check all that apply)
   ☐ Municipal (including hotels, stores, etc.)
   ☐ Industrial
   ☐ Domestic (individual, noncommercial water system)
   ☐ Military
   ☐ Other (explain)

   Does this well serve 25 or more people at least 60 days per year or have 15 or more service connections? ☐ Yes ☐ No

   ☐ Irrigation (crop)
   ☐ Golf Course
   ☐ No. of Acres: 120
   ☐ Other (explain)

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 6 Million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   ☐ Flowmeter ☐ Open-pipe ☐ Weir ☐ Orifice ☐ Other (explain)

OTHER IMPORTANT INFORMATION:

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

   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   ☐ Not Required ☐ If required, date approved

   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEC at 586-4185
   ☐ Not Required ☐ If required, date published in OEC bulletin

   Special Management Area Permit (SMAP) To determine if an SMAP is necessary on Oahu, call 527-5374; on Hawaii, call 961-6286; for Maui county, call 270-7235; on Kauai, call 241-6077
   ☐ Not Required ☐ If required, date approved

9. REMARKS, EXPLANATIONS:

   (If more space is needed, please attach additional sheet)

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion abandonment report within 60 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

Well Owner
Kekaha Venture, Inc
Signature

Landowner
Kamehameha Schools
Signature

Contractor: Wai'e'i Drilling
Signature

Date

For official use only
Latitud e

Aqui fer System No.

Longitude

State Well No.
10. PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one): □ ASTM A249 (Type 304) □ Type 316 □ Grade B □ Other
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F840 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one):
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Motor Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one): □ ASTM A249 (Type 304) □ Type 316 □ Grade B □ Other
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F840 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one):
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Motor Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

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

For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or:

Bottom Elevation of Well Limit = (Water Elevation - 1.4 x Water Level Elev.) / 4

Example: Estimated = 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 4 x 2) / 4 = 1.5 ft.

**Solid Casing:**
- 915.16 ft
- Hole Diameter: 19 in.
- Solid Casing: 90% x (Ground Elev. - Water Level Elev.)
  - Total Length: 972.5 ft
  - Nominal Diameter: 12 in.
  - Wall Thickness: 0.375 in
  - Bottom Elevation: -57.34 ft

**Open Casing:**
- 912.6 ft
- Open Casing: 38 perforated □ Screen
  - Total Length: 40.5 ft
  - Nominal Diameter: 12 in.
  - Wall Thickness: 0.375 in
  - Bottom Elevation: -97.84 ft
  - Note: Neither bentonite nor mud should be used in contacted groundwater unit.

**Estimated Water Level Elev.:** +2.56 ft

- The estimated water level elevations shall be referenced to mean sea level (msl) at the time of application filing.
APPLICATION INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) ☐ WELL OWNER: Kekaha Venture, Inc Contact Person: Tyler Smith Phone 887-0264
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   Fax: 887-0125
   E-mail:

   (b) ☐ LAND OWNER: Kamehameha Schools Contact Person: Rick Robinson Phone 322-5300
   Mailing Address: 78-831 Alii Dr. Suite 232 Kailua-Kona, HI 96740
   Fax: 808-322-9446
   E-mail: RROBINSON@KSB.EDU

   (c) ☐ CONTRACTOR: Wai'elii Drilling Contact Person: Dale Strong Phone 324-1420
   Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
   Fax: 322-0928
   E-mail:
   Lic # C-16543 (circle one: C-57, C-57a, or A)

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

2. WELL NAME: Kaupulehu #4 Island: Hawaii
   Address:
   Kaupulehu
   Tax Map Key: Zone Sec Plat Parcel
   7 2 3 03
   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location tabled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

3. PROPOSED WORK: (check all that apply)
   ☐ Construct New Well
   ☐ Install New Pump*
   ☐ Modify Existing Well*
   ☐ Modify Pump*
   ☐ Abandon/Seal*
   *State Well No.: 4757-04 (if unknown, please call Commission at 587-0225)

4. CONSTRUCTION: ☐ Drilled ☐ Dug ☐ Shaft ☐ Tunnel
   Is this well part of a battery of wells? ☐ Yes ☐ No (Please describe)
   ☐ Other (explain):

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE: (check all that apply)
   ☐ Domestic (individual, noncommercial water system)
   ☐ Military
   ☐ Irrigation (crop)
   ☐ Golf Course
   ☐ No. of Acres: 120
   ☐ Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 0.6 Million gallons per day
   (b) METHOD OF FLOW MEASUREMENT: ☐ Flowmeter ☐ Open-pipe ☐ Weir ☐ Orifice ☐ Other (explain):

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   ☐ Not Required If required, date approved
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEC at 596-4185
   ☐ Not Required If required, date published in OEC bulletin
   Special Management Area Permit (SMAP) To determine if a SMAP is necessary, on Oahu, call 527-5374; on Maui, call 961-8288, for Maui county, call 270-7235; on Kauai, call 241-6677
   ☐ Not Required If required, date approved

9. REMARKS, EXPLANATIONS:
   (if more space is needed, please attach additional sheet)

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) if the event the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $100/day.

Well Owner:
(legibly)

Landowner:
(legibly)

Contractor:
(legibly)

Signature:

Signature:

Signature:

Date:

Date:

Date:

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

For Official Use Only:

WCPIFA Form 821/01
10. PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

For PVC Carbon Thermoset Plastic:
- ASS Solid Carbon Steel:
- Stainless Steel:

Open Stainless ASS PVC Plastic conforming to Thermoset Plastic:
- And compliant with
- And compliant with

Minimun of 2 Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft)
- Ground Elevation 14.0 ft.

Solid Casing: (90% x (Ground Elev.-Water Level Elev))
- Total Length: 972.5 ft
- Nominal Diameter: 12 in
- Wall Thickness: .375 in
- Bottom Elevation: -57.34 ft., mas"

Open Casing: & Perforated □ Screen
- Total Length: 40.5 ft
- Nominal Diameter: 12 in
- Wall Thickness: .375 in
- Bottom Elevation: -97.84 ft., mas"

Note: Neither bentonite nor mud should be used in cement annular area between casing and formation.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more):
- And compliant with (check one or more):
- Stainless Steel: (check one)
- ABS Plastic conforming to ASTMF480 and ASTM D1527 (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241) (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
- □ Filament Wound Resin Pipe conforming to ASTM D2996
- □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
- □ Reinforced Plastic Motor Pressure Pipe conforming to ASTM D3517
- □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
- □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more):
- And compliant with (check one or more):
- Stainless Steel: (check one)
- ABS Plastic conforming to ASTMF480 and ASTM D1527 (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241) (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
- □ Filament Wound Resin Pipe conforming to ASTM D2996
- □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
- □ Reinforced Plastic Motor Pressure Pipe conforming to ASTM D3517
- □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
- □ FEP Fluorocarbon Tubing conforming to ASTM D3296

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = \( \left( \frac{\text{Water Elevation} - \text{41.1xWell Level Elev.}}{2} \right) \)

Example: Estimated + 2 ft. Water Elevation. Bottom Elevation of Well Limit = \( \left( \frac{\text{Water Elevation} - \text{2.56 ft.}}{2} \right) \) = 18.5 ft.

Ground Elevation:
- Basal Wells 10. PROPOSED WELL Elevation at top of casing --

Material:
- Crushed Basalt
- Rounded Gravel

Rock or Gravel Packing:
- Top Of Basks 5 ft.

Annular space between hole and casing (min 3`):
- 3 in.

Total Depth:
- 1013 ft.

Estimated Water Level Elevation:
- 2.56 ft. mas"
APPLICATION INFORMATION:
(Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) WELL OWNER: Kekaha Venture, Inc.
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, H 96740
   Phone: 887-0264
   Fax: 887-0125
   E-mail:
   (b) LAND OWNER: Kamehameha Schools
   Mailing Address: 78-681 Alii Dr. Suite 272, Kailua-Kona, H 96740
   Phone: 808-322-9446
   Fax: 322-0928
   E-mail:

   (c) CONTRACTOR: Wai‘e‘i Drilling
   Mailing Address: 78-6740 Makolea St. Kailua-Kona, H 96740
   Fax: 322-0928
   E-mail:
   Lic #: C-16543
   (circle one C-57, C-57a, or A)

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

2. WELL NAME: Kaupulehu #4
   Island: Hawaii
   Address Kaupulehu
   Tax Map Key: 72-2-3-03
   Zone: Sec: Plat: Parcel:
   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

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

   State Well No: 4757-04
   (if unknown, please call Commission at 587-0225)

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

5. PROPOSED PUMPING RATE:
   - 550 gallons per minute

6. PROPOSED USE:
   (check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - Golf Course
   - No. of Acres: 120
   - Industrial
   - Military
   - Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   - 6 Million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   - Flowmeter
   - Open-pipe
   - Well
   - Orifice
   - Other (explain):

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS:
   - If required, these permits must be obtained before the Commission can legally issue a permit.
   - Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   - Not Required
   - Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEC at 586-4185
   - Not Required
   - Special Management Area Permit (SMAP) To determine if an SMAP is necessary, on Oahu, call 527-5374; on Hawaii, call 961-8288; for Maui county, call 270-7235; on Kauai, call 241-6677.
   - Not Required

9. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date, 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work, and monthly water use data shall be submitted to the Commission, 3) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity, 4) in the event that the application is not completed correctly, any permit may be suspended until the item is brought into compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

Well Owner
Kekaha Venture, Inc.
Signature
Date 2-5-02
(print legibly)
(print legibly)
(print legibly)

Landowner
Signature
Date

Contractor: Wai‘e‘i Drilling
Signature
Date 2-5-02
(print legibly)

For official use only
Latitute: Aquifer System No.
Longitude: State Well No.

WCPA Form 92101
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing ______ ft., msl*

Hole Diameter: 19 in.

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

Ground Elevation: $1 \text{ ft.}$, msl*

Cement Grout: 540 ft. (min. 70% of distance from bottom elevation of water surface or 500 ft. whichever is less)

Annular space between hole and casing (min 3')
- 3 in.

Rock or Gravel Packing Top of Bksts
- Material
  - Crushed Basalt
  - Rounded Gravel

Total Depth 1013 ft.

Estimated Water Level Elevation: +2.36 ft., msl*

Solid Casing:
- 90% x (Ground Elevation - Water Level Elev.)
  - Total Length: 972.5 ft.
  - Nominal Diameter: 12 in.
  - Wall Thickness: .375 in.
  - Bottom Elevation: $-57.34\text{ ft.}$, msl*

Open Casing:
- 6 ft Perforated
  - Total Length: 40.5 ft.
  - Nominal Diameter: 12 in.
  - Wall Thickness: .375 in.
  - Bottom Elevation: $-97.84\text{ ft.}$, msl*

Open Hole:
- Length: N/A ft.
  - Diameter: N/A
  - Bottom Elevation: N/A, msl*

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

For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = \left(\text{Water Elevation} - \dfrac{1}{4}\times \text{Water Level Elev.}\right)

Example: Estimated + 2 ft. Water Level Elev. $\rightarrow$ Bottom Elevation of Well Limit $= \left(\text{Water Elevation} - \dfrac{1}{4}\times 2\right) = -18.5$ ft.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more):
  - ANSI/WWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
  - ASTM A242 (check one or more):
    - Type E
    - Type A
    - Grade B
  - Other
- Stainless Steel: (check one or more):
  - ASTM A409 (product walls)
  - ASTM A312 (monitor walls)
- ABS Plastic conforming to ASTM F480 and ASTM D1527 (check one):
  - Schedule 40
  - Schedule 80

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

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

Open Casing Material:
- Carbon Steel: compliant with (check one or more):
  - ANSI/WWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
  - Other
- Stainless Steel: (check one or more):
  - ASTM A409 (product walls)
  - ASTM A312 (monitor walls)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one):
  - Schedule 40
  - Schedule 80

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

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

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

For Official Use Only:

Directions: Please print in Ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by five (5) copies and a nonrefundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit http://www.state.hi.us/dlnr/cwrm.

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) □ WELL OWNER: Kekaha Venture In Contact Person: Tyler Smith Phone: 887-0264
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   Fax: 887-0125 Email:

(b) □ LAND OWNER: Kamehameha Schools Contact Person: Rick Robinson Phone: 322-5300
   Mailing Address: 78-631 Alii Dr. 50172 232 Kailua-Kona, HI 96740
   Fax: 887-322-9416 Email:

(c) □ CONTRACTOR: Wai'ele Drilling Contact Person: Dale Stromquis Phone: 324-1420
   Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
   Fax: 322-0928 Email:

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

2. WELL NAME: Kaupulehu #4 Island: Hawaii
   Address: Kaupulehu
   Tax Map Key: Zone 2 Sec 3 03

   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map

3. PROPOSED WORK: (check all that apply)
   □ Construct New Well
   □ Modify Existing Well
   □ Abandon/Seal
   "State Well No.: 4757-04
   (if unknown, please call Commission at 587-0225)

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

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE: (check all that apply)
   □ Municipal (including hotels, stores, etc.) □ Industrial
   □ Domestic (individual, noncommercial water system)
   □ Irrigation (crop)
   □ Golf Course
   □ No. of Acres: 120
   □ Military
   □ Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 0.6 Million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   □ Flowmeter □ Open-pipe □ Weir □ Orifice □ Other (explain)

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   □ Not Required
   □ Required, date approved ____________________
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEC at 586-4185
   □ Not Required
   □ Required, date published in OEC bulletin ____________________
   Special Management Area Permit (SMAP) To determine if an SMAP is necessary, on Oahu, call 527-5374; on Hawaii, call 961-8288; for Maui county, call 270-7235; on Kauai, call 241-6077
   □ Not Required
   □ Required, date approved ____________________

9. REMARKS, EXPLANATIONS:

   (If more space is needed, please attach additional sheet)

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion / abandonment report within 60 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) each approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

Well Owner: Kekaha Venture In (print legibly)
Signature: ___________ Date: 2/5/02

Landowner: KAMEHAMEHA SCHOOLS (print legibly)
Signature: ___________ Date: ___________

Contractor: WAI' ELE DRILLING (print legibly)
Signature: ___________ Date: ___________

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

WC.PBA Form 8/21/01
10. PROPOSED WELL SECTION  

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

Example: Estimated +2.56 ft Water Level Elev. - 912.6 ft = -97.84 ft, msl

Solid Casing Material:

Carbon Steel: compliant with (check one or more): □ ANSI/WWA C200 □ API Spec 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one):
□ ASTM A409 (produced walls) □ ASTM A412 (monitor wells)
□ Other
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80

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

Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C900
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:

Carbon Steel: compliant with (check one or more): □ ANSI/WWA C200 □ API Spec 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one):
□ ASTM A409 (produced walls) □ ASTM A412 (monitor wells)
□ Other
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80

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□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296
TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction Permit / Pump Installation Permit Application for
   Kaupulehu 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and -4756-01)

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your department. Please
respond by returning this cover memo form by April 10, 2000.

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

Response:

[1] This well qualifies as a source which will serve as a source of potable water to a public water system (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

[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 private owner must 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.

[1] 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.

[1] 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.

[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 [ ] is [ ] located near the proposed well site
(information attached).

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

No comments/objections

Contact Person: William Wong
Phone: 586-4258
Signed: William Wong
Date: 04/04/00
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
TRANSMITTAL SHEET

Date: 4/1/02

FROM: FAX # (808) 322-0928 Keaou-Kona, Hawaii USA

Transmitted by: Bob Richardson

EMAIL: mowater@nethawaii.net
Telephone #: (808) 324-1420

TO: FAX # BOB 587-0249

Name of Co. Dlaa/C.W.R.M

Telephone #: ( ) 587-0249

Attention: Roy Richardson

Number of pages being transmitted including this page: 15

Special Instructions (if checked):

☑ URGENT - IMMEDIATE REPLY IS REQUESTED
☑ Please fax/telephone to confirm receipt of foregoing
☐ For your information
☐ For your signature; return signed copy to this office

Other:

☐ Pump Test Data

A Water Development Joint Venture
P.O. Box 5685, Kailua-Kona, Hawaii 96745 • (808) 324-1420 • Fax (808) 322-0928

Please notify sender immediately if the documents received are incomplete and/or illegible.
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 521, Honolulu, Hawaii 96803. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrm/

<table>
<thead>
<tr>
<th></th>
<th>State Well No.</th>
<th>4757-4</th>
<th>Well Name:</th>
<th>Kaupulehu #4</th>
<th>Island:</th>
<th>Hawaii</th>
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</table>

<table>
<thead>
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<th>Address:</th>
<th>Kaupulehu</th>
<th>Tax Map Key:</th>
<th>7-2-3:03</th>
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</thead>
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<table>
<thead>
<tr>
<th></th>
<th>Drilling Company:</th>
<th>Wai'eli Drilling &amp; Development</th>
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</thead>
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<table>
<thead>
<tr>
<th></th>
<th>Drilling method used during construction:</th>
<th>Rotary</th>
<th>Percussion</th>
<th>Other (describe)</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Date Well Construction (drilled, cased, grouted) completed: 2/15/02</th>
<th>Attach Driller's Log (7/26/99 DL Form)</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Was the subject well cored?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Initial water-level encountered 912.6 ft. below ground</th>
<th>Date and time of measurement: 2/21/02</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Step-Drawdown Test completed?</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
</table>

Parameters prior to pump test:

<table>
<thead>
<tr>
<th></th>
<th>Water-level: 912.6 (+2.56) ft. above msl</th>
<th>Date and time of measurement: 2/21/02 10:00a.m.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Chloride:</th>
<th>240 ppm</th>
<th>Date and time of sampling: 2/21/02 10:00a.m.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Temperature:</th>
<th>71 °F</th>
<th>Date and time of measurement: 2/21/02 10:00a.m.</th>
</tr>
</thead>
</table>

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


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): C. Dale Stromquist  
C-57 Lic. No. C-16543  
Signature  
Date 3/24/2002

Surveyor (print): DONALD C. MCINTOSH  
L.P.L.S. Lic. No. 4768 HAWAII  
Signature  
Date 3/24/02

Permittee (print):  
Signature  
Date 3/24/02
13. AS-BUILT WELL SECTION

Please attach as-built if different from diagram provided below.

*msl = mean sea level

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200
- Stainless Steel: (check one): ASTM A408 (production wells)
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one): Schedule 40
- PVC Plastic conforming to ASTM F490 and ASTM D1785 or ASTM D2241: (check one): Schedule 40
- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing complying to ASTM D3296
  - FEP Fluorocarbon Tubing complying to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200
- Stainless Steel: (check one): ASTM A409 (production wells)
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one): Schedule 40
- PVC Plastic conforming to ASTM F490 and ASTM D1785 or ASTM D2241: (check one): Schedule 40
- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing complying to ASTM D3296
  - FEP Fluorocarbon Tubing complying to ASTM D3296

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.
6-1-91-04
4th hole

353' in
to lower basket

Air @ 913.4 ft

Top of RFS @ 972.5 ft

19" hole

Top of gravel @ 650 ft

Top of cement @ 640 ft

Top of sandstone

18.5 yrs 0.000 gage

2.9 @ 50% 000

29.0 Vol.

19.0 Open hole

Cement

Total 640'

To surface

12 3/4" O.D. CS9
**WELL NUMBER:**

**DRILLERS LOG**

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<tr>
<th>Depth (ft)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Loam, sandy [ashes]</td>
<td></td>
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<tr>
<td>85</td>
<td>Clay</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Hard</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>Mixed, lathes, mud</td>
<td></td>
</tr>
<tr>
<td>198</td>
<td>Hard</td>
<td></td>
</tr>
<tr>
<td>205</td>
<td>Soft/Loamy</td>
<td></td>
</tr>
<tr>
<td>236</td>
<td>Med</td>
<td></td>
</tr>
<tr>
<td>262</td>
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**Remarks:**

- 04/01/2002 10:40 AM FROM WAI'ELI DRILLING 1 808 322 0928
- 10/01 Q4 & 10/05 180108
- IRW DRILLING 1
- 4/19/04
<table>
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<th>Interval (ft)</th>
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<tbody>
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Table 1 (SDPTD Form 12/17/97)
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*(See dr. watch record [Pg. 3]*)
### Table 1 (SOPTD Form 12/17/87)

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**END TEST** Date: **3/30/02** Time of day: **8:21 AM**

**ADDITIONAL REMARKS:**

Person in charge of pump test (print): **Bob Rich anderson**

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.
### Table 1 (SDPTC Form 12/17/97)

#### STEP-DRAWDOWN PUMP TEST DATA

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

<table>
<thead>
<tr>
<th>Pumped Well No.</th>
<th>Pumped Well Name</th>
<th>Observation well no.</th>
<th>Distance between Obs. &amp; Pumped Well (ft.)</th>
<th>Reference pt. for depth to water (ft. msl)</th>
<th>Static Water Level @ start of test (ft. msl)</th>
<th>Water level measurements by:</th>
<th>Target Q (gpm)</th>
<th>Reference pt. for depth to water (ft.)</th>
<th>Static Water Level @ start of test (ft. msl)</th>
<th>Flow Meter Reading Start</th>
<th>Time of day</th>
<th>Result</th>
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**START TEST Date:** 3/5/62

**Time of day:** 9.1.4
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 877-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwm/

1. State Well No.: 4757-04    Well Name: Kaupulehu #4    Island: Hawaii
2. Address: Kaupulehu    Tax Map Key: 7-2-3:03
3. Pump Installation Company: Wai'eli Drilling & Development
4. Date Pump Installed: \textbf{3/27/02}
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Turbine Crown S/N 12774    Rated Capacity: 550 gpm
   Motor Type, H.P., Voltage, rpm: Submersible 200HP 3500
   Type of flow meter: Turbine which measures in Gals
6. Method of flow measurement:
   Water Specialty
   ☐ Flowmeter Manufacturer ------- Make Same ------- Size 6"
   ☐ Weir* ☐ Open Pipe* ☐ Orifice* ☐ Other*, explain below
   *attach schematic
7. Fill in the as-built section on the other side of this sheet.

Other remarks/comments:


Pump Installation Contractor (print) \textbf{Wai'eli Drilling & Development} C-57/C-57a/A Lic. No. C-16543
Signature: [Signature]
Date: 3/29/2002
Permittee (print) \textbf{Ko'olau Contracting Inc.}
Signature: [Signature]
Date: 3/29/2002
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 915.16 ft. mean sea level

Elevation of top of chase tube = 915.16 ft. mean sea level

Pump intake depth = 958.93 ft. (referenced to bench mark)

Chase tube depth = 949.83 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = -41.81 ft. mean sea level
APPLICATION FOR PERMIT

WELL: Construction and/or Pump Installation

APPLICANT INFORMATION:

1. (a) WELL OWNER: Kekaha Venture, Inc; Contact Person: Tyler Smith; Phone: 887-0264
   - Mailing Address: PMB 428 75-1027 Henry St; Kailua-Kona, HI 96740
   - Fax: 887-0125

(b) LAND OWNER: Kamahameha Schools; Contact Person: Rick Robinson; Phone: 322-5300
   - Mailing Address: 78-631 Alii Dr; Suite 232; Kailua-Kona, HI 96740
   - Fax: 887-324-5444

(c) CONTRACTOR: Wai'eli Drilling; Contact Person: Dale Stromquist; Phone: 324-1420
   - Mailing Address: 78-6740 Makoles St; Kailua-Kona, HI 96740
   - Fax: 322-0928

Well & Pump Information:

2. WELL NAME: Kaupulehu #4; Island: Hawaii
   - Address: Tax Map Key: Zone: 7; Sec: 2; Pit: 03
   - Annot: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quadrangle
   - (b) a property tax map, showing well location referenced to established property boundaries

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

4. CONSTRUCTION:
   - (a) Drilled
   - (b) Dug
   - (c) Shaft
   - (d) Tunnel

5. PROPOSED PUMPING RATE:
   - 550 gallons per minute

6. PROPOSED USE:
   - (check all that apply)
     - Municipal (including hotels, stores, etc)
     - Industrial
     - Domestic (individual, noncommercial water system)
     - Irrigation
     - Golf Course
     - Other (please specify)

7. PROPOSED AMOUNT OF WITHDRAWAL:
   - (a) 1 Million gallons per day
   - (b) 6 Million gallons per day

8. LEGAL REQUIREMENTS:
   - (a) Not Required
   - (b) Required

9. REMARKS, EXPLANATIONS:

[Signature]

For Official Use Only:

Latitude
Longitude
Aquifer System No.
State Well No.

WCPRA Form 02/01
10. PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

**Hole Diameter: 19 in**

**Elevation at top of casing:** 915.16 ft, msl

**Minimum of 2 Radius & 6" Thick Concrete Pad to contain benchmark surveyed to nearest 0.01 ft.**

**Ground Elevation:** 914.01 ft, msl

---

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

- **Total Length:** 972.5 ft
- **Nominal Diameter:** 12 in
- **Wall Thickness:** .375 in
- **Bottom Elevation:** -57.34 ft, msl

**Open Casing:** 16 Perforated @ Screen

- **Total Length:** 40.5 ft
- **Nominal Diameter:** 12 in
- **Wall Thickness:** .375 in
- **Bottom Elevation:** -97.84 ft, msl

*Note: Neither bentonite nor mud should be used in saturated iron and calcium.*

---

**Open Hole:**

- **Length:** N/A ft
- **Diameter:** N/A in
- **Bottom Elevation:** N/A ft, msl

---

**Solid Casing Material:**

- Carbon Steel compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. SL □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 & Type E □ Type S □ Grade B □ Other

- Stainless Steel: (check one) □ ASTM A409 (production wells) □ ASTM A312 (miller wells)

- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80

- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120

- Thermoset Plastic: (check one) □ Filament Wound Resin Pipe conforming to ASTM D2296
- □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
- □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
- □ FEP Fluorocarbon Tubing conforming to ASTM D3299

**Open Casing Material:**

- Carbon Steel compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. SL □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 & Type E □ Type S □ Grade B □ Other

- Stainless Steel: (check one) □ ASTM A409 (production wells) □ ASTM A312 (miller wells)

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- □ FEP Fluorocarbon Tubing conforming to ASTM D3299

---

**For non-salt water Bore Wells:** bottom elevation of well should not be deeper than 1/4 of aquifer thickness or.

**Bottom Elevation of Well Limit = (Water Elevation - 11) X Water Level Elev)**

**Example:** Estimated + 2 ft, Water Level Elev. = Bottom Elevation of Well Limit = (2 - 11 X 11 ft) = -18.5 ft.

---

**Open Hole:**

- **Length:** N/A ft
- **Diameter:** N/A in
- **Bottom Elevation:** N/A ft, msl

---

**Annular space between hole and casing:** (min 3') □ 3 in

---

**Rock or Gravel Packing:**

- □ Crushed Basalt □ Rounded Gravel

---

**Top of Drift:**

- **Total Depth:** 1013 ft
- **Estimated Water Level Elev:** 912.6 ft, msl

---

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

---

**Calcium Grout:**

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

---

**Trench Data:**

- **Nominal Pressure:**...
- **Grade:**...
- **Diameter:**...
- **Flow Rate:**...
Well Name: Kaupulehu Irr. Well No. 4 (4757-04)
Date of Test: March 30, 2002
Date of Analysis: 03-Apr-02

Alternative way for determining T from step-drawdown data (Mink, per. comm)

\[ Q = ft^3/d \]
\[ s = ft. \]
\[ Q1 (gpm) = 510 = 98175 ft^3/d \]
\[ Q2 (gpm) = 350 = 67375 ft^3/d \]

Set up two equations:

\[ s1 = jQ1 + nQ1^2 \]
\[ s2 = jQ2 + nQ2^2 \]

\[ Q2 = 67375 \quad s2 = 5.56 \]
\[ Q1 = 98175 \quad s1 = 8.93 \]

Well Depth below sea level = 98
Radius of well (ft) = 0.5 = r

\[ n = s1 - (Q1/Q2)s2/Q1(Q1-Q2) = 2.7E-10 \]
\[ j = s/Q - nQ = 6.4E-05 \]

Laminar flow equation:
\[ s = jQ = 6.289839 \quad 70.43\% \quad \text{Head loss due to laminar flow} \]

Thiem Eq.
\[ T = 1/2\pi j \ln(re/r) \]

\[ re = \text{Well Depth BSL} \times 1.6 = 156.8 \]
Therefore:
\[ T = 1/2\pi j \ln(re/r) = 14279 \ ft^2/d / \]
March 15, 2002

CERTIFIED MAIL
DELIVERY CONFIRMATION
RETURN RECEIPT REQUESTED

Linnel T. Nishioka, Deputy Director
c/o Ryan Imata
Commission on Water Resource Management
PO Box 621
Honolulu, HI 96809

SUBJECT: Well Completion Report – Part II
Kaupulehu Well #3 (4757-03)
TMK: (3)-7-2-3:03

Dear Linnel:

Please find enclosed the Well Completion Report – Part II for Kaupulehu Well #3 (4757-03) for your files.

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

Mahalo,

Stephen P. Bowles

SPB:mdc

Enclosures

cc: Tyler Smith, Kekaha Venture, Inc.
    C. Dale Stromquist, Wai`eli Drilling & Development
March 15, 2002

CERTIFIED MAIL
DELIVERY CONFIRMATION
RETURN RECEIPT REQUESTED

Linnel T. Nishioka, Deputy Director
c/o Ryan Imata
Commission on Water Resource Management
PO Box 621
Honolulu, HI 96809

SUBJECT: Well Completion Report – Part I
Kaupulehu Well #3 (4757-03)
TMK: (3)-7-2-3:03

Dear Linnel:

Please find enclosed the Well Completion Report – Part I for Kaupulehu Well #3 (4757-03) for your files.

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

Mahalo,

Stephen P. Bowles

SPB:mdc

Enclosures

cc: Tyler Smith, Kekaha Venture, Inc.
    C. Dale Stromquist, Wai‘eli Drilling & Development
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 587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrm/

<table>
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<tr>
<th>1. State Well No.:</th>
<th>4757-03</th>
<th>Well Name:</th>
<th>Kaupulehu #3</th>
<th>Island:</th>
<th>Hawaii</th>
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<td>5. Date Well Construction (drilled, cased, grouted) completed:</td>
<td>10/10/01</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>In addition to the driller's log, if a geologic log was prepared, please submit with this form.</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>6. Was the subject well cored?</td>
<td>☑ Yes ☐ No</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. Initial water-level encountered</td>
<td>883.5 ft. below ground</td>
<td>Date and time of measurement:</td>
<td>9/12/01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Step-Drawdown Test completed?</td>
<td>☐ No ☑ Yes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Attach Step-Drawdown Test form (12/17/97 SDPTD Form)</td>
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<td></td>
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</tr>
<tr>
<td>Parameters prior to pump test:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9. Constant Rate Aquifer Test completed?</td>
<td>☐ No ☑ Yes</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Water-level:</td>
<td>8837.5&quot; ft. above msl</td>
<td>Date and time of measurement:</td>
<td>9/12/01</td>
<td></td>
<td></td>
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<tr>
<td>11. Chloride:</td>
<td>220 ppm</td>
<td>Date and time of sampling:</td>
<td>9/12/01</td>
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<td></td>
</tr>
<tr>
<td>12. Temperature:</td>
<td>71°F</td>
<td>Date and time of measurement:</td>
<td>9/12/01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Fill in the as-built section on the other side of this sheet.
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) C. Dale Stromquist C-57 Lic. No. C-16543
Signature
Date 10/10/01

Surveyor (print)
Donald C. McIntosh L.P.L.S. Lic. No. 4968 HAWAII
Signature
Date 2/4/02

Permittee (print)
Keahe Venture, Inc.
Signature
Date February 02, 2002

WCR1 Form 9/29/00
13. AS-BUILT WELL SECTION

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

Bench mark elevation:
887.7 ft., msl*
(Survey to nearest 0.01 ft.)

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

Hole Diameter: 19 in.

Minimum of 2' Radius & 4" Thick Concrete Pad

Ground Elevation: 887.4 ft., msl

Cement Grout: 860 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 (min.3"):
3 in.

Rock or Gravel Packing:
80 ft.
Material:
 Crushed Basalt
 Rounded Gravel

Water Level Elevation:
+3.91 ft. msl*

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))
Length: 899.52 ft.
Nominal Diameter: 12 in.
Wall Thickness: .375 in.
Bottom Elevation: -52.59 ft., msl

Open Casing: [ ] Perforated [ ] Screen
Length: 40.48 ft.
Nominal Diameter: 12 in.
Wall Thickness: .375 in.
Bottom Elevation: -52.59 ft., msl

Open Hole:
Length: 60 ft.
Diameter: 10.63 in.
Bottom Elevation: -112.59 ft., msl

*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 [ ] Type E [ ] Type S
[ ] Grade B [ ] Other
Stainless Steel: (check one):
[ ] ASTM A409 (production wells) [ ] ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one):
[ ] Schedule 40 [ ] Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):
[ ] Schedule 40 [ ] Schedule 80 [ ] Schedule 120
Thermoset Plastic: (check one)
[ ] Filament Wound Resin Pipe conforming to ASTM D2996
[ ] Centrifugally Cast Resin Pipe conforming to ASTM D2997
[ ] Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
[ ] Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
[ ] PTFE Fluorocarbon Tubing conforming to ASTM D3296
[ ] FEP Fluorocarbon Tubing conforming to ASTM D3296

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

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

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

WELL SECTION

8-4197-03 KAUPULEHU 3

MINIMUM INSTALLATION STANDARDS

Ensure that your as-built is in compliance
with applicable standards.
1. State Well No.: 4757-03  Well Name: Kaupulehu #3  Island: Hawaii
2. Address: Kaupulehu  Tax Map Key: 7-2-3:03
3. Pump Installation Company: Wai'eli Drilling & Development
4. Date Pump Installed: 1/8/02
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Sub. Crown SER# 12310  Rated Capacity: 550 gpm
   Motor Type, H.P., Voltage, rpm: Sub. 200HP 2300V 3540 RPM
   Type of flow meter: Turbine which measures in GPM
6. Method of flow measurement:
   - Flowmeter
   - Manufacturer
   - Make
   - Water Specialty
   - Size
   - Weir*  
   - Open Pipe*  
   - Orifice*  
   - Other*, explain below
   *attach schematic
7. Fill in the as-built section on the other side of this sheet.

Other remarks/comments:

Pump Installation Contractor (print)  Wai'eli Drilling  C-57/C-57a/A  Lic. No.  C-16543
Signature  Date  2/1/02
Permittee (print)  Ke'aha Venture, Inc.
Signature  Date  February 01, 2002
Bench mark elevation surveyed to nearest 0.01 ft. = 887.78 ft. mean sea level.

Elevation of top of chase tube = 888.1 ft. mean sea level.

Pump intake depth = 915.28 ft. (referenced to bench mark).

Chase tube depth = 905 ft. (referenced to bench mark).

If airline installed, bottom of airline elevation = 903 ft. mean sea level.
<table>
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<tr>
<th>Time</th>
<th>Engine RPM</th>
<th>Water Temperature</th>
<th>Fuel Flow</th>
<th>Notes</th>
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<tr>
<td>7:30 PM</td>
<td>820</td>
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Notes:
- Test Date: Jan 10-11, 2002
- Engine RPM and Water Temperature in °C
- Fuel Flow in °C
- Test conducted on pump test day, 8/5/31
LICENSE SCREEN

[ Look up License Type Codes-> ]
Please click a link listed below to display the other screen.

***** GENERAL LICENSEE *****

LIC ID: CT-16543  
ACTIVE/INACTIVE: ACTIVE
NAME: WAI'ELI DRILLING & DEVELOPMENT
TRADE NAME: 
STATUS: CURRENT, VALID & IN GOOD STANDING
ENTITY: JOINT VENTURE 
BUSINESS CODE: 
ORIG LIC DATE: 3/18/91 
EXPIRE DATE: 9/30/02
CLASS PREFIX: C  
SPECIAL PRIVILEGE: 
RESTRICTION: 
EDUCATION CODE: 
MAILING ADDR: P O BOX 5685  
KAILUA-KONA HI 96745
Click here to enter search criteria for prior complaints history ->
For prior complaints and disciplinary history, contact licensing and business information center at (808)587-3295.

<-Back  New Search->

EMPLOYEES LIST   |    | EMPLOYERS LIST   |    | INSURANCE/BOND   |    | LICENSE CLASS

Copyright 2000 Professional and Vocational Licensing Division

Hawaii State homepage | DCCA | Professional and Vocational Licensing Division

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<th>Taxkey</th>
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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.
### Well Background Check

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<tr>
<th>Approved Well No.</th>
<th>Well Name</th>
<th>Applicant</th>
<th>Driller</th>
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<th>Well Construction</th>
<th>Pump Installation</th>
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<td>West Hawaii Water Co.</td>
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<td>4757-03</td>
<td>Kaupulehu 3</td>
<td>Kekaha Venture, Inc.</td>
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FROM: RYAN
DATE: 13-Feb-02
SUSPENSE DATE: __________

TO: BAUER, G.  INIT.  LUM, A.  
TO: CHING, F.  INIT.  NAKMA, L.  
TO: FUJI, N.  INIT.  NAKANO, D.  
TO: HARDY, R.  INIT.  NISHIOKA, L.  
TO: HIGA, D.  INIT.  OHYE, M.  
TO: HIRANO, E.  INIT.  SAKODA, E.  
TO: ICE, C.  INIT.  SUBIA, S.  
TO: IMATA, R.  INIT.  SWANSON, S.  
TO: JINNAI, R.  INIT.  UYENO, D.  
TO: KUNIMURA, I.  INIT.  YODA, K.  

PLEASE:
1. Review & Comment
2. Take Action
3. Approval
4. Signature
5. Type Draft acknowledgment letter
6. Type Final, label new file folder
7. File
8. Xerox ______ copies

WELL NUMBER 4757-03  WELL NAME Kaupulehu 3

☐ WELL CONSTRUCTION  ☒ PUMP INSTALLATION  ☐ BOTH

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated
1. TRANS. LETTER
2. CWRM MAP
3. APPL. FORM (3X)
4. USGS MAP (3X)
5. TAX MAPS (3X)
6. PARCEL OWNER VERIF.  MLS PRINTOUT
7. CONTRACTOR VERIF.  DCCA LICENSE SCREEN PRINTOUT
8. ALL INFO FILLED IN
9. BACKGROUND CHECK  FILING FEE

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

INCOMPLETE ACTION DATES:

DATE ACTION

 Glenn said okay.
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
APPLICATION FOR PERMIT  

☐ Well Construction and/or ☐ Pump Installation  

INSTRUCTIONS: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by 5 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 887-0225. For further information and updates to this application form, visit http://www.state.hi.us/divwaterw.

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) ☐ WELL OWNER: Kekaha Venture, Inc Contact Person: Tyler Smith Phone: 887-0264  
Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740  
Fax: 887-0125 E-mail: 

(b) ☐ LAND OWNER: Kamehameha Schools Contact Person: Rick Robinson Phone: 322-5300  
Mailing Address: 785-831 Alii Dr. Suite 332, Hauula-Lanai, HI 96740  
Fax: 808-322-9446 E-mail: riRorgan@KSBE.EDU  

(c) ☐ CONTRACTOR: Wai'elli Drilling Contact Person: Dale Stromquist Phone: 324-1420  
Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740  
Fax: 322-0928 E-mail: 
Lic # C-16543 (circle one: C-37, C-5/a, or A)  

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

2. WELL NAME: Kaupulehu #3 Island: Hawaii  
Address Kaupulehu Tax Map Key: Zone 2 Sec 3 Parcel 03  

3. PROPOSED WORK: (Check all that apply)  
☐ Construct New Well  ☐ Install New Pump  
☐ Modify Existing Well*  ☐ Modify Pump*  
☐ Abandon/Seal*  

*State Well No: 4757-03  (if unknown, please call Commission at 587-0225)  

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

5. PROPOSED PUMPING RATE: 550 gallons per minute  

6. PROPOSED USE: (Check all that apply)  
☐ Municipal (including hotels, stores, etc.)  ☐ Industrial  
☐ Domestic (individual, noncommercial water system)  ☐ Military  
Does this well serve 25 or more people at least 60 days per year or have 15 or more service connections? ☐ Yes ☐ No  
☐ Irrigation (crop)  ☐ Golf Course  ☐ No. of Acres: 120  
☐ Other: (explain)  

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: .6 million gallons per day  
(b) METHOD OF FLOW MEASUREMENT: ☐ Flowmeter ☐ Open-pipe ☐ Weir ☐ Office ☐ Other (explain)  

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.  
Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414  
☐ Not Required  ☐ If required, date approved  

Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OECG at 586-4185  
☐ Not Required  ☐ If required, date published in OECG bulletin  

Special Management Area Permit (SMAP) To determine if a SMAP is necessary: on Oahu, call 527-5374; on Hawaii, call 961-8288; for Maui county, call 270-7255; on Kauai, call 241-6677.  
☐ Not Required  ☐ If required, date approved  

9. REMARKS, EXPLANATIONS:  

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date, 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work, 3) monthly water use data shall be submitted to the Commission, 4) such approval shall not constitute a determination of corrective water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity, 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought to compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.  

Well Owner: Kekaha Venture, Inc  
Landowner: Rick Robinson  
Contractor: Wai'elli Drilling  

Signature:  
Date: 2/14/02  

For official use only  

Latitute ____________________________  
Longitute ____________________________  
Aqurifer System No. ___________________  
State Well No. ________________________  

WCRPA Form 82/16/01
10. PROPOSED WELL SECTION

(Hole Diameter: 19"

Elevation at top of casing __ ft., mast

Minimum of 2 Radius & 6" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.) 887.4 ft.

Ground Elevation: __ ft., mast

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

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

Total Length: 899.52 ft.
Nominal Diameter: 12
Wall Thickness: .375 in.
Bottom Elevation: -52.59 ft., mast

Open Casing: 8 Perforated □ Screen

Total Length: 40.48 ft.
Nominal Diameter: 12 in.
Wall Thickness: .375 in.
Bottom Elevation: -52.59 ft., mast

note: Neither bentonite nor mud should be used in cementitious materials.

Open Hole

Length: 60 ft.
Diameter: 10.63 in.
Bottom Elevation: -112.59 ft., mast

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

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Elevation at top Water Surface or ground elevation to top of water surface or 50 ft. whichever is less.)

Example: Estimated Bottom Elevation = 4 ft + 1/4 (140/4) = 18 ft.
**APPLICANT INFORMATION:** (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) **WELL OWNER:** Keahamamea, Inc
   Contact Person: Tyler Smith
   Phone: 887-0264
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   Fax: 887-0125
   E-mail: 
   Lic #: 

   (b) **LAND OWNER:** Keahamamea Schools
   Contact Person: Rick Robinson
   Phone: 322-5300
   Mailing Address: 78-631 Alii Dr. Suite 232, Kailua-Kona, HI 96740
   Fax: C0F-322-9446
   E-mail: RIKROBINSON@KEOBE.EDU

   (c) **CONTRACTOR:** Wailei Drilling
   Contact Person: Dale Stromquist
   Phone: 324-1420
   Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
   Fax: 322-0928
   E-mail: 
   Lic #: C-16543

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

2. WELL NAME: Kaupulehu #3
   Island: Hawaii
   Address: Kaupulehu
   Tax Map Key: Zone 7 Sec 2 Par 303
   Attch: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the survey map
   (b) a property tax map, showing well location referenced to established property boundaries

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

   State Well No: 4757-03 (if unknown, please call Commission at 567-0225)

4. CONSTRUCTION:
   - Drilled
   - Dug
   - Shaft
   - Tunnel

   Is this well part of a battery of wells? Yes \((\text{Please describe})\)

5. PROPOSED PUMPING RATE: \(550\) gallons per minute

6. PROPOSED USE: (check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water system)
   - Industrial
   - Irrigation (crop)
   - Golf Course
   - No. of Acres: 120
   - Military
   - Other (explain): 

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: \(0.6\) million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   - Flowmeter
   - Open-Pipe
   - War
   - Orifice
   - Other (explain): 

**OTHER IMPORTANT INFORMATION:**

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit
   - Conservation District Use Permit (CDUP)
   - Environmental Impact Statement (EIS) or Environmental Assessment (EA)
   - Special Management Area Permit (SMAP)

   If required, if required, date approved

   If required, date published in OEQC bulletin

9. REMARKS, EXPLANATIONS:

   For official use only
   - Aquifer System No.
   - State Well No.

WCPPA Form 921601
10. PROPOSED WELL SECTION

(For non-saline water Basalt Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = (Water Elevation - 41 x Water Level Elevation) / 4
Example: Estimated + 2 ft. Water Level Elev. = Bottom Elevation of Well Limit = (2 - 41 x 0.2) / 4 = -18.5 ft.

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

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

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

☐ Well Construction and/or ☐ Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management; P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by 5 copies and a non-refundable filing fee of $25.00 payable to the Dept of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225.

For further information and updates to this application form, visit http://www.state.hi.us/div/wrm.

APPLICANT INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

1. ☐ WELL OWNER Kekaha Venture, Inc Contact Person: Tyler Smith Phone: 887-0264
Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
Fax: 887-0125 E-mail:

☐ LAND OWNER Kamehameha Schools Contact Person: Rick Robinson Phone: 322-5300
Mailing Address: 78-831 Alii Dr. Suite 232, KAILUA-KONA, HI 96740
Fax: 865-222-0446 E-mail: RRobinson@KSBF.EDU

☐ CONTRACTOR Wai`ei Drilling Contact Person: Dale Stromquis Phone: 324-1420
Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
Fax: 322-0928 E-mail:

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

2. WELL NAME: Kaupulehu #3 Island: Hawaii
Address: Kaupulehu
Tax Map Key: 7 2 03

Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
(b) a property tax map, showing well location referenced to established property boundaries

3. PROPOSED WORK:
☐ Construct New Well
☐ Modify Existing Well
☐ Abandon/Seal

☐ Install New Pump
☐ Modify Pump

*State Well No.: 4757-03

4. CONSTRUCTION:
☐ Dripped
☐ Dug
☐ Shaft
☐ Tunnel

Is this well part of a battery of wells? ☐ Yes ☐ No (Please describe)

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE:
☐ Municipal (including hotels, stores, etc.)
☐ Domestic (individual, noncommercial water system)
☐ Industrial
☐ Golf Course
☐ Military
☐ Other (explain)

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 6 million gallons per day
(b) METHOD OF FLOW MEASUREMENT:
☐ Flowmeter ☐ Open-pipe ☐ Weir ☐ Orifice ☐ Other (explain)

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 567-6414
☐ Not Required
☐ Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEQC at 586-4185
☐ Not Required
☐ Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEQC at 586-4185
☐ Not Required
☐ Special Management Area Permit (SMAP) To determine if a SMAP is necessary, call DLNR Water Districts at 577-0225; on Kauai, call 241-6677
☐ Not Required

☐ If required, date approved

9. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work to be completed within 2 (two) years of the approval date, 2) the contractor shall submit to the Commission a completed abandonment report within 60 days after the completion date of the permitted work, 3) monthly water use data shall be submitted to the Commission, 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity, 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought into compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

Well Owner Kekaha Venture, Inc. Landowner Rick Robinson Contractor Dale Stromquis
(print legibly) (print legibly) (print legibly)
Signature __________________________ Signature __________________________ Signature __________________________
Date 2-5-02 Date 2-5-02 Date 2-5-02

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

WCPA Form 8/2161
10. PROPOSED WELL SECTION
(Please attach schematic if different from diagram provided below)

Minimum of 2' Radius & 4' Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)
Ground Elevation: 887.41 ft., msl*

Solid Casing: (90% x (Ground Elev. - Water Level Elev))
Total Length: 899.52 ft.
Nominal Diameter: 12 in.
Wall Thickness: .375 in.
Bottom Elevation: -52.59 ft., msl*

Open Casing: □ Perforated □ Screen
Total Length: 40.48 ft.
Nominal Diameter: 12 in.
Wall Thickness: .375 in.
Bottom Elevation: -52.59 ft., msl*

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or:
Bottom Elevation of Well Limit = \left( \frac{\text{Water Elevation - 61 WML Elev.}}{4} \right) - 18.5 ft.

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = \left( \frac{889.98 - 887.41}{4} \right) - 18.5 ft.

Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one): □ ASTM A400 (production wells) □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527 (check one): □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241) (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one):
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one): □ ASTM A400 (production wells) □ ASTM A312 (monitor wells)
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□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296
WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

2. WELL NAME: Kaupulehu #3
   Island: Hawaii
   Address: Kaupulehu
   Tax Map Key: 7
   Zone: 2
   Sec: 3
   Parcel: 0

3. PROPOSED WORK:
   (check all that apply)
   - Construct New Well
   - Modify Existing Well
   - Abandon/Seal
   *State Well No.: 4757-03

4. CONSTRUCTION:
   - Drilled
   - Dug
   - Shaft
   - Tunnel
   Is this well part of a battery of wells? Y/N (Please describe)

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE:
   (check all that apply)
   - Municipal (including hotels, stores, etc)
   - Industrial
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - Golf Course
   - No. of Acres: 120
   - Military
   - Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: .6 million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
      - Flowmeter
      - Open-pipe
      - Weir
      - Orifice
      - Other (explain):

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   - Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   - Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEOC at 586-4185
   - Special Management Area Permit (SMAP) To determine if an SMAP is necessary: Oahu, call 527-5374; on Hawaii, call 961-6288, for Maui County, call 270-7235; on Kauai, call 241-6677

9. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/bandonment report within 60 days after the completion date of the permitted work, 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $1000/day.

Well Owner: Keaka Venture, Inc
Landowner: Rick Robinson
Contractor: Dale Stromquist

Date: 2-5-02

For official use only
Aquifer System No. Aquifer System No.
10. PROPOSED WELL SECTION

For non-salt water Basal Wells, Open Carbon Steel: H Thermosel Plastic: \text{conforming to ASTM A53 and/or Other Standards.}

Solid Casing: \(90\% \times (\text{Ground Elev. - Water Level Elev.})\)

- Total Length: 899.52 ft.
- Nominal Diameter: 12 in.
- Wall Thickness: 0.375 in.
- Bottom Elevation: -52.59 ft, msl

Open Casing: \(\% \times (\text{Water Level Elev. - Bottom Elevation})\)

- Total Length: 40.48 ft.
- Nominal Diameter: 12 in.
- Wall Thickness: 0.375 in.
- Bottom Elevation: -52.59 ft, msl

- Note: Neither bentonite nor mud should be used in constricted areas.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): \(\text{ANSI/AWWA C200 \& API Spec. 5L \& ASTM A53 \& ASTM A139}\)
- Stainless Steel: (check one): \(\text{ASTM A409 (producing wells)} \& \text{ASTM A312 (monitor wells)}\)
- ABS Plastic conforming to ASTM F480 and ASTM D1527 (check one): \(\text{Schedule 40} \& \text{Schedule 80}\)
- PVC Plastic conforming to ASTM F490 and ASTM D1785 or ASTM D2421 (check one): \(\text{Schedule 40} \& \text{Schedule 80} \& \text{Schedule 120}\)
- Thermoset Plastic: (check one):
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Motor Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more): \(\text{ANSI/AWWA C200 \& API Spec. 5L \& ASTM A53 \& ASTM A139}\)
- Stainless Steel: (check one):
  - ASTM A409 (producing wells)
  - ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527 (check one): \(\text{Schedule 40} \& \text{Schedule 80}\)
- PVC Plastic conforming to ASTM F490 and ASTM D1785 or ASTM D2421 (check one): \(\text{Schedule 40} \& \text{Schedule 80} \& \text{Schedule 120}\)
- Thermoset Plastic: (check one):
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Motor Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or:

\[
\text{Bottom Elevation of Well Limit} = \left(\frac{1}{4} \times \text{Water Elevation} \right) - \text{Bottom Elevation of Well Limit} \cdot \frac{2}{3}
\]

Example: Estimated + 2 ft. Water Level Elev. \text{Bottom Elevation of Well Limit} = \left(\frac{2}{3} \times \text{Water Elevation} \right) - 18.5 ft.

- The elevation must be referenced to mean sea level.
APPLICANT: (Fill out all three, if applicable, and place a check next to the primary contact)

1. (a) □ WELL OWNER: Kekaha Venture, Inc. Contact Person: Tyler Smith Phone: 887-0264
   Mailing Address: PMB 428 75-1027 Henry St. Kailua-Kona, HI 96740
   Fax: 887-0125

   (b) □ LAND OWNER: Kamehameha Schools Contact Person: Rick Robinson Phone: 322-5300
      Mailing Address: 79-683 Ali`i Dr. Suite 222, Kailua-Kona, HI 96740
      Fax: 808-322-9446

   (c) □ CONTRACTOR: Wai`eli Drilling Contact Person: Dale Stromquist Phone: 324-1420
      Mailing Address: 78-6740 Makolea St. Kailua-Kona, HI 96740
      Fax: 322-0928

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

2. WELL NAME: Kaupulehu #3 Island: Hawaii
   Address: Kaupulehu Tax Map Key: 7-2-03
   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

3. PROPOSED WORK: (check all that apply)
   □ Construct New Well
   □ Modify Existing Well
   □ Abandon/Seal
   □ Install New Pump
   *State Well No.: 4757-03 (if unknown, please call Commission at 587-0225)

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

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE: (check all that apply)
   □ Municipal (including hotels, stores, etc.)
   □ Industrial
   □ Domestic (individual, noncommercial water system)
   □ Irrigation (crop)
   □ Golf Course
   □ No. of Acres: 120
   □ Military
   □ Other (explain)

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: .6 million gallons per day
   (b) METHOD OF FLOW MEASUREMENT: □ Flowmeter □ Open-pipe □ Weir □ Orifice □ Other (explain)

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   □ Not Required
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEC at 585-4185
   □ Not Required
   Special Management Area Permit (SMAP) To determine if an SMAP is necessary: on Oahu, call 527-5374; on Hawaii, call 961-8286; for Maui county, call 270-7235; on Kauai, call 241-6077
   □ Not Required

9. REMARKS, EXPLANATIONS:

   (If more space is needed, please attach additional sheet)

   NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work, 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity; 5) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $10,000/day.

   Well Owner: Kekaha Venture, Inc. Landowner: Rick Robinson Contractor: Dale Stromquist
   Signature: __________________________ Signature: __________________________ Signature: __________________________
   Date: __________ Date: __________ Date: __________

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

WCPA Form 92101
10. PROPOSED WELL SECTION

<table>
<thead>
<tr>
<th><strong>Hole Diameter:</strong></th>
<th>19 in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elevation at top of casing:</strong></td>
<td>889.98 ft, msl*</td>
</tr>
</tbody>
</table>

- **Cement Group:** 850 ft (min 70% of distance from ground elevation to top of water surface or 50 ft, whichever is less)
- **Rock or Gravel Packing:** 80 ft
  - Material: Crushed Basalt or Rounded Gravel
- **Estimated Water Level Elevation:** +3.91 ft, msl*

Solid Casing Material:
- **Carbon Steel:** compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
- **Stainless Steel:** (check one):
  - ASTM A242
  - Type E
  - Type S
  - Grade B
  - Other
- **ABS Plastic conforming to:**
  - ASTM F480 and ASTM D1527 (check one)
  - Schedule 40
  - Schedule 80
- **PVC Plastic conforming to:**
  - ASTM F480 and ASTM D1785 or ASTM D2241 (check one)
  - Schedule 40
  - Schedule 80
  - Schedule 120

Thermoset Plastic: (check one)
- **Fiberglass Wound Resin Pipe conforming to:**
  - ASTM D2996
- **Centrally Cast Resin Pipe conforming to:**
  - ASTM D2997
- **Reinforced Plastic Mortar Pressure Pipe conforming to:**
  - ASTM D3517
- **Glass Fiber Reinforced Resin Pressure Pipe conforming to:**
  - AWWA C950
- **FEP Fluorocarbon Tubing conforming to:**
  - ASTM D3296

Open Casing Material:
- **Carbon Steel:** compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
- **Stainless Steel:** (check one):
  - ASTM A242
  - Type E
  - Type S
  - Grade B
  - Other
- **ABS Plastic conforming to:**
  - ASTM F480 and ASTM D1527 (check one)
  - Schedule 40
  - Schedule 80
- **PVC Plastic conforming to:**
  - ASTM F480 and ASTM D1785 or ASTM D2241 (check one)
  - Schedule 40
  - Schedule 80
  - Schedule 120

Thermoset Plastic: (check one)
- **Fiberglass Wound Resin Pipe conforming to:**
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- **Centrally Cast Resin Pipe conforming to:**
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- **Reinforced Plastic Mortar Pressure Pipe conforming to:**
  - ASTM D3517
- **Glass Fiber Reinforced Resin Pressure Pipe conforming to:**
  - AWWA C950
- **FEP Fluorocarbon Tubing conforming to:**
  - ASTM D3296

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

For non-salt water Basal Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation - 41 ft, Water Level Elev.)

Example: Estimated + 2 ft. Water Level Elev. —> Bottom Elevation of Well Limit = (2 + 41 ft, Water Level Elev.) - 18.5 ft.

<table>
<thead>
<tr>
<th><strong>Open Hole:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length:</strong> 60 ft</td>
</tr>
<tr>
<td><strong>Diameter:</strong> 10.63 in</td>
</tr>
<tr>
<td><strong>Bottom Elevation:</strong> -112.59 ft, msl*</td>
</tr>
</tbody>
</table>

*Solid Casing (90% x (Ground Elev. - Water Level Elev.))
  - Total Length: 899.52 ft
  - Nominal Diameter: 12 in
  - Wall Thickness: 0.375 in
  - Bottom Elevation: -52.59 ft, msl*

Solid Casing Material (see attached schematic if different from diagram provided below):
- **Hawaii Well Construction and Pump Installation Standards**
  - To ensure that your as-built is in compliance with applicable standards.

Minimum of 2' Radius & 4' Thick Concrete Pad to contain benchmark surveyed to nearest 0.01 ft. (887.41 ft, msl)
WELL & PUMP INFORMATION: (Please fill in the diagram on the back of this form.)

2. WELL NAME: Kaupulehu #3 Island: Hawaii
   Address: Kaupulehu
   Tax Map Key: Zone 7 Sec 3 Plat 103 Parcels 044
   Attach: (a) portion of a 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
   (b) a property tax map, showing well location referenced to established property boundaries

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

   *State Well No: 4757-03 (If unknown, please call Commission at 587-0225)

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

5. PROPOSED PUMPING RATE: 550 gallons per minute

6. PROPOSED USE: (check all that apply)
   - Municipal (including hotels, stores, etc.)
   - Industrial
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - Golf Course
   - No. of Acres: 120
   - Military
   - Other (explain):

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: .6 million gallons per day
   (b) METHOD OF FLOW MEASUREMENT: Flowmeter Open-pipe Water Orifice Other (explain)

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at 587-0414
   - Not Required
   - Required, date approved
   Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEC at 585-4185
   - Not Required
   - Required, date published in OEC bulletin
   Special Management Area Permit (SMAP) To determine if an SMAP is necessary: on Oahu, call 527-5374; on Hawaii, call 961-8286, for Maui county, call 270-7235; on Kauai, call 241-6677.
   - Not Required
   - Required, date approved

9. REMARKS, EXPLANATIONS:
   (If more space is needed, please attach additional sheet)

NOTE: Signing below indicates the signatories understand and swear that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/reclamation report within 60 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity. 5) In the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $1000 per day.

Well Owner: Kekaha Venture, Inc. Landowner: Rick Robinson Contractor: Dale Stromquis
Signature: ___________________________ Signature: ___________________________ Signature: ___________________________
Date: ___________________________ Date: ___________________________ Date: ___________________________

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

WCPBA Form 9/21/01
For Stainless ASS PVC Open Carbon Thermoset ASS Plastic PVC Plastic Stainless Steel:

be submitted in the Well referenced to a benchmark which has been established by a surveyor at the time of application filing Final elevations of well components shall

- non-salt Plastic conforming to

And Example:

1000 ft.

Material:

Material:

- cement: compliant with

ASTM F480 and (ASTM D17BS

O Reinforced Plastic Mortar Pressure

FEP Fluorocarbon Tubing conforming to ASTM D3296

Solid Casing: (check one or more):

Hole Diameter: 19 in

Wedge Thickness: 0.375 in

Bottom Elevation: -52.59 ft, msl

Open Casing: [ ] Perforated [ ] Screen

Total Length: 40.48 ft

Nominal Diameter: 12 in

Wall Thickness: 0.375 in

Bottom Elevation: -52.59 ft, msl

note: Neither bentonite nor mud should be used in
cemented zones during drilling

Solid Casing Material:

Carbon Steel: compliant with

And compliant with

Stainless Steel: (check one)

ABS Plastic conforming to ASTM F480 and ASTM D1527 (check one)

Thermoset Plastic: (check one)

Open Casing Material:

Carbon Steel: compliant with

And compliant with

Stainless Steel: (check one)

ABS Plastic conforming to ASTM F480 and ASTM D1527 (check one)

Thermoset Plastic: (check one)

- Centrifugally Cast Resin Pipe conforming to ASTM D2997

- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517

- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950

- PTFE Fluorocarbon Tubing conforming to ASTM D3296

- FEP Fluorocarbon Tubing conforming to ASTM D3296

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or

Bottom Elevation of Well Limit = (Water Elevation - Ground Elev.)/4

Example: Estimated + 2 ft. Water Level Elev. - + Bottom Elevation of Well Limit = (2 - 4) / 4 = +0.5 ft.

Elevation at top of casing 889.98 ft, msl

Minimum of 2 RADIUS 4' Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.) 887.41 ft, msl

Elevation: +3.91 ft, msl

- The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.
Pumping Test No. Constant Rate
Well 4757-03
Discharge 126087.50 ft³/d

Transmissivity [ft²/d]: 4.26 x 10⁵
Waterloo Hydrogeologic
180 Columbia St. W.
Waterloo, Ontario, Canada
ph. (519) 746-1788

Pumping test analysis
Time-Drawdown-method after
COOPER & JACOB
Confined aquifer

Date: 02.04.2002 Page 2

Project: Kaupulehu Irr. Well No. 3

Evaluated by: Glenn Bauer

Pumping Test No. Constant Rate
Well 4757-03
Kaupulehu Irr. Well No. 3
Discharge 126087.50 ft³/d
Distance from the pumping well 1.00 ft

Static water level: 883.00 ft below datum

<table>
<thead>
<tr>
<th>Pumping test duration</th>
<th>Water level [ft]</th>
<th>Drawdown [ft]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>890.85</td>
<td>7.85</td>
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<tr>
<td>2</td>
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</tr>
<tr>
<td>14</td>
<td>890.99</td>
<td>7.99</td>
</tr>
</tbody>
</table>
ISLAND OF HAWAII

TOTAL HYDROLOGIC UNITS:

SUSTAINABLE YIELD / ABUNDANCE CODE

1 MILE RADIUS

Kaupulehu 3 Well (Well No. 4757-03)

SCALE: 1" = 2000'

Well Location
MEMORANDUM

TO: CWRM
FROM: Dennis Takahashi
587-0347

SUBJECT: B & F Notice No. 346
For: TIFFANY FORWARD

Attached is a copy of a Notice for Adjustment Required for Returned Check and the actual returned check which was forwarded to our office by the Department of Budget and Finance, Treasury Management Branch. Any adjustment to deposits into an official State bank account is initially reported to B&F.

Fiscal will be responsible for adjusting official state records using the original of the notice.

Your office is responsible for the following checked items:

[ X ] Informing the maker of the check of the notice;
[ X ] Asking for a replacement cashiers check or cash;
[ X ] Collecting the $15.00 service fee;
[ ] Completing the bottom portion of this memo and returning or fax (587-0360) a copy to our office as soon as possible.

Call Lynne Masuyama at 587-0356 or me if you have any questions.

Other Collections(describe): KAUPULEHU #4 PERMIT

Schedule of Collection No: ______ Schedule Date: ______
Bank Deposit Amount: ______ Bank Deposit Date: ______
Completed By: ____________________ Phone: ____________
STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
FINANCIAL ADMINISTRATIVE DIVISION
TREASURY MANAGEMENT BRANCH

NOTICE OF ADJUSTMENT REQUIRED FOR RETURNED CHECK

| FIN 101 NO: | 346 |
| DATE:      | 5/7/2002 |
| TO:        | DLNR |
| Agency:    | Fiscal Office |
| FROM:      | Dir of Fin |
| By:        | et |

| Depository Bank: | FHB |
| Bank Account Number: | 01-000497 |
| Bank Account Title: | Dir of Fin |

| Check Drawn On: | Central Pacific Bank |
| Reason Returned: | NSF |
| Check Number: | 0121 |

TIFFANY FORWARD 514-94-1696
PH. 808-329-2345
75-5608 HENALOLI RD UNIT 17
KAILUA KONA, HI 96740

RETURNED NOT PAID
BECAUSE

Pay to the Order of Dept. Land and Natural Resources

For Kaupee Stream Permit

In accordance with the State Comptroller's Special Distribution Memorandum No. 1984-17, please prepare a Journal voucher (JV), SAFORM A-27, to reduce your account to which this receipt was credited. A copy of this notification should be attached to the JV that is submitted to the Accounting Division at the Department of Accounting and General Services (DAGS).

Please also collect applicable bad check charge as provided by law or your rules and regulations.

Form Fin-101 (Revised 03-2002)
<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT.</th>
<th>TO:</th>
<th>INIT.</th>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>MATHIAS, T.</td>
<td></td>
<td>Approval Signature</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td></td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>DANBARA, S.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td></td>
<td>Take Action</td>
</tr>
<tr>
<td>FUJII, N.</td>
<td></td>
<td>NISHIOKA, L.</td>
<td></td>
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<td>Type Draft</td>
</tr>
<tr>
<td>HARDY, R.</td>
<td></td>
<td>OHYE, M.</td>
<td></td>
<td></td>
<td>Type Final</td>
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<tr>
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<td></td>
<td>SAKODA, E.</td>
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<td>File</td>
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<tr>
<td>ICE, C.</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td>Cashier's Check or</td>
<td></td>
</tr>
<tr>
<td>JINNAI, R.</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td>Not a Regular</td>
<td></td>
</tr>
<tr>
<td>KUNIMURA, I.</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td>Check</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date:** MAY 9 2002

**Suspense Date:**

**PLEASE:**

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

**Comments:**

- Ryan, which well is this for? May need to cancel permit. 4757-04 called date 5/14/02
- Please follow up. This is pretty bad to get an NSF for a $25 check
May 21, 2002

TO:       Anne Furuuchi, Fiscal Management Officer  
           Fiscal Office

ATTN:     Dennis Takahashi  
           Fiscal Office

FROM:     Linnel T. Nishioka, Deputy Director  
           Commission on Water Resource Management

SUBJECT:  B & F Notice No. 346 for Tiffany Forward (Well No. 4757-04)

Attached is the check for $40, which includes the replacement check and the $15 service fee. Ryan Imata of the Commission staff confirmed with Lynne Masuyama that the check is acceptable in lieu of a cashier’s check or cash. Mr. Imata has also contacted the party who wrote the check and confirmed that there are sufficient funds for this check to clear.

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

RI:ss
Attachment
MEMORANDUM

TO: CWRM

FROM: Dennis Takahashi
       587-0347

SUBJECT: B & F Notice No. 346

For: TIFFANY FORWARD

Attached is a copy of a Notice for Adjustment Required for Returned Check and the actual returned check which was forwarded to our office by the Department of Budget and Finance, Treasury Management Branch. Any adjustment to deposits into an official State bank account is initially reported to B&F.

Fiscal will be responsible for adjusting official state records using the original of the notice.

Your office is responsible for the following checked items:

[ X ] Informing the maker of the check of the notice;
[ X ] Asking for a replacement cashiers check or cash;
[ X ] Collecting the $15.00 service fee;
[ ] Completing the bottom portion of this memo and returning or fax (587-0360) a copy to our office as soon as possible.

Call Lynne Masuyama at 587-0356 or me if you have any questions.

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

Other Collection$(describe): KAUPULEHU #4 PERMIT

Schedule of Collection No: ______ Schedule Date: ______

Bank Deposit Amount: ______ Bank Deposit Date: ______

Completed By: ________________________ Phone: ____________
STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
FINANCIAL ADMINISTRATIVE DIVISION
TREASURY MANAGEMENT BRANCH

NOTICE OF ADJUSTMENT REQUIRED FOR RETURNED CHECK

FIN 101 NO: 346
DATE: 5/7/2002
TO: DLNR
Agency: Fiscal Office
FROM: Dir of Fin
By: et

Depository Bank: FHB
Bank Account Number: 01-000497
Bank Account Title: Dir of Fin

Check Drawn On: Central Pacific Bank
Reason Returned: NSF
Check Number: 0121

In accordance with the State Comptroller's Special Distribution Memorandum No. 1984-17, please prepare a Journal voucher (JV), SAFORM A-27, to reduce your account to which this receipt was credited. A copy of this notification should be attached to the JV that is submitted to the Accounting Division at the Department of Accounting and General Services (DAGS).

Please also collect applicable bad check charge as provided by law or your rules and regulations.

Form Fin-101 (Revised 03-2002)
PIA-Kona Limited Partnership
REQUEST FOR VARIANCE OF PUMP TEST STANDARDS
4757-03 & -04 (Well No. 4757-03 & -04)
Well Construction: 18/18-inch Casing Diameter, 1000/1017-ft Deep Well
Pump Installation: 550/550 gpm for Irrigation use
TMK 7-2-003: 003, Kaupulehu, Hawaii

APPLICANT:  
PIA-Kona Limited Partnership
P.O. Box 803
Kamuela, HI 96743

LANDOWNER:  
Kamehameha Schools
567 South King Street
Honolulu, Hawaii 96813

DESCRIPTION:  
Location: (See Exhibit 1)  
Dimensions: (See Exhibit 2)

BACKGROUND:  
Well Construction Permits were issued for these two wells on April 19, 2000. The wells are currently under construction, and the Well Construction Permits are valid until April 19, 2002.

On February 8, 2000, the applicant submitted a Pump Installation Permit application for 550 gpm pumps for both wells.

Section 2.9 (b) of the Hawaii Well Construction and Pump Installation Standards (HWCPIS) specifies that a step drawdown test is required for any proposed pump pumping greater than 70 gpm. The step drawdown test is required to establish the efficiency of the well and to provide preliminary information on the yield, drawdown and salinity of the well. The specific requirements pertaining to the step drawdown tests can be found in Section 2.9 (b), which is attached as Exhibit 3.
Section 2.9 (c) of the HWCPIS specifies that for a 550 gpm pump, a constant rate pump test of 48 hours is required. Constant rate pump tests are required to determine hydraulic properties of the aquifer, to identify nearby boundaries such as dikes in wells located in confined and semi-confined aquifers, or to determine any trend in salinity in wells located in aquifers affected by salt water intrusion. The specific requirements pertaining to the constant rate test can be found in Section 2.9 (c), which is attached as Exhibit 3.

Historically, these pump tests have been performed with temporary test pumps. The data from such tests were then used to size and design the final permanent pump. As a policy to enforce compliance, staff requires that pump tests are acceptably performed before the issuance of the pump installation permit for the permanent pump.

ISSUES/ANALYSIS:

The applicant is requesting a variance from the standards, to allow the installation of the permanent pump prior to the issuance of the pump installation permit for testing purposes. Refer to Exhibit 5.

Staff has found in the past that permanent pumps installed to run the pump test are sometimes incapable of being throttled down to produce noticeable differences in drawdown during the step-drawdown test.

However, if the applicant can comply with the pump test protocol using the permanent pump, there should be no problems associated with the installation of the permanent pump prior to the issuance of the pump installation permit.

RECOMMENDATION:

That the Commission:

1. Approve the applicant’s request for a variance to allow the installation of the permanent pumps prior to the issuance of the pump installation permits, with the following conditions:
   
   a. The pump tests shall be started within one week of the installation of the pumps or staff requests that the pump test be rerun. Otherwise, the pumps shall be removed.
   
   b. The applicant shall submit pump test results within one day of the completion of the pump tests.
   
   c. Staff will complete its analysis of pump results within one business day and issue pump installation permit if pump tests are satisfactory.
   
   d. In the event that pump tests are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with 1.a., b. and c. above until they are in compliance with standard pump test requirements.

Respectfully submitted,

LINNEL T. NISHIOKA
Deputy Director

Exhibit(s):
1. (Location Map)
2. (Proposed Well Section)
3. (Excerpt from Pump Standards)
4. (Standard Pump Installation Permit Conditions)
5. (Letter Requesting Variance)
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): ✓ ANSI/AWWA C200  ✓ API Spec. 5L  ✓ASTM A53  ❌ ASTM A139
- Stainless Steel: compliant with (check one or more): ❌ ASTM A242  ✓ Type E  ✓ Type S  ✓ Grade B  ❌ Other
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): ✓ Schedule 40  ❌ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2341): (check one): ✓ Schedule 40  ✓ Schedule 80  ❌ Schedule 120
- Thermoset Plastic: (check one): ✓ Filament Wound Resin Pipe conforming to ASTM D2996  ✓ Centrifugally Cast Resin Pipe conforming to ASTM D2997  ✓ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D317  ✓ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950  ✓ 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
- Stainless Steel: compliant with (check one or more): ✓ ASTM A242  ✓ Type E  ✓ Type S  ✓ Grade B  ❌ Other
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): ❌ Schedule 40  ✓ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2341): (check one): ❌ Schedule 40  ✓ Schedule 80  ❌ Schedule 120
- Thermoset Plastic: (check one): ❌ Filament Wound Resin Pipe conforming to ASTM D2996  ✓ Centrifugally Cast Resin Pipe conforming to ASTM D2997  ✓ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D317  ✓ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950  ✓ PTFE Fluorocarbon Tubing conforming to ASTM D3296  ✓ FEP Fluorocarbon Tubing conforming to ASTM D3298

---

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Wall Limit = (Water Level - 0.25 x Water Level Elev.)

Example: Estimated = 2 ft. Water Level Elev.  ➔ Bottom Elevation of Wall Limit = (2. 0.25) = -1.5 ft.
KAUPULEHU #3
WELL NO. 4757-03

A Water Development Joint Venture

Junction Box

250KVA Transformer
Reduced
voltage
2300V
Starter
440V
utility
Transformer

SURFACE DISCHARGE ELBOW:

CONDITIONS
U.S. GALLONS PER MINUTE: 550
TOTAL DYNAMIC HEAD: 960
LIQUID: water
SPECIFIC GRAVITY: 1.0

MAXIMUM DIAMETER OF UNIT: 10 3/4 Shroud

8Rd. Short

SUBMERSIBLE CABLE SIZE: 4'-4KV

PUMP MANUFACTURE: Crown
MODEL NUMBER: 8L-600 10 Stage

SUCTION STRAINER: STL. STL.

SUBMERSIBLE MOTOR MFG: Franklin Severe Duty
HP: 200 PHASE: 3 CYCLE: 60
VOLTAGE: 2300 RPM: 3500 49.4AMP

CUSTOMER: Kekaha Venture Inc.
PROJECT: Kaupulehu #3
PUMP DESIGNATION:

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED

PO Box 5685 - 78-6740 Makoleon Street
Kailua-Kona, Hawaii 96743
808-324-1420 - Fax 808-324-0928

EXHIBIT 2
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

- **Hole Diameter:** 18 in.
- **Minimum of 2" Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)** 917 ft., masl
- **Elevation at top of casing:** 919 ft., masl
- **Solid Casing:** (90% x (Ground Elev. - Water Level Elev.) Total Length: 959 ft.
  - Nominal Diameter: 12 in.
  - Wall Thickness: 0.375 in.
  - Bottom Elevation: -83 ft., masl

**Open Casing:**
- **Total Length:** 41 ft.
- **Nominal Diameter:** 12 in.
- **Wall Thickness:** 0.375 in.
- **Bottom Elevation:** -83 ft., masl

- **Total Depth:** 1017 ft.
- **Rock or Gravel Packing:** N/A in.
- **Material:**
  - Crushed Basalt
  - Rounded Gravel

- **Estimated Water Level Elevation:** +3.9 ft., masl

**Cement Grout:** N/A

**Annular space between hole and casing (min. 3")**:
- 3 in.

**Hole:**
- **Length:** 17 ft.
- **Diameter:** 18 in.
- **Bottom Elevation:** -100 ft., masl

- **Open Hole:**
  - **Length:** 127 ft.
  - **Diameter:** 18 in.
  - **Bottom Elevation:** -100 ft., masl

---

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

- **Bottom Elevation of Well Limit**: (Water Elevation - 5 ft. Water Level Elev.)


### Solid Casing Material:
- Carbon Steel: compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139

- Stainless Steel (check one or more):
  - ASTM A242
  - Type E
  - ASTM A409 (production welds)
  - ASTM A312 (monitor welds)

- ABS Plastic conformed to ASTM F490 and ASTM D1527: (check one)
  - Schedule 10
  - Schedule 40
  - Schedule 80

- PVC Plastic conformed to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one)
  - Schedule 40
  - Schedule 80
  - Schedule 120

- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3298
  - FEP Fluorocarbon Tubing conforming to ASTM D3298

### Open Casing Material:
- Carbon Steel: compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139

- Stainless Steel (check one):
  - ASTM A242
  - Type E
  - ASTM A409 (production welds)
  - ASTM A312 (monitor welds)

- ABS Plastic conformed to ASTM F490 and ASTM D1527: (check one)
  - Schedule 10
  - Schedule 40
  - Schedule 80

- PVC Plastic conformed to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one)
  - Schedule 40
  - Schedule 80
  - Schedule 120

- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D2996
  - Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3298
  - FEP Fluorocarbon Tubing conforming to ASTM D3298

---

* TO BE VERIFIED UPON COMPLETION (BEFORE PUMP INSTALLED)
KAUPULEHU #4  
WELL NO. 4757-04

SURFACE DISCHARGE ELBOW: 6" - 125

CONDITIONS
U.S. GALLONS PER MINUTE: 550
TOTAL DYNAMIC HEAD: 980
LIQUID: Water
SPECIFIC GRAVITY: 1.0

MAXIMUM DIAMETER OF UNIT: 10 3/4 Shroud

COLUMN PIPE: 6 5/8 8rd. Galv. .280 Wall

SUBMERSIBLE CABLE SIZE: #4 4KV

PUMP MANUFACTURE: Crown
MODEL NUMBER: 8L 600 10 Stage
SUCTION STRAINER: STN STL

SUBMERSIBLE MOTOR MFG. Franklin Severe Se:
HP: 200 PHASE: 3 CYCLE: 60
VOLTAGE: 2300 RPM: 3500 49.4 AMP

CUSTOMER: Kekaha Venture Inc.
PROJECT: Kekaha Venture Inc.
PUMP DESIGNATION:

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED

CSN Shoe 1 1000'
2.9 Minimum Well Testing

(a) **Purpose**

Well testing is required when new wells are drilled or when existing wells are modified and have not been previously tested in accordance with the provisions of these Standards. Well testing shall normally consist of a short step-drawdown test and a long-term constant-rate test. Well testing is not mandatory for monitor wells. The purpose of well testing in the prescribed manner is to obtain hydrologic information needed to determine the well's performance and efficiency with regard to yield and drawdown; the well's trend with regard to drawdown, recovery, and salinity; and the nearby hydraulic properties of the aquifer.

(b) **Step-Drawdown Tests**

Step-drawdown tests are required to establish the efficiency of the well and to provide preliminary information on the yield, drawdown, and salinity (chloride content) of the well. Step-drawdown tests are not required for wells proposed for production of less than 100,000 gallons per day or 70 gallons per minute. The water level in the pumped well shall be measured at 15-minute intervals for 45 minutes prior to the initiation of the step-drawdown test in order to verify the pre-test static water levels. The step-drawdown test shall consist of pumping the well at progressively increasing fractions of the maximum discharge capacity proposed by the permittee or determined during well development. The minimum length of time for each discharge rate shall be one-half hour and the minimum number of discharge rates shall be 3, depending upon the maximum discharge capacity and the occurrence of observable changes in pumping water levels from one pumping rate to the next. The step-drawdown test shall begin with the lowest pumping rate and conclude with the highest rate. Pumping shall be continuous throughout the entire step-drawdown test. As a minimum, a water sample taken at the end of the test shall be tested for chloride content.

(c) **Constant-Rate Tests**

Constant-rate tests are required on all wells intended for production of ground water to determine the hydraulic properties of the aquifer, to identify any nearby hydrologic boundaries such as dikes in wells located in confined and semi-confined aquifers, or to determine any trend in salinity (chloride content) in wells located in aquifers affected by salt-water intrusion. The

**EXHIBIT 3**
A constant-rate test shall not commence until the water level in the pumped well has fully recovered from the step-drawdown test. Prior to the start of the constant-rate test, the static water level in the pumped well shall be measured at 15-minute intervals for 45 minutes.

The pumping rate for the constant-rate test shall be an amount as determined by the results of the step-drawdown test or equal to the pump capacity proposed by the well owner/operator. Constant-rate tests shall be pumped continuously for a minimum period of time, as shown in Table 9.

### Table 9. Minimum Test Period for Constant Rate Tests

<table>
<thead>
<tr>
<th>Proposed Use of Well</th>
<th>Proposed Capacity (gpm)</th>
<th>Minimum Test Period (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-County Water Supply</td>
<td>0 - 50</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>51 - 100</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>101 - 300</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>301 - 700</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>701 - 1000</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>1001 +</td>
<td>96</td>
</tr>
<tr>
<td>County Water Supply</td>
<td></td>
<td>96</td>
</tr>
</tbody>
</table>

The water discharged from a well during constant-rate tests shall be transported to a distance sufficient to prevent the pumped water from reaching the ground-water table and affecting the test results and shall be discharged in a manner that meets best management practices to eliminate erosion.

(d) **Accuracy of Measurements**

The rate of pumping shall be recorded in gallons per minute (gpm) and shall be maintained within ±30 gpm or ±10 percent of the designated rate, whichever is less. The depth to water shall be measured as accurately as possible, but in no case less accurate than to the nearest one-tenth of a foot. Time shall be measured as accurately as possible, but in no case less accurate than to the nearest minute. In observation wells, accuracy of measurement shall be no less than one-hundredth of a foot.
STANDARD PUMP INSTALLATION PERMIT CONDITIONS

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 4757-03 & -04 (Well No. 4757-03 & -04) at Kaupulehu, Hawaii, TMK 7-2-003: 003, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 550/550 gpm capacity, or less, pump in the well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on monthly basis, on forms provided by the Commission (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The applicant shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Commission within sixty (60) days after completion of work.

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

7. The pump installation permit application and staff submittal approved by the Commission at its January 30, 2002 meeting are incorporated into the permit by reference.

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

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

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

EXHIBIT 4
December 28, 2001

Gilbert S. Coloma-Agaran
Chairperson
Commission on Water Resource Management
PO Box 621
Honolulu, 96809

SUBJECT: Request for Variance of Pump Installation Protocol
Wells Nos. 4757-03 and 4757-04

Dear Chairperson Coloma-Agaran:

As discussed at the December 19, 2001 meeting of the CWRM, I explained some of the circumstances and difficulties of pump installation permitting and testing procedures presented to our clients, primarily on Hawaii, where wells deeper than 800' to water are the rule. In the late 1980's, WWS, on behalf of its clients and for the purpose of gaining knowledge necessary to facilitate timely design and purchase of permanent pumping equipment, introduced a well testing procedure which involved installing submersible test pump equipment in the uncased pilot bore of deep, rotary drilled wells. It had become apparent that the deep, rotary or hammer drilled wells on Hawaii would dominate the well development scene. To facilitate the rapidly accelerating water development needs, a timely ordering of submersible pumping units was required and the trend was away from the expensive and complex line shaft, vertical turbine pumps.

It is now a matter of routine to insert a submersible test pump unit in the pilot bore of a new well for the purpose of establishing the yield and quality prior to reaming and casing. The designed pumps are then ordered and delivered to time with the completion of the cased well. This technique allows the well to be placed in service immediately and is part of the critical path program of private water purveyors.

The adopted CWRM testing protocol was originally instituted by the source developers, in particular government agencies, for the purpose of learning about the resource and well yield for purposes of pump design, primarily on Oahu. As groundwater development accelerated on neighbor islands, new techniques for the construction, testing and cleaning wells were created by the private sector. Beginning in the late 1980's, the submersible pump units became the pumps for deep wells. The testing protocol and sequence required by the CWRM is expensive and untimely in today's water development climate.
This request is for a variance from the order in which testing and pump installation approval is accomplished. By the time each of the subject wells is cased and grouted, the pilot bore will have been pumped and tested and the permanent pump will be on the site ready for installation. We are requesting permanent pump installation approval prior to well completion so that the permanent pump can be used to clean and test the well. Once the test results have been submitted to the CWRM with the Well Completion Report, the data can be reviewed, approved administratively as to completeness and the well can be placed immediately into service.

It is very costly for the water developer to install and remove a test pump for purely data collection. Use of a permanent pump is adequate. If damage to pump equipment occurs, such damage is the risk of the owner.

Sincerely,

Stephen P. Bowles

Attachments

cc: Linnel Nishioka, Deputy Director – CWRM
Guy Lam - Kekaha Venture
Dale Stromquist – Wa‘elei Drilling & Development
Roger Harris – PIA / Kamehameha Schools
**Facsimile Transmittal**

<table>
<thead>
<tr>
<th>To:</th>
<th>Attn: Ryan Imata - CWRM</th>
<th>Fax:</th>
<th>(808) 587-0219</th>
</tr>
</thead>
<tbody>
<tr>
<td>From:</td>
<td>Steve Bowles</td>
<td>Date:</td>
<td>January 7, 2002</td>
</tr>
<tr>
<td>Re:</td>
<td>Variance Info - Well Nos. 4757-03&amp;-04</td>
<td>Pages: 8 including cover sheet</td>
<td></td>
</tr>
</tbody>
</table>

- Urgent
- For Review
- Please Comment
- Please Reply
- Please Recycle

**Message:**

Ryan,

For your information, we have already mailed these to you but thought to fax you a copy as well.

Mahalo,

Steve
December 28, 2001

Gilbert S. Coloma-Agaran  
Chairperson  
Commission on Water Resource Management  
PO Box 621  
Honolulu, 96809

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Wells Nos. 4757-03 and 4757-04

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Chairperson Coloma-Agaran  
December 28, 2001  
Page 2 of 2

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Sincerely,

Stephen P. Bowles

Attachments

cc: Linnel Nishioka, Deputy Director – CWRM  
Guy Lam - Kekaha Venture  
Dale Stromquist – Wai`eli Drilling & Development  
Roger Harris – PIA / Kamehameha Schools
January 4, 2002

Gilbert S. Coloma-Agaran  
Chairperson  
Commission on Water Resource Management  
PO Box 621  
Honolulu, 96809

SUBJECT: Well Sections for Wells Nos. 4757-03 and 4757-04

Dear Chairperson Coloma-Agaran:

On December 28, 2001, we sent you a letter requesting a variance of pump installation protocol. Unfortunately, the attachments were incomplete. We are forwarding you completed well sections for Well Nos. 4757-03 and 4757-04. Please disregard the previous attachments and replace with these for your review.

We apologize for any inconvenience made to you.

Sincerely,

Stephen P. Bowles

Attachments

cc: Linnel Nishioka, Deputy Director – CWRM  
Guy Lam - Kekaha Venture, Inc.  
Dale Stromquist – Wai‘eili Drilling & Development  
Roger Harris – PIA-Kona Limited Partnership  
Rick Robinson - Kamehameha Schools
KAUPULEHU #3
WELL NO. 4757-03

10. PROPOSED WELL SECTION
(please attach schematic if different from diagram provided below)

For water wells, bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, in any case, less than 2 ft. Water Level Elev.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200, API Spec. 5L, ASTM A53, ASTM A139
- Stainless Steel: compliant with (check one or more): ASTM A242, Type E, Type S, Grade B, Other
- ABS Plastic: conforming to ASTM F490 and ASTM D1237, Schedule 40, Schedule 80
- PVC Plastic: conforming to ASTM F490 and ASTM D1237, Schedule 40, Schedule 80, Schedule 80, Schedule 120
- Thermoset Plastic: filament wound resin pipe conforming to ASTM D2296
- Centrifugally cast resin pipe conforming to ASTM D2207
- Reinforced plastic mortar pressure pipe conforming to ASTM D517
- Glass fiber reinforced resin pressure pipe conforming to AWWA C900
- FEP fluorocarbon tubing conforming to ASTM D2298

Open Casing Material:
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200, API Spec. 5L, ASTM A53, ASTM A139
- Stainless Steel: compliant with (check one or more): ASTM A242, Type E, Type S, Grade B, Other
- ABS Plastic: conforming to ASTM F490 and ASTM D1237, Schedule 40, Schedule 80
- PVC Plastic: conforming to ASTM F490 and ASTM D1237, Schedule 40, Schedule 80, Schedule 80, Schedule 120
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- Centrifugally cast resin pipe conforming to ASTM D2207
- Reinforced plastic mortar pressure pipe conforming to ASTM D517
- Glass fiber reinforced resin pressure pipe conforming to AWWA C900
- FEP fluorocarbon tubing conforming to ASTM D2298
KAUPULEHU #3
WELL NO. 4757-03

A Water Development Joint Venture

SURFACE DISCHARGE ELBOW:

CONDITIONS
U.S. GALLONS PER MINUTE: 550
TOTAL DYNAMIC HEAD: 960
LIQUID: Water
SPECIFIC GRAVITY: 1.0

MAXIMUM DIAMETER OF UNIT: 10 3/4 Shroud

8Kd. Short

SUBMERSIBLE CABLE SIZE: 4'-4KV

PUMP MANUFACTURE: Crown
MODEL NUMBER: 8L-600 10 Stage
SUCTION STRAINER: STD STL.

SUBMERSIBLE MOTOR MFG: Franklin Severe Duty
HP: 200
PHASE: 3
CYCLE: 60
VOLTAGE: 2300 RPM: 3500 49.4AMP

CUSTOMER: Kakaha Venture Inc.
PROJECT: Kaupulehu #3
PUMP DESIGNATION:

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED
10. PROPOSED WELL SECTION

| **Elevation at top of casing** | **919 ft** |
| **Hole Diameter** | **18 in** |
| **Total Depth** | **1017 ft** |

- **Minimum of 2 Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft)**
- **Ground Elevation:** **917 ft**

**Casing Group:** **380**

- **Annular space between hole and casing:** **3 in**
- **Rock or Gravel Packing:** N/A
- **Estimated Water Level:** **+1.9 ft**

**Solid Casing:** **200**

- **Total Length:** **959 ft**
- **Nominal Diameter:** **12 in**
- **Wall Thickness:** **3.75 in**
- **Bottom Elevation:** **-63 ft**

**Open Casing:**
- **Total Length:** **41 ft**
- **Nominal Diameter:** **12 in**
- **Wall Thickness:** **3.75 in**
- **Bottom Elevation:** **-63 ft**

---

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): [ANSI/AWWA C209](#) [API Spec. 5L](#) [ASTM A53](#) [ASTM A139](#) [ASTM A324](#) [Type E](#) [Type S](#) [Grade B](#) [Other](#)
- Stainless Steel: (check one): [ASTM A409 (production wells)](#) [ASTM A312 (monitor wells)](#)
- ABB 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 D2441): (check one): Schedule 40 [Schedule 80](#)
- Thermoplastic: (check one): [Flameguard Cast Resin Pipe conforming to ASTM D2997](#) [Carboplastite 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 D3298](#) [FEP Fluorocarbon Tubing conforming to ASTM D3298](#)

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more): [ANSI/AWWA C209](#) [API Spec. 5L](#) [ASTM A53](#) [ASTM A139](#) [ASTM A324](#) [Type E](#) [Type S](#) [Grade B](#) [Other](#)
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* TO BE VERIFIED UPON COMPLETION (BEFORE PUMP INSTALLED)
KAUPULEHU #4
WELL NO. 4757-04

Junction Box
Reduced
Voltage
Starter
w/Keltronics

255 KVA
Transformer

Reduced
Voltage
Starter
w/Keltronics

12477V

2477V

460V
Utility
Transformer

SURFACE DISCHARGE ELBOW: 6" - 125

CONDITIONS
U.S. GALLONS PER MINUTE: 550
TOTAL DYNAMIC HEAD: 980
LIQUID: Water
SPECIFIC GRAVITY: 1.0

MAXIMUM DIAMETER OF UNIT: 10 3/4 Shroud

COLUMN PIPE: 6 5/8 8rd. Galv. .280 Wall

SUBMERSIBLE CABLE SIZE: #4 4KV

PUMP MANUFACTURE: Crown
MODEL NUMBER: 8L 600 10 Stage

SUCTION STRAINER: STN STL

SUBMERSIBLE MOTOR MFG.: Franklin Severe Ser:
HP: 200 PHASE: 3 CYCLE: 60
VOLTAGE: 2300 RPM: 3500 49.4 AMP

CUSTOMER: Kekaha Venture Inc.
PROJECT: Kekaha Venture Inc.
PUMP DESIGNATION:

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED

CSN Shoe @ 1000'

PO Box 2585 - Kamuela, Hawaii 96743
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: LINNEL
DATE: JAN - 7 2002

TO: BAUER, G.
CHING, F.
DANBARA, S.
FUJII, N.
HARDY, R.
HIGA, D.
HIRANO, E.
ICE, C.
IMATA, R.
JINNAI, R.

INIT.

TO: KUNIMURA, I.
NAKAMA, L.
NAKANO, D.
NISHIOKA, L.
OHYE, M.
SAKODA, E.
SUBIA, S.
SWANSON, S.
UYENO, D.
YODA, K.

INIT.

FOR: Approval
Signature
Information

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

application forms? suppose to be WCRI? Status of?
I think I may have given 12/28 letter to Tolman for comments.
January 4, 2002

Gilbert S. Coloma-Agaran
Chairperson
Commission on Water Resource Management
PO Box 621
Honolulu, 96809

SUBJECT: Well Sections for Wells Nos. 4757-03 and 4757-04

Dear Chairperson Coloma-Agaran:

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Guy Lam - Kekaha Venture, Inc.
Dale Stromquist – Wai‘eli Drilling & Development
Roger Harris – PIA-Kona Limited Partnership
Rick Robinson - Kamehameha Schools
10. PROPOSED WELL SECTION  (Please attach schematic if different from diagram provided below)

Minimum of 2' Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft) 887.41 ft. msl

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

Solid Casing: (90% x (Ground Elevation - Water Level Elevation))
- Total Length: 899.52 ft.
- Nominal Diameter: 12 in.
- Wall Thickness: .375 in.
- Bottom Elevation: -12.11 ft. msl

Open Casing:
- Total Length: 40.42 ft.
- Nominal Diameter: 12 in.
- Wall Thickness: .375 in.
- Bottom Elevation: -52.59 ft. msl

Note: Neither bentonite nor mud should be used in saturated ground condition.

Open Hole:
- Length: 60 ft.
- Diameter: 10.63 in.
- Bottom Elevation: -112.59 ft. msl

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation - 41 x Water Level Elevation) / 4

Example: Estimated 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = ((2 - 41 x 2) / 4) = -18.5 ft.

Solid Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one or more): □ ASTM A422 □ Type E □ Type S □ Grade B □ Other
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one) □ Filament Wound Resin Pipe conforming to ASTM D2996 □ centrifugally Cast Resin Pipe conforming to ASTM D2997 □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517 □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C960 □ PTFE Fluorocarbon Tubing conforming to ASTM D3296 □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- Stainless Steel: (check one): □ ASTM A409 (production walls) □ ASTM A312 (monitor walls)
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one) □ Filament Wound Resin Pipe conforming to ASTM D2996 □ centrifugally Cast Resin Pipe conforming to ASTM D2997 □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517 □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C960 □ PTFE Fluorocarbon Tubing conforming to ASTM D3296 □ FEP Fluorocarbon Tubing conforming to ASTM D3296

Estimated Water Level Elevation: +3.91 ft. msl
KAUPULEHU #3
WELL NO. 4757-03

SURFACE DISCHARGE ELBOW:

CONDITIONS
U.S. GALLONS PER MINUTE: 550
TOTAL DYNAMIC HEAD: 960
LIQUID: Water
SPECIFIC GRAVITY: 1.0

MAXIMUM DIAMETER OF UNIT: 10 3/4 Shroud

8 Rd. Short

SUBMERSIBLE CABLE SIZE: 4' - 4KV

PUMP MANUFACTURE: Crown
MODEL NUMBER: 8L-600 10 Stage

SUCTION STRAINER: STN STL.

SUBMERSIBLE MOTOR MFG.: Franklin Severe Duty
HP: 200 PHASE: 3 CYCLE: 60
VOLTAGE: 2300 RPM: 3500 49.4AMP

CUSTOMER: Kakaha Venture Inc.
PROJECT: Kaupulehu #3
PUMP DESIGNATION:

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED

PO Box 5685 - 78-6740 Makoana Street
Kailua-Kona, Hawaii 96745
808-324-1420 - Fax 808-322-0928
10. PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

Hole Diameter: 18 in.
Elevation at top of casing: 919 ft., masl
Minimum of 2 Radii & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)
Ground Elevation: 917 ft., masl

Solid Casing: (2) 90% x (Ground Elevation - Water Level Elevation)
Total Length: 959 ft.
Nominal Diameter: 12 in.
Wall Thickness: 3.75 in.
Bottom Elevation: -42 ft., masl

Open Casing: □ Perforated □ Screen
Total Length: 41 ft.
Nominal Diameter: 12 in.
Wall Thickness: 3.75 in.
Bottom Elevation: -83 ft., masl

Note: Neither bentonite nor mud should be used in saturated zones during drilling.

Open Hole:
Length: 17 ft.
Diameter: 18 in.
Bottom Elevation: -100 ft., masl

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

For non-salt water Basalt Wells - bottom elevation of well shall not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = (Water Elevation - 1/4 x Water Level Elevation)  
Example: Estimated 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 917 ft.) = -85.5 ft.

Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
□ Other
Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABB Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one) □ Filament Wound Resin Pipe conforming to ASTM D2296
□ Centrifugally Cast Resin Pipe conforming to ASTM D2297
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
□ Other
Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABB Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
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□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

* TO BE VERIFIED UPON COMPLETION (BEFORE PUMP INSTALLED)
KAUPULEHU #4
WELL NO. 4757-04

Junction Box TVSS
255 KVA Transformer
Reduced Voltage Starter w/Keltronics
460V Utility Transformer

SURFACE DISCHARGE ELBOW: 6" - 125

CONDITIONS
U.S. GALLONS PER MINUTE: 550
TOTAL DYNAMIC HEAD: 980
LIQUID: Water
SPECIFIC GRAVITY: 1.0

MAXIMUM DIAMETER OF UNIT: 10 3/4 Shroud

COLUMN PIPE: 6 5/8 8rd. Galv. .280 Wall

SUBMERSIBLE CABLE SIZE: #4 4KV

PUMP MANUFACTURE: Crown
MODEL NUMBER: 8L 600 10 Stage

SUCTION STRAINER: STN STL

SUBMERSIBLE MOTOR MFG: Franklin Severe Ser
HP: 200 PHASE: 3 CYCLE: 60
VOLTAGE: 2300 RPM: 3500 49.4 AMP

CUSTOMER: Kekaha Venture Inc.
PROJECT: Kekaha Venture Inc.
PUMP DESIGNATION:

NOTE: DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED
January 4, 2002

Gilbert S. Coloma-Agaran  
Chairperson  
Commission on Water Resource Management  
PO Box 621  
Honolulu, 96809

SUBJECT: Well Sections for Wells Nos. 4757-03 and 4757-04

Dear Chairperson Coloma-Agaran:

On December 28, 2001, we sent you a letter requesting a variance of pump installation protocol. Unfortunately, the attachments were incomplete. We are forwarding you completed well sections for Well Nos. 4757-03 and 4757-04. Please disregard the previous attachments and replace with these for your review.

We apologize for any inconvenience made to you.

Sincerely,

Stephen F. Bowles

Attachments

cc: [Redacted] Deputy Director – CWRM  
Guy Lam - Kekaha Venture, Inc.  
Dale Stromquist – Waiʻeli Drilling & Development  
Roger Harris – PIA-Kona Limited Partnership  
Rick Robinson - Kamehameha Schools
**WELL NUMBER:**  8-4751.03 Kāpulehu PIA 3

**DRILLER'S LOG (729-2 DL Form)**

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<th>Rock Description, Water Level, etc.</th>
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**Remarks:**

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ELEVATION CERTIFICATION
For
IRRIGATION WELL No. 3
8. 4151.03 KAUPULEHU - PIA 3
NANEAGOLF CLUB
TMK: (3) 7-2-03:03

I CERTIFY that the following elevations were obtained upon the existing well site as of December 12, 2001:

8X8 feet slab .......................................................... 887.30 feet
3X3 feet slab .......................................................... 887.78 feet
1.1 feet wide metal cap ............................................. 887.81 feet
Top of well bolt ...................................................... 888.09 feet

THIS CERTIFICATION is based upon the temporary bench mark on the concrete slab of WE1.1 #5 by R. M. Towill Corporation. The elevations are referenced to Mean Sea Level and are recorded on December 12, 2001 in Field Book T48, Page14 and Job File 3178-01.

Donald C. McIntosh, L. P. L. S. #4968
Consultant-Planner: Developments
Kailua-Kona, Hawaii
Job No: 3178-01
December 13, 2001
Mr. Roger Harris
PIA-Kona Limited Partnership
P.O. Box 803
Kamuela, HI 96743

Dear Mr. Harris:

Well Construction Permit
Kaupulehu Irrigation 3, 4 & 5 Wells (Well Nos. 4757-03, 04 and 4756-01)

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 depth of the well below sea level shall be in compliance with Section 2.2 of the Hawaii Well Construction and Pump Installation Standards.

This permit does not authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

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

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

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

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

Aloha,

[Signature]

TIMOTHY E. JOHNS
Chairperson

Enclosures
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 Kaupulehu Irrigation 3, 4 & 5 Wells (Well Nos. 4757-02, -04 and 4756-01) at Kaupulehu, Hawaii, TMK 7-2-3; 03, subject to the Hawaii Well Construction & Pump Installation Standards (12/3/97) which include but are not limited to the following conditions:

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

2. The well construction permit shall be for construction and testing of the well only. A minimum 1\frac{1}{4}\text{ in.} 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 cumulative water rights.

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

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997; HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

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

Date of Approval: April 19, 2000
Expiration Date: April 19, 2002

TIMOTHY E. JOHNS, 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/ Safe Drinking Water, Wastewater, and Clean Water Branches
  - Hawaii Department of Water Supply
WELL CONSTRUCTION PERMIT
Kaupulehu Irrigation 3, 4 & 5 Wells, Well Nos. 4757-03, -04 and 4756-01

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kaupulehu Irrigation 3, 4 & 5 Wells (Well Nos 4757-03, -04 and 4756-01) at Kaupulehu, Hawaii, TMK 7-2-3: 03, subject to the Hawaii Well Construction & Pump Installation Standards (12/3/97) which include but are not limited to the following conditions:

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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.

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Permittee's Signature: [Signature]
Printed Name: [Printed Name]
Date: [Date]
Firm or Title: [Firm or Title]

Driller's Signature: [Signature]
Printed Name: [Printed Name]
Date: [Date]
Firm or Title: [Firm or Title]

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
Hawaii Department of Water Supply
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: RYAN  DATE: 4/19/00  SUSPENSE DATE: 

TO:  INIT. TO:  INIT. FOR:  PLEASE:  

BAUER, G.  LOM, A.  3 Approval  See Me  
CHING, F.  NAOKA, L.  3 Signature  1 Review & Comment  
FUJII, N.  NAKANO, D.  4 Information  Take Action  
HARDY, R.  NISHIOKA, L.  
HIRANO, E.  OHYE, M.  
ICE, C.  OSAKODA, E.  
IMATA, R.  SUBIA, S.  
JINNAI, R.  SWANSON, S.  
KUNIMURA, I.  UYENO, D.  

WELL NUMBER 4757-03 4757-04 WELL NAME  Kaniwahau Dr. 3, 485 Wells

WELL CONSTRUCTION

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER  
2 PERMIT (2x)  
3 PUMP TEST  
4 DOH COMMENTS  
5 LAND DIV. COMMENTS  
6 WCR FORM  

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

PUMP INSTALLATION

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER  
2 PERMIT (2x)  
3 DOH COMMENTS  
4 LAND DIV. COMMENTS  
5 WCR FORM  
6 WUR FORM  

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY
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## PUBLIC RECORD DATA

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### SALES

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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.
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<td>Theoretical Thickness of Aquifer:</td>
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<td>Well Casing:</td>
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<td>County or Non-County:</td>
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<td>Minimum Length of Solid Casing:</td>
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<td>90% of ground to top of aquifer:</td>
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**Well No.** 4757-04
**Well Name** Kaupulehu 4
**Applicant** PIA-Kona LP

**Date of Review** 4/19/00
**Reviewer** RRI

---

### SECTION 1: WELL LOCATION INFORMATION

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### SECTION 2: WELL SECTION DATA  
(enter data in grey cells only)

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<thead>
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<td>205 ft.</td>
<td>Y or N</td>
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### SECTION 3: CHECKLIST  
(values to check are shaded)

**Well Depth**
- Theoretical Thickness of Aquifer: 205 ft.
- 1/4 Aquifer Thickness: 51.25 ft.
- Depth of Well below Sea Level: 60 ft. too deep (refer to HWCPIS Section 2.2)

**Well Casing**
- Minimum Wall Thickness
  - Material: Steel
  - County or Non-County: non-county
  - Minimum Thickness per standards: 0.313 in.
  - Wall Thickness Provided: 0.375 in. okay (refer to HWCPIS Section 2.4 c)
  - Minimum Length of Solid Casing: 90% of ground to top of aquifer: 823.5 ft.
  - Length of solid casing Provided: 910 ft. okay (refer to HWCPIS Section 2.4 d)
  - Casing Material: ASTM A53 okay (refer to HWCPIS Section 2.4 e)

**Annular Space**
- Calculated Depth of Grouting: 500 ft.
- Depth of Grouting provided: 650 ft. okay (refer to HWCPIS Section 2.6 c)
- Thickness of Annular Space: 3.5 in. okay (refer to HWCPIS Section 2.6 d)
**SECTION 1: WELL LOCATION INFORMATION**

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<thead>
<tr>
<th>Island</th>
<th>HAWAII</th>
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<td>Aquifer Sector</td>
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**SECTION 2: WELL SECTION DATA**  *(enter data in grey cells only)*

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<th>Elevation at top of casing</th>
<th>205 ft., m.s.l.</th>
<th>Solid Casing</th>
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<tr>
<td>Rock Packing</td>
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<td>Length</td>
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<tr>
<td>Hole Diameter</td>
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<td>Diameter</td>
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<tr>
<td>Total Depth</td>
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<tr>
<td>Estimated Head</td>
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<td>Calculated Aquifer Thickness</td>
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<tr>
<td>County Water Supply (Y/N ?)</td>
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<td>Designation</td>
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</table>

**SECTION 3: CHECKLIST**  *(values to check are shaded)*

**Well Depth**

- Theoretical Thickness of Aquifer: 205 ft.
- 1/4 Aquifer Thickness: 51.25 ft.
- Depth of Well below Sea Level: 60 ft.  
  *(too deep) (refer to HWCPIS Section 2.2)*

**Well Casing**

- Minimum Wall Thickness
  - Material: Steel
  - County or Non-County: non-county
- Minimum Thickness per standards: 0.313 in.
- Wall Thickness Provided: 0.375 in.  
  *(okay) (refer to HWCPIS Section 2.4 c)*

- Minimum Length of Solid Casing
  - 90% of ground to top of aquifer: 787.5 ft.
- Length of solid casing Provided: 870 ft.  
  *(okay) (refer to HWCPIS Section 2.4 d)*

- Casing Material
  - ASTM A53: okay

**Annular Space**

- If the cell above reads #N/A, reference HWCPIS

**Depth of Grouting**

- Calculated Depth of Grouting: 500 ft.
- Depth of Grouting provided: 620 ft.  
  *(okay) (refer to HWCPIS Section 2.6 c)*
- Thickness of Annular Space: 3.5 in.  
  *(okay) (refer to HWCPIS Section 2.6 d)*
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit / Pump Installation Permit Application for Kaupulehu 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and -4756-01)

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 10, 2000.

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

RESPONSE:

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

[ ] 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.

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

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

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

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

No comments/objections

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

Signed: Lori N. Kajiwara
Date: 4/3/2000
REPORT ON INDIVIDUAL WASTE WATER SYSTEM

Property Owner: HELCO
Property Address: KAUPULEHU
TMK: 7-2-3-3
Lot Size: 1 ACRE

Builder/Contractor: SAS. W. GLOVER
Intended For: 

Owner's/Agents Mailing Address: P.O. Box 1027, HI 96720

Building Permit No.: 941644
Number of Bedrooms: 0

Cesspool Specifications:

- "A" Diameter 8'0"
- "B" Depth 12'0"
- "C" Depth, below finished grade to cover: 12"
- "D" Depth to Groundwater: N.A.
- "E" Type Retaining Wall: CONCRETE RING

FINISHED GRADE

X-SECTION

Show: Location of all buildings, utility lines external to the buildings, property lines, and other legal boundaries, individual wastewater system/systems, surface waters, and roadways.

OWNER'S CERTIFICATION STATEMENT

I certify that I am the owner, duly authorized agent of the individual wastewater system described on the attached plot plan and drawing(s) and that said individual wastewater system as installed complies with Title 11, Chapter 62, Hawaii Administrative Rules, which I have read and understand.

Chen F. Loa 3/13/95
SAS. W. Glover
LTD

DEPARTMENT OF HEALTH SECTION

Accepted By: P. A. K. O. 13/17
Name: 
Title: 
Date: 3/13/95
Remarks: 

NOTARY PUBLIC

Notary Public signature required if persons other than owner signs "Owner's Certification Statement"

Subscribed and sworn before me this 13th day of March 1995

Lori Den Dulk Notary Public
Circuit, State of Hawaii
TO:  Dean Y. Uchida, Administrator
     Land Division

FROM:  Linnel T. Nishioka, Deputy Director
        Commission on Water Resource Management

SUBJECT:  Well Construction / Pump Installation Permit Application for 3
         Kaupulehu 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and -4756-01)

Transmitted for your review and comment is a copy of the captioned well application
which includes a request for a pump installation permit.

We would appreciate your comments on the captioned with regard to the programs,
plans, and objectives specific to your division. Specifically, Item 9 on the application has been
added per your request concerning water lease/permits administered by your division. Please
respond by returning this cover memo form by April 10, 2000.

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

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

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

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

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

[ ] No objections

X[X] Other comments: Original source of title is Land Commission Award No. 7715:10 issued between 1845 and 1855.

Contact Person  Gary Martin  Phone:  587-0421

Signed:  Gary Martin  Date:  MAR 31 2000
Mr. Roger Harris  
P.I.A-Kona Limited Partnership  
P.O. Box 803  
Kamuela, HI 96743

Dear Mr. Harris:

We acknowledge receipt, on February 16, 2000, of your completed well construction / pump installation permit application for the Kaupulehu Irrigation 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and 4756-01). 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 Ryan Imata of the Commission staff at 587-0255.

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

Rt:ss
TO: Honorable Bruce S. Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction Permit / Pump Installation Permit Application for
   Kaupulehu 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and -4756-01)

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your department. Please
respond by returning this cover memo form by April 10, 2000.

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

RI:ss
Attachment(s)

RESPONSE:

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

[ ] 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
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[ ] If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and
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devices should be routinely inspected and tested.

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

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

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

[ ] No comments/objections

Contact Person: ________________________ Phone: ________________________

Signed: _____________________________  Date: ____________________________
TO: Dean Y. Uchida, Administrator  
Land Division  

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management  

SUBJECT: Well Construction / Pump Installation Permit Application for the  
Kaupulehu 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and -4756-01)  

Transmitted for your review and comment is a copy of the captioned well application which includes a request for a pump installation permit.  

We would appreciate your comments on the captioned with regard to the programs, plans, and objectives specific to your division. Specifically, Item 9 on the application has been added per your request concerning water lease/permits administered by your division. Please respond by returning this cover memo form by April 10, 2000.  

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

RI:ss  
Attachment(s)  

RESPONSE:  
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.  
[ ] A water lease/permit is not required of this applicant.  
[ ] A water lease/permit has been obtained by the applicant through lease no. _____________________.  
[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.  
[ ] No objections  
[ ] Other comments:  

Contact Person ____________________________ Phone: ____________________________  

Signed: ____________________________ Date: ____________________________
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**TOTAL** 100.00

**REMARKS:**

**LINE (1)** Well No. 5514-02 (WCPA/PIPA)

**LINE (2)** Well No. 4757-03, 04 & 4756-01 (WCPA/PIPA)

**LINE (3)**

**LINE (4)**

---

**SHAWNE O'NEILL**

RR 1, BOX 452  808-242-6947
WAILUKU, HI 96793

DATE: 12-1-99

To the Order of:

D. L. W.R.

Twenty-five & 00/100 Cents

DOLLARS

For:

Shawne O'Neill

---

**TNWRE INC.**

**DBA TOM NANCE WATER RESOURCE ENGINEERING**

680 ALA MOANA BLVD., STE. 406
HONOLULU, HI 96813

DATE: February 7, 2000

* * Seventy-five and 00/100 * *

DOLLARS $75.00

TO THE ORDER OF:

Department of Land and Natural Resources

---
DEPARTMENT OF LAND AND NATURAL RESOURCES

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<td>TOTAL 100.00</td>
</tr>
</tbody>
</table>

REMARKS:
LINE (1) Well No. 5514-02 (WCPA/PIPA)
LINE (2) Well No. 4757-03, 04 & 4756-01 (WCPA/PIPA)
LINE (3)
LINE (4)

PAY

** Seventy-five and 00/100 **

DOLLARS $*75.00*

TO THE ORDER OF

Department of Land and Natural Resources

SHAWNE O'NEILL
RR 1, BOX 452 808-242-6047
WAILEA, HI 96793

DATE 12-1-99

** Twenty-five W/300 **

DOLLARS $25.00

COMMERCIAL BANK OF CALIFORNIA
Santa Cruz Main Office

** Seventy-five and 00/100 **

DOLLARS $*75.00*

TO THE ORDER OF

Department of Land and Natural Resources
## Well Background Check

<table>
<thead>
<tr>
<th>Approved Well No</th>
<th>Well Name</th>
<th>Applicant</th>
<th>Driller</th>
<th>Type</th>
<th>Well Construction</th>
<th>Pump Installation</th>
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<tbody>
<tr>
<td>7/28/93</td>
<td>4859-01</td>
<td>Kaupulehu Resor</td>
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<td>WELL</td>
<td>8/10/93</td>
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<tr>
<td>6/8/94</td>
<td>4757-01</td>
<td>Kaupulehu Irr 1</td>
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<td>PUMP</td>
<td>6/8/94</td>
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<td>12/1/94</td>
<td>4658-02</td>
<td>Kaupulehu Company [01]</td>
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<td>10/22/96</td>
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<td>Kaupulehu Company [01]</td>
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<td>PUMP</td>
<td>12/1/94</td>
<td>11/13/96</td>
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</tr>
<tr>
<td>Lessor:</td>
<td>B P BISHOP ESTATE TRUSTEES</td>
<td></td>
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<td></td>
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<tr>
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</tr>
<tr>
<td>Lessee:</td>
<td>PIA-KONA LTD PARTNERSHIP</td>
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<tr>
<td>Tax Payer:</td>
<td>PIA SPORTS PROPERTIES</td>
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<td>Tax Bill:</td>
<td>1501 FARM CREDIT DR, #2500, MCLEAN, VA 22102 USA</td>
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<tr>
<th>Assessed Value (99/00)</th>
<th>Exemption</th>
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<th>Buildings</th>
<th>Dwellings</th>
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<tr>
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<td>Total Building: $51,100</td>
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<table>
<thead>
<tr>
<th>Semi-Annual Tax:</th>
<th>$12,061.68</th>
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<tr>
<td>Tenure:</td>
<td>Leasehold</td>
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</table>

| SALES |
|-------|---------|
| 05/24/1984 | AL -M | $3,143,000 B/P 17895/672 |
| 05/01/1989 | AL | $9,500,000 B/P 23130/298 |
| 11/19/1990 | L | $124,800 Doc 90-177626 |

| PITT Code: | 500 |
| Nbhood Code: | 7284 |
| Zoning: | A-20A |

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

Route Slip for New Applications


Date: 2/22/00

Suspending Date: __________


Please:

1. Review & Comment
2. Take Action
3. Type Draft
4. Signatures
5. File

WELL NUMBER: 4760-31
WELL NAME: Kaupulehu 3, 4, 8, 5

☐ WELL CONSTRUCTION
☐ PUMP INSTALLATION

1. TRANS. LETTER
2. CWRMM MAP
3. APPL. FORM (3x)
4. USGS MAPS (3x)
5. TAX MAPS (3x)
6. OWNER VERIF.
7. CONTRACTOR VERIF.

FOLDER:

☐ MAKE NEW FOLDER
☐ FOLDER ALREADY MADE

Incomplete Application Dates:

Date Action

Ryan looks OK but just realized older company owns it too WCRZ5. See attached.

I called Tom & said I am WCR 25 before we issue, but I said we process.

Actually, he said I 1/2 a different company.
<table>
<thead>
<tr>
<th>TO</th>
<th>INIT</th>
<th>TO</th>
<th>INIT</th>
<th>FOR</th>
<th>PLEASE</th>
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<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>3 Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>3 Signature</td>
<td>Review &amp; Comment</td>
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<tr>
<td>FUJII, N.</td>
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<td></td>
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<td>4 Information</td>
<td>Take Action</td>
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<tr>
<td>HARDY, R.</td>
<td></td>
<td>NISHIOKA, L.</td>
<td></td>
<td></td>
<td>Type Draft</td>
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<tr>
<td>HIGA, D.</td>
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<td>OHYE, M.</td>
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<td>HIRANO, E.</td>
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<td>SAKODA, E.</td>
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<td>ICE, C.</td>
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<td>SUBIA, S.</td>
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<td>IMATA, R.</td>
<td></td>
<td>SWANSON, S.</td>
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<td>copies</td>
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<td>JINNAI, R.</td>
<td></td>
<td>UYENO, D.</td>
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<td>KUNIMURA, I.</td>
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<td>YODA, K.</td>
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</table>

- WELL NUMBER
- WELL NAME

- WELL CONSTRUCTION
- PUMP INSTALLATION

1 TRANS. LETTER
2 CWRM MAP
3 APPL. FORM (3X)
4 USGS MAPS (3X)
5 TAX MAPS (3X)
6 OWNER VERIF.
7 CONTRACTOR VERIF.

- MAKE NEW FOLDER
- FOLDER ALREADY MADE
REF:G:\WORK\REGULATE\TEMP\4757-03.ACK
February 22, 2000

Mr. Roger Harris
PIA-Kona Limited Partnership
P.O. Box 803
Kamuela, HI 96743

Dear Mr. Harris:

We acknowledge receipt, on February 16, 2000, of your complete well construction / pump installation permit application for the Kaupulehu Irrigation 3, 4 & 5 Wells / Well Nos. 4757-03, -04 and 

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 Ryan Imata of the Commission staff at 587-0255.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

R/s
Ms. Linnel T. Nishioka - Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Well Construction Permit Applications for
Kaupulehu Irrigation Well Nos. 3, 4, and 5 in North Kona, Hawaii

On behalf of PIA Kona Limited Partnership, I am pleased to submit the enclosed Well Construction permit applications and filing fee for Kaupulehu Irrigation Well Nos. 3, 4, and 5 in North Kona, Hawaii. The three new wells are needed to provide irrigation supply for two new golf courses which will start construction later this year. One course will be located mauka of the irrigation wells and the other will be in the Hualalai Resort.

If you have any questions or need additional information, please feel free to call. Thank you for your assistance to this matter.

Sincerely,

Tom Nance

Enclosures

cc: Roger Harris - PIA Kona  [Fax only]
Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management. An application must be accompanied by 3 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225.

APPLICANT INFORMATION: (Fill in all three, if applicable, and place a check next to the primary contact)

PIA-Kona Limited Partnership

1. (a) WELL OWNER: PIA-Kona Limited Partnership Contact Person: Roger Harris Phone: 808-885-4872
Mailing Address: P. O. Box 803 Kamuela, Hawaii 96743 Fax: 808-885-5721 E-mail: ____________
(b) LAND OWNER: Kamehameha Schools Contact Person: Rick Robinson Phone: 808-322-5300 Mailing Address: 567 South King Street - Suite 200 Honolulu, Hawaii 96813 Fax: ____________ E-mail: ____________
(c) CONTRACTOR: To Be Competitively Bid Contact Person: Phone: ____________
Mailing Address: ____________ Fax: ____________ E-mail: ____________ Lic #: __________________

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

2. WELL LOCATION/NAME: Kaupulehu-3 Island: Hawaii
Address: ____________ Tax Map Key: 7-2-03:3
Attach the relevant portion of (a) a 7.5-Minute Series USGS topographic map (scale 1" = 24,000'), and (b) a property tax map, showing well location referenced to established property boundaries.

3. PROPOSED WORK: (Check all that apply)
   • Drill New Well
   • Deepen
   • Install New Pump
   • Modify Existing Well
   • Redrill
   • Modify Pump
   • Abandon/Seal *
   • Replace Pump
   * Well No: ____________ Be sure to complete and submit well abandonment report upon completion of work.

4. CONSTRUCTION: 
   • Dig
   • Bored
   • Driven
   • Drilled
   • Radial
   Is this well a part of a battery of wells? 
   Yes ☐ No ☐ (Please describe.) [See Below]

5. PROPOSED PUMP INFORMATION: 
   Rated Pump Capacity: 550 gallons per minute
   Pump Type (Check one):
   • Deep Well Turbine
   • Submersible
   • Centrifugal
   • Rotary
   • Rotary-Displacement
   • Rotary-Gear
   • Propeller
   • Reciprocating
   • Impulse
   • Powered by:
   • Diesel
   • Gas
   • Electric, rated horsepower: 200
   • Industrial
   • No. of Dwelling Units: ____________
   • No. of Acres: ____________
   • Municipal (including hotels, stores, etc.) ☐
   • Domestic (individual, noncommercial water system) ☐
   • Irrigation (crop) ☐ Golf Course ☐
   • Military ☐
   • Other (explain): ____________

6. PROPOSED USE: (Check all that apply)
   • Municipal (including hotels, stores, etc.) ☐
   • Domestic (individual, noncommercial water system) ☐
   • Irrigation (crop) ☐ Golf Course ☐
   • Military ☐
   • Other (explain): ____________

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 500,000 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   • Flowmeter
   • Open-pipe
   • Weir
   • Orifice
   • Other (explain):

OTHER IMPORTANT INFORMATION:

8. PENDING ACTIONS: 
   • CODA ☐ SMA ☐ EIS ☐ EA ☐ NONE ☐ Other (explain)

9. REMARKS, EXPLANATIONS: 
   Three wells will be drilled to provide irrigation for two golf courses to be constructed later this year, one mauka of the wells and the other in the Hualalai Resort.

   (if more space is needed, please attach additional sheet)

I understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

PIA-Kona Limited Partnership
Well Owner: Kamehameha Schools Landowner: Contractor:

Signature: ________ Signature: ________ Signature: ________
Date: 2-1-00 Date: 2-1-00 Date: ____________

Field Checked By: ____________ Longitude: ________ Aquifer System Name: ____________
Date: ________ Latitude: ________ State Well No: ____________

WCPIFORM (9/13/99)
11. PROPOSED WELL SECTION

Hole Diameter: 21 in.

Minimum of 2' Radius & 4' Thick Concrete Pad

Ground Elevation: 880 ft., msl*

Minimum annular space between hole and casing ≥ 3"

Casing Material: (check one or more):
- Stainless Steel: ASTM A53
- PVC
- Thermoset Plastic: ASTM F480

Pump Installation Standards:

- Solid Casing: (≥ 90% x (Ground Elev - Water Level Elev))
  - Material: Solid
  - Material Standard: ASTM A53
  - Length: 570 ft.
  - Diameter: 21 in.
  - Wall Thickness: 0.375 in.
  - Bottom Elevation: -10 ft., msl*

- Open Casing: (check one):
  - Perforated
  - Screen

  - Material: (check one):
    - Steel: ASTM A53
    - Other

  - Length: 60 ft.
  - Diameter: 21 in.
  - Bottom Elevation: 50 ft., msl*

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = (Water Elevation x 0.25) + Bottom Elevation of Well Limit

Example: Estimated 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 ft. x 0.25) + 18.5 ft.

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

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 A242
- Type E
- Type S
- Grade B
- Other

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

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

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

Open Casing Material:

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

And compliant with (check one or more):
- ASTM A242
- Type E
- Type S
- Grade B
- Other

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- ASTM A312

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- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296
APPLICATION INFORMATION: (Fill out all three, if applicable, and place a check next to the primary contact)

PIA-Kona Limited Partnership  Contact Person: Roger Harris  Phone: 808-885-4872
Mailing Address:  P. O. Box 803  Kamuela, Hawaii 96743
Fax: 808-885-5721  

(b) LANDOWNER: Kamehameha Schools  Contact Person: Rick Robinson  Phone: 808-322-5300
Mailing Address:  567 South King Street - Suite 200  Honolulu, Hawaii 96813
Fax: 808-885-5721  

(c) CONTRACTOR: To Be Competitively Bid  Contact Person:  Phone:  
Mailing Address:  
Fax:  

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

2. WELL LOCATION/NAME: Kaupulehu-4  Island: Hawaii  
Address  
Tax Map Key: 7-2-03:3 

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

3. PROPOSED WORK: (Check all that apply)

- Drill New Well  
- Deepen  
- Install New Pump  
- Modify Existing Well  
- Redrill  
- Modify Pump  
- Abandon/ Seal *  
- Replace Pump  

* Well No.: Be sure to complete and submit well abandonment report upon completion of work.

4. CONSTRUCTION: 

- Dug  
- Bored  
- Driven  
- Drilled  
- Radial  

Is this well a part of a battery of wells?  Yes  No  
(Please describe.) [See Below]

5. PROPOSED PUMP INFORMATION: Rated Pump Capacity: 550 gallons per minute

- Pump Type (Check one):  
  - Deep Well Turbine  
  - Submersible  
  - Centrifugal  

- Powered by:  
  - Diesel  
  - Gas  
  - Electric, rated horsepower: 200  

6. PROPOSED USE: (Check all that apply)

- Municipal (including hotels, stores, etc.)  
- Domestic (individual, noncommercial water system)  
- Irrigation (crop)  
- Military  
- Golf Course  

- Industrial  
- No. of Dwelling Units:  
- No. of Acres: 2.43  
- Other (explain):  

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 500,000 gallons per day

(b) METHOD OF FLOW MEASUREMENT:  

Flowmeter  Open-pipe  Weir  Orifice  Other (explain)  

OTHER IMPORTANT INFORMATION:

8. PENDING ACTIONS:  

- CDUA  
- SMA  
- EIS  
- EA  
- NONE  
- Other (explain)  

9. REMARKS, EXPLANATIONS: Three wells will be drilled to provide irrigation for two golf courses to be constructed later this year, one mauka of the wells and the other in the Hualalai Resort.

(If more space is needed, please attach additional sheet)

I understand that approval of this application attaches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

PIA-Kona Limited Partnership  
Well Owner  
Signature  
Date 2-1-00  

Landowner  
Signature  
Date 2-1-00  

Contractor  
Signature  
Date  

Field Checked By  
Longitude  
Aquifer System Name  
Date  
Latitude  
State Well No.  

WCPIFORM (9/13/99)
For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,
Bottom Elevation of Well Limit = \( \frac{(2 - 41 \times \text{Water Level Elev})}{4} \)

Example: Estimated +2 ft. Water Level Elev. \( \rightarrow \) Bottom Elevation of Well Limit = \( \frac{(2 - 41 \times 4)}{4} \) = -16.5 ft.

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment report 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 A242
  - Type E
  - Type S
  - Grade B
  - Other

**Stainless Steel:** (check one):
- ASTM A409
- ASTM A312

**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

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

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

**Stainless Steel:** (check one):
- ASTM A409
- ASTM A312

**ABS Plastic** conforming to ASTM F480 and ASTM D1527: (check one)
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- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296
CHECKLIST

√ WELL CONSTRUCTION PERMIT √ PUMP INSTALLATION PERMIT

WELL NAME or LOCATION: KAUPULEHU-KONA WELL
ISLAND: HAWAII

WELL NUMBER: 4757-03
Tax Map Key: 7-2-03:03

OWNER/OPERATOR:
Firm Name: PIA-KONA LTD PARTNERSHIP
Contact Person: ROGER HARRIS
Address: P.O. BOX 4375
Phone: 325-0909

LANDOWNER:
Firm Name: B.P. BISHOP ESTATE
Contact Person: SYDNEY KELAIPUOLELE
Address: P.O. BOX 3460
Phone: 523-6200

Date application received ........................................ 1-17-91
Date acknowledged receipt/request more info .................. 3-1-91
Date application accepted ...........................................
Suspense date (90 days) .............................................
Date filing fee deposited ...........................................

Application sent to following:
- Dept. of Health
- Dept. of Hawn Home Lands
- Dept/Bd of Water Supply
- Historic Preserv. Prog.
- Koolauloa NB #28 (Oahu)
- Dept.Pub. Wrks (Hawaii)
- Office of Hawaiian Affairs

Date sent Comments received
4-MARCH-91

Date agenda due ..................................................
Date submittal due ..............................................
Date submittal sent to applicant ..............................

Date application approved or disapproved ..................
Date applicant notified of decision ..........................

REMARKS: MAP ENCLOSED IS UPDATED VERSION. THESE ARE THE
TRUE WELL LOCATIONS ACCORDING TO TOM NANCE (2-21-91).
NOTE: WELLS 4757-03,02 WERE RELOCATED ON MAPS
- Dept. of Health asking for prop. tax verify.
WCR 2 Check for Well No. **4757-03** (survey to regulation memo)

1. **Pump Tests Check** (special condition of PIP? Yes/No) [Glenn Bauer (initial if yes)]
   - Yes No
   - If no, describe deficiency
   - Step-Drawdown Test:
     - followed WCPI Stds
     - analysis attached
     - proposed pump cap o.k.
   - Aquifer Pump Test:
     - followed WCPI Stds
     - T & S analysis attached
   - Well Interference:
     - estimated Steady-State drawdown at 1-mile radius is ________ ft.
     - analysis attached
   - Stream Surface Water Impacted:

2. **Pump Installation Check** Mitch Ohye [initial]
   - Yes No
   - If no, describe deficiency
   - data complete
   - followed WCPI Stds
   - well database updated

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

4. Roy [initial] check

5. Subia [initial] finalize

6. Dean [initial] signature

7. Charley/Lenore/Ryan File
1. State Well No.: 4757-03  
Well Name: Kaupulehu #3  
Island: Hawaii

2. Address: Kaupulehu  
Tax Map Key: 7-2-3:03

3. Pump Installation Company: Wai'eli Drilling & Development

4. Date Pump Installed: 1/16/03

5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Sub. Crown SER# 12310  
   Rated Capacity: 550 gpm
   Motor Type, H.P., Voltage, rpm: Sub. 200HP 2300V 3540 RPM (changed)
   Type of flow meter: Turbine  
   which measures in GPM

6. Method of flow measurement:
   - ✗ Flowmeter  
   - ☐ Weir*  
   - ☐ Open Pipe*  
   - ☐ Orifice*  
   - ☐ Other*, explain below

   *attach schematic

7. Other remarks/comments:

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Pump Installation Contractor (print) Wai'eli Drilling C-57/C-57a/A Lic. No. C-16543
Signature: [Signature]
Date: 1/22/2003

Permittee (print) Kekaha Venture, Inc.
Signature: [Signature]
Date: 1/27/02

[Handwritten notes and signatures]
Bench mark elevation surveyed to nearest 0.01 ft. = 887.78 ft. mean sea level

Pump intake depth = 915.28 ft. (referenced to bench mark) +27.5 ft.

Chase tube depth = 914 ft. (referenced to bench mark) +26.2 ft.

Elevation of top of chase tube 888.1 ft. mean sea level

If airline installed, bottom of airline elevation = 914 ft. mean sea level +26.2 ft.
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: Ryuen

DATE: 1/21/02

SUSPENSE DATE: ________________

TO: INIT.

TO: INIT.

FOR: Approval

Signature

Information

PLEASE:

___ See Me

___ Review & Comment

___ Take Action

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___ Type Final

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Good morning!
February 1, 2002

Mr. Roger Harris
PIA Kona Limited Partnership
P.O. Box 803
Kamuela, HI 96743

Dear Mr. Harris:

Notice of Action
Request for Variance of Pump Test Standards
Kaupulehu Irrigation 3 & 4 Wells (Well Nos. 4757-03 and -04)

This letter serves as your official notice of action taken by the Commission on Water Resource Management (Commission) on the subject application. By a unanimous vote of the Commission at their meeting on January 30, 2002, the Commission approved the applicant’s request for a variance to allow the installation of the permanent pumps prior to the issuance of the pump installation permits, with the following conditions:

a. The pump tests shall be started within one week of the installation of the pumps or staff requests that the pump test be rerun. Otherwise, the pumps shall be removed.

b. The applicant shall submit pump test results within one day of the completion of the pump tests.

c. Staff will complete its analysis of pump results within one business day and issue pump installation permit if pump tests are satisfactory.

d. In the event that pump tests are not satisfactory to Commission staff, the applicant shall rerun the pump tests in accordance with a., b. and c. above until they are in compliance with standard pump test requirements.

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

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Rl:ss

C: Waimea Water Services
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: LINNEL
DATE: JAN - 3 2002
SUSPENSE DATE: 

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I don't understand - 2" H is what we understand is occurring. What is the difference between pilot "tests and "permanent pump" tests? We'd actually like the open hole test data, right? (although they're for client), We should do same thing for Maui (Uncased) where they run tests and report immediately (24 hrs) and we can get back to them tests are acceptable (and we conduct too according to this letter) - so yes will only wait ~ 24 hrs for acceptance of work.
December 28, 2001

Gilbert S. Coloma-Agaran  
Chairperson  
Commission on Water Resource Management  
PO Box 621  
Honolulu, 96809

SUBJECT: Request for Variance of Pump Installation Protocol  
Wells Nos. 4757-03 and 4757-04

Dear Chairperson Coloma-Agaran:

As discussed at the December 19, 2001 meeting of the CWDRM, I explained some of the circumstances and difficulties of pump installation permitting and testing procedures presented to our clients, primarily on Hawaii, where wells deeper than 800’ to water are the rule. In the late 1980’s, WWS, on behalf of its clients and for the purposes of gaining knowledge necessary to facilitate timely design and purchase of permanent pumping equipment, introduced a well testing procedure which involved installing submersible test pump equipment in the uncased pilot bore of deep, rotary drilled wells. It had become apparent that the deep, rotary or hammer drilled wells on Hawaii would dominate the well development scene. To facilitate the rapidly accelerating water development needs, a timely ordering of submersible pumping units was required and the trend was away from the expensive and complex line shaft, vertical turbine pumps.

It is now a matter of routine to insert a submersible test pump unit in the pilot bore of a new well for the purpose of establishing the yield and quality prior to reaming and casing. The designed pumps are then ordered and delivered to time with the completion of the cased well. This technique allows the well to be placed in service immediately and is part of the critical path program of private water purveyors.

The adopted CWDRM testing protocol was originally instituted by the source developers, in particular government agencies, for the purpose of learning about the resource and well yield for purposes of pump design, primarily on Oahu. As groundwater development accelerated on neighbor islands, new techniques for the construction, testing and cleaning wells were created by the private sector. Beginning in the late 1980’s, the submersible pump units became the pumps for deep wells. The testing protocol and sequence required by the CWDRM is expensive and untimely in today’s water development climate.
This request is for a variance from the order in which testing and pump installation approval is accomplished. By the time each of the subject wells is cased and grouted, the pilot bore will have been pumped and tested and the permanent pump will be on the site ready for installation. We are requesting permanent pump installation approval prior to well completion so that the permanent pump can be used to clean and test the well. Once the test results have been submitted to the CWRM with the Well Completion Report, the data can be reviewed, approved administratively as to completeness and the well can be placed immediately into service.

It is very costly for the water developer to install and remove a test pump for purely data collection. Use of a permanent pump is adequate. If damage to pump equipment occurs, such damage is the risk of the owner.

Sincerely,

Stephen P. Bowles

Attachments

cc: Linnel Nishioka, Deputy Director – CWRM
    Guy Lam - Kekaha Venture
    Dale Stromquist – Wai’eli Drilling & Development
    Roger Harris – PIA / Kamehameha Schools
10. PROPOSED WELL SECTION  
(Please attach schematic if different from diagram provided below)

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = (Water Elevation - 4 ft. x Water Level Elev) / 4

Example: Estimated +2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 4 ft. x 2) / 4 = 1.5 ft.

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  - □ Filament Wound Resin Pipe conforming to ASTM D2996
  - □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - □ PTFE Fluorocarbon Tubing conforming to ASTM D2596
  - □ FEP Fluorocarbon Tubing conforming to ASTM D2596

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F490 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  - □ Filament Wound Resin Pipe conforming to ASTM D2996
  - □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - □ PTFE Fluorocarbon Tubing conforming to ASTM D2596
  - □ FEP Fluorocarbon Tubing conforming to ASTM D2596

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = (Water Elevation - 4 ft. x Water Level Elev) / 4

Example: Estimated +2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 4 ft. x 2) / 4 = 1.5 ft.
**Surface Discharge Elbow:**

- **Conditions:**
  - U.S. Gallons per minute: 550
  - Total Dynamic Head: 960
  - Liquid: Water
  - Specific Gravity: 1.0

- **Maximum Diameter of Unit:** 10 3/4 Shroud

- **Column Pipe:** 6 5/8 .280 Wall Galv.
  - 8rd. Short

- **Submersible Cable Size:** 4' - 4KV

- **Pump Manufacturer:** Crown
  - Model Number: 8L-600 10 Stage

- **Suction Strainer:** STN STL.

- **Submersible Motor MFG.:** Franklin Severe Duty
  - HP: 200
  - Phase: 3
  - Cycle: 60
  - Voltage: 2300 RPM: 3500 49.4AMP

**Customer:** Kakaha Venture Inc.
**Project:** Kaupulehu #3
**Pump Designation:**

**Note:** Do not use for construction unless certified

---

PO Box 5685 - 78-6740 Makapuu Street
Kailua-Kona, Hawaii 96745
808-324-1420 - Fax 808-322-0928
WELL CONSTRUCTION PERMIT

for

Kaupulehu-PIA Well 3
Well No. 4757-03
Kaupulehu, North Kona, Hawaii

TO: PIA-Kona Ltd. Partnership
   P.O. Box 4375
   Kailua-Kona, HI 96745-4375

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Kaupulehu-PIA Well 3 (Well No. 4757-03) for golf course irrigation, is approved subject to the following conditions:

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

2. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at 543-8304, concerning "EIGHT (8) CONDITIONS APPLICABLE TO THIS NEW GOLF COURSE DEVELOPMENT" dated April, 1990 (version 3). The applicant shall obtain a written statement from the Environmental Management Division indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

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

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct a well shall not constitute a determination of correlative water rights.
5. The following shall be submitted to DWRM within 30 days after completion of the well:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record, including time, pumping rate, drawdown, chloride content, and water quality data.

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

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

WILLIAM W. PATY, Chairperson

OCT 27 1991
Date of Issuance

cc: USGS
Department of Health
   Safe Drinking Water Branch
   Ground Water Protection Program
Hawaii Department of Water Supply
Tom Nance Water Resources Engineering
Fax Cover Sheet

DATE: 5/3/00
TO: Timothy Johns
PHONE: 587-0219
FAX: 808-325-0199 ext. 102

FROM: Guy Lam
PHONE: 808-325-0199 ext. 102
FAX: 808-325-7460

RE: Kaupulehu Irrigation 3, 4 & 5 Wells
CC: 

Number of pages including cover sheet: 2

Message: Timothy,

Following is our Well Construction Permit for the above referenced project.

If you have any questions, please call me.

Thank you,
Guy Lam
WELL CONSTRUCTION PERMIT

Keaulelehu Irrigation 3, 4 & 5 Wells, Well Nos. 4757-03, -04 and 4758-01

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-188, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Keaulelehu Irrigation 3, 4 & 5 Wells (Well Nos. 4757-03, -04 and 4758-01) at Keaulelehu, Hawaii TMIK 7-3-31: 03, subject to the Hawaii Well Construction & Pump Installation Standards (12/3/92) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 821, Honolulu, HI 96810, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and shall be allowed to inspect installation activities in accordance with §13-188-15, Hawaii Administrative Rules.

2. The well construction permit shall be permanent and testing of the well only. A minimum 14-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 unconfined ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the unconfined 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 immediately 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 drawings of the well.
   d. Plat plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 25, 1997, HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-188-12(2) prior to any well sealing or plugging work.

12. The permittee, his 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 agent 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: April 19, 2000
Expiration Date: April 19, 2002

TIMOTHY E. JOHNS, 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: Roger A Harris
Date: 5-3-2000
Printed Name: Roger A Harris
Firm or Title: V.P. PUA-KONA LIMITED PARTNERSHIP

Driller’s Signature: M. I. Y. Chong
C-57 License # C-16543
Date: 5/7/2000
Printed Name: C. I. Y. Chong
Firm or Title: WAI’ELE DEVELOPMENT

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

Attachment

Department of Health Safe Drinking Water, Wastewater, and Clean Water Branches
Hawaii Department of Water Supply
APPLICATION FOR

____ WELL CONSTRUCTION PERMIT
____ PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 372, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $15.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 548-1542, Hydrology/Geology Section for assistance.

1. WELL LOCATION

Island Hawaii Tax Map Key 7-2-03:3
Address Kaupulehu, North Kona, Hawaii

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

2. WELL OWNER

PIA - Kona Ltd. LANDOWNER
Firm Name Partnership
Contact Person Roger Harris
Address P.O. Box 4375
Kailua-Kona, Hawaii 96745-4375
Phone 325-0909

B. P. Bishop Estate
Firm Name Partnership
Contact Person Sydney Keliipuleole
Address P.O. Box 3466
Honolulu, Hawaii 96801
Phone 523-6200

3. PROPOSED CONTRACTOR FOR: ☐ Well Drilling ☐ Pump Installation

Name To Be Competitively Bid Phone
Address

Contractor's License No.

4. PROPOSED WORK

☐ Drill New Well ☐ Deepen ☐ Redrill
☐ Alter ☐ Seal ☐ Abandon
☐ Install New Pump ☐ Replace Pump ☐ Modify Pump
☐ Abandon

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

5. PROPOSED USE

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

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

7. PROPOSED PUMP INFORMATION

Pump Type: ☐ Vertical Turbine ☐ Submersible
☐ Motor: ☐ Diesel ☐ Gas ☐ Electric: 150 ☐ Centrifugal
Rated Pump Capacity 450 gallons per minute (gpm)

Well Owner (print) PIA Kona Ltd. Pty Landowner (print) B.P. Bishop Estate
Signature Roger Harris Signature
Date 12/30/91 Date

For Official Use Only:
Field Checked By Latitude Hydrologic Unit
Date State Well No. 4757-02

Glaciated Map No. H-6
Briefly describe the proposed work:

Drill, case, and pump test an exploratory well for possible golf course irrigation use.

PROPOSED SECTION OF WELL

Elevation at top of casing 882 ft., msl.

Ground Elev. 880 ft., msl*

Cement Grout 300 ft.

Solid Casing:
Material Steel (ASTM A-283)
Length 875 785 ft.
Diameter 12 in.
Wall thickness 0.375 in.

Hole Dia. 16 in.

Total Depth 935 ft.

Rock Packing None ft.

Casing: /X/Perforated / /Screen
Material Steel (ASTM A-242)
Length 40 ft.
Diameter 12 in.
Wall thickness 0.3125 in.
Openings 60 sq. in./L.F.

Open Hole:
Length 20 ft.
Diameter 10 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
THIS MAP IS CORRECT PER TOM NANCE 2-21-91
WELL CHANGE MASTER & INDIVIDUAL FILES

PROPOSED POTABLE WELL (4658-03)

PROPOSED POTABLE WELL (4658-04)
June 10, 1991

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

Dear Mr. Tagomori:

Permit Application for Ka'upulehu-PIA Well 3
Ka'upulehu, North Kona, Hawaii TMK: 7-2-03: 3

Thank you for your letter of June 5. Enclosed for your information are the following:

1. Map showing the proposed Well No. 3 site.

2. Map from PHRI Archaeological Inventory Survey of the Ka'upulehu Mauka lands project area which includes the site for Well No. 3.

3. Copies of the pages from the report that describe the archaeological sites in the area and the status which in all cases is "No Further Work" recommended.

4. A copy of your letter to PIA.

5. A copy of Historic Preservation's memo to you.

In summary, we have had an archaeological inventory survey for this area done and have enclosed the sections that deal with surrounding sites. We have also had the referenced trail surveyed and staked and will ensure that the proposed well does not encroach on the trail and that well construction in no way disturbs the trail.
I hope this will clear up any concerns regarding historic sites. As Holly McEldowney is out of the office until June 21, I have directed a copy of this information to Ross Cordy. If you should have any more questions or concerns, please call me at 325-0909.

Sincerely,

Heather M. Cole
Special Projects

Enclosures

cc: Ross Cordy
    Tom Nance Water Resources Engineering
    Don Hibbard
Archaeological Inventory Survey
Kaupulehu Mauka Lands Project Area

Land of Kaupulehu, North Kona District
Island of Hawaii
(TMK: 3-7-2-03:3)

by

James A. Head, B.A.
Supervisory Field Archaeologist

Susan T. Goodfellow, Ph.D.
Laboratory Director

and

Paul H. Rosendahl, Ph.D.
Principal Archaeologist

Prepared for
Potomac Investment Associates
Western Division, Hawaii Office
P.O. Box 803
Kamuela, Hawaii 96743

March 1991
height and 1.25 m external height. The door is constructed of milled wood and galvanized hinges at top and nailed with wire nails.

FEATURE B: Enclosure
FUNCTION: Agriculture/animal husbandry
DIMENSIONS: 18.50 m (N-S) by 17.50 m (E-W) by 1.55 m
DESCRIPTION: This feature is constructed at the northeast corner of enclosure Feature C, and shares the same corner walls as Feature C. The walls are the same construction of core-filled/bifacial aa small boulders and cobbles. Found in the north corner, at the intersection of Feature C wall is a pig door/gate abutting the intersection at the east side. Door is c. 0.60 m wide by 0.80 m internal height and c.1.40 m external height. Site tag is located on wall at east edge of the "pig door." Door is constructed of milled lumber, wire nails, and two galvanized gate hinges.

FEATURE C: Enclosure
FUNCTION: Agriculture/animal husbandry
DIMENSIONS: 85.00 m (N-S) by 71.50 m (E-W) by 1.75 m
DESCRIPTION: This feature is roughly circular and is constructed of bifaced core-filled walls of aa boulders and cobbles. The structure also encloses two smaller enclosures at its northeast corner, which may have been added after initial construction. There are two gates/entrances in the structure at the south end and the ESE side. Both gates are c. 10.0 m wide with collapsed edges. At the north side is a constructed "funnel" opening to the north, presumed to be for driving stock into the enclosure. Running through the middle of the enclosure c. 225-25° is a bulldozed road which destroyed sections of the northeast and southwest walls. There is also bulldozer disturbance within the south corner and outside the northwest corner next to the road. Internal surface is flat but irregular with aa rubble. Site tag is located on the wall at north northeast corner of Feature B.

SITE NO.: State: 14813 Other No.: 642-3(?)
PHRI: 57
SITE TYPE: Enclosure
TOPOGRAPHY: Sloping pahoehoe and aa lava flows marked by channels and tubes trending toward Puhiia Pele. VEGETATION: Christmas-berry (dominant) kukui, lantana, koa-haole, and silver oak.
CONDITION: Fair
INTEGRITY: Partially altered by slump
PROBABLE AGE: Historic
FUNCTIONAL INTERPRETATION: Agriculture/animal husbandry
DIMENSIONS: 12.00 m (N-S) by 16.00 m (E-W) by 1.50 m (approx.)

DESCRIPTION: The enclosure is located on the Kailua side of the bifacial core-filled wall which begins near Puhiia Pele and travels c. 125° bearing mauka toward the highway. This enclosure is also a bifacial core-filled wall square structure with a badly fallen "pig door" near the northwest corner and also another (in better preservation) in the east wall. The eastern door appears to have been walled off on the outside and possibly never used. There are a total of five fence posts along the inside of the north and west walls. Both of these walls (especially the northernmost) are lower than on the east and south.

SITE NO.: State: 14814 Other No.: 720-11
PHRI: 58
SITE TYPE: Lava tube cave
TOPOGRAPHY: At the bottom of a wide northwest trending channel with large aa flow just to northwest. The slope is quite gentle to the north. VEGETATION: Fountain grass (dominant), and sparse indigo.
CONDITION: Fair
INTEGRITY: Unaltered
PROBABLE AGE: Prehistoric
FUNCTIONAL INTERPRETATION: Temporary habitation
DIMENSIONS: 2.60 m (N-S) by 2.00 m (E-W) by 1.10 m (approx.)
DESCRIPTION: This is a single lava tube cave. There is no evidence of modification. The floor surface is irregular and sloping. There are Cocos, Echinoidea, waterworn basalt present in the cave, and three pieces of broken Cypraea sp. observed on the surface.

SITE NO.: State: 14815 Other No.: 720-9
PHRI: 59
SITE TYPE: Lava tube cave
TOPOGRAPHY: Rolling and gentle north-sloping aa and pahoehoe lava flows with lava tube blisters and channels. VEGETATION: Fountain grass (moderate to dense) dominates and very sparse indigo.
CONDITION: Fair
INTEGRITY: Unaltered
PROBABLE AGE: Prehistoric
FUNCTIONAL INTERPRETATION: Temporary habitation
DIMENSIONS: 2.90 m (N-S) by 2.50 m (E-W) by 1.00 m (approx.)
DESCRIPTION: This is a single lava tube cave with a possible cleared area at the entrance. There are Echinoidea sp. and Cypraea sp. in the area. The cave is opened to the
east. A collapsed area is present on the east of the opening. It measured c. 1.40 m (N-S) by 1.80 m (N-S). The collapsed area has partially been cleared of boulders.

SITE NO.: State: 14816 Other No.: 720-10
PHRI: 60
SITE TYPE: Lava tube cave
TOPOGRAPHY: Gentle north sloping exposed lava flows with both channels and lava tube blister caves.
VEGETATION: Dense to moderate fountain grass (dominant) and very sparse indigo.
CONDITION: Fair
INTEGRITY: Unaltered
PROBABLE AGE: Prehistoric
FUNCTIONAL INTERPRETATION: Temporary habitation
DIMENSIONS: 4.10 m (E-W) by 2.00 m (N-S) by 0.67 m (approx.)
DESCRIPTION: This is a single lava tube cave without modification. There are five small blisters included in the site boundaries but not given feature designation. The tunnel entrance and sink appears cleared of roof fall and debris appears to have been tossed into a pile on the south. Light midden scatter of Cypraea sp. in site tag cave. There is a light surface scatter within the site boundaries. Midden in these areas also consists mostly of a light scatter of Cypraea sp. and small water worn basalt. Also Cellana sp. in the area. Site area appears to have been utilized only slightly. There is only a small chance of significant cultural deposits.

SITE NO.: State: 14817 Other No.: 720-8
PHRI: 61
SITE TYPE: Complex (2 Features)
TOPOGRAPHY: Gently sloping aa and pahoehoe lava flows marked by channels, tubes, and blisters.
VEGETATION: Fountain grass (dominant) and very sparse indigo.
CONDITION: Fair
INTEGRITY: Unaltered
PROBABLE AGE: Prehistoric
FUNCTIONAL INTERPRETATION: Temporary habitation
DIMENSIONS: 3.80 m (N-S) by 7.90 m (E-W) by 0.95 m (approx.)
DESCRIPTION: The complex consists of two caves (Features A and B).

FEATURE A: Cave
FUNCTION: Temporary habitation
DIMENSIONS: 3.20 m (E-W) by 2.15 m (N-S) by 0.85 m
DESCRIPTION: Feature A is a collapsed lava tube blister.

It opens to the east. The entrance measures c. 2.15 m (N-S) with a height of 0.85 m. The thickness of the ceiling is c. 0.15 m. The interior measures c. 3.2 m (E-W) by 1.4 m. The interior floor is rough pahoehoe floor with sparse scattered boulders and rubble on the floor. This feature is oriented on a terrain of smooth and rough pahoehoe with fountain grass in the area. It is constructed of a natural lava tube. There is no modification except for a cleared area at the entrance.

FEATURE B: Cave
FUNCTION: Temporary habitation
DIMENSIONS: 1.80 m (N-S) by 1.15 m by 0.95 m
DESCRIPTION: The natural lava tube is collapsed at the east end. The collapsed area measured c. 1.9 m (E-W) by 1.15 m (N-S). There are pahoehoe slabs and boulders in the collapsed area. The entrance faces east at 90°. The interior measures c. 3.0 m by 2.8 m. The main interior area is ropey pahoehoe floor with sparse shell and soil. The rear of the cave interior extends southwest and northwest (natural tube extension). The southwest measures c. 2.5 m in length by 1.6 m in width. The northwest measures c. 3.0 m in length by 1.2 m in width. No portable remains were identified. An area (c. 1.5 m east to west by 1.0 m north to south) in the north half of the main interior of the cave has a grayish soil deposit of c. 0.03 m thick.
APPENDIX A

CONDITION: Fair
INTEGRITY: Unaltered
PROBABLE AGE: Unknown
FUNCTIONAL INTERPRETATION: Indeterminate
DIMENSIONS: 11.00 m (E-W) by 1.00 m (N-S) by 1.00 m high
DESCRIPTION: The wall is a single bifacial rubble core design. It is oriented almost east to west. The wall is constructed with natural pahoehoe and aa blocks stacked on each other. It is roughly faced on the south side, but even rougher on the north side. Basic alignment is c. 100-280°.

SITE NO.: State: 14827
SITE TYPE: Cairn complex
TOPOGRAPHY: Quickly to gently sloping lava flows marked by both aa and pahoehoe areas.
VEGETATION: Fountain grass (dense) with sparse indigo.
CONDITION: Poor to Fair
INTEGRITY: Altered mostly by slumpage
PROBABLE AGE: Prehistoric
FUNCTIONAL INTERPRETATION: Marker
DIMENSIONS: 600.00 m (N-S) by 50.00 m (E-W) by 1.00 m high (approx.)
DESCRIPTION: The complex consists of nineteen separate cairns, complete and collapsed, which are thought to mark the main route of the #1193 Hawaiian trail. Also a slight trail variant to the Kailua side (west) is included within the complex. As an aid in identification, the makai end of the cairn complex begins near 14807 with C-25 and ends with C-42 which is somewhat near 14809 (although probably not associated with this latter site). All cairns are constructed of locally available pahoehoe and aa lava cobbles, boulders, and slabs. The cairns are each given an identification number starting from C-25 to C-42.

SITE NO.: State: 14828
SITE TYPE: Cairn
TOPOGRAPHY: The cairn lies on the southwest top edge of exposed aa flow.
VEGETATION: Fountain grass (dense)
CONDITION: Fair-Good
INTEGRITY: Unaltered
PROBABLE AGE: Prehistoric
FUNCTIONAL INTERPRETATION: Marker
DIMENSIONS: 1.80 m (E-W) by 0.90 m (N-S) by 0.53 m deep
DESCRIPTION: Feature A is the easternmost pahoehoe excavation. The excavated feature thickness is c. 0.20-0.25 m.

FEATURE A: Pahoehoe excavation
FUNCTION: Quarry
DIMENSIONS: 1.30 m (E-W) by 0.60 m (N-S) by 0.60 m deep
DESCRIPTION: Feature B is located between Feature A and Feature C. The excavated feature thickness is c. 0.15-0.20 m.

FEATURE B: Pahoehoe excavation
FUNCTION: Quarry
DIMENSIONS: 0.70 m (E-W) by 0.30 m (N-S) by 0.50 m deep
DESCRIPTION: Feature C is the westernmost pahoehoe excavation. It has a thickness of c. 0.15 m.
Table 2. (cont.)

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Subtotal: 16 0 0 0 16 0 0 0

Subtotal: 12 0 12 0 12 0 12 0
MEMORANDUM

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

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Well Permit -- Ka'upulehu-PIA Well 3
Kaupulehu, North Kona, Hawaii
TMK: 7-2-3: part 3

HISTORIC PRESERVATION PROGRAM CONCERNS:

We have received a fax dated June 10, 1991, from Heather Cole of Potomac Investment Associates on this permit, including a copy of her letter of June 10, 1991, to you. Her letter is correct. Survey was done, and historic preservation concerns have been met.

cc: Heather Cole, Potomac Investment
Mr. Roger Harris  
P/A Kona Ltd. Partnership  
P.O. Box 4375  
Kailua-Kona, HI 96745-4375

Dear Mr. Harris:

Permit Application for Kaupulehu-P/A Well 3

We are continuing our review of your application for the above well. Enclosed, for your information, is a memorandum from the State Historic Preservation Division concerning your application.

We will let you know when your application is scheduled for action by the Commission on Water Resource Management.

Sincerely,

MANABU TAGOMORI  
Deputy Director

ES:bm

c: Tom Nance Water Resources Engineering
MEMORANDUM

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

FROM:    Don Hibbard, Administrator
          State Historic Preservation Division

SUBJECT: Well Construction and Pump Installation Permit
          Application -- Construction and Installation of New
          Well (PIA - Kona Ltd)
          Kaupulehu, North Kona, Hawaii
          TMK: 7-2-03: 3

HISTORIC PRESERVATION PROGRAM CONCERNS:

We need more information before we can determine that construction
of this proposed well will have "no effect" on historic sites.
According to our records, no archaeological survey has been done
in the project area and we are concerned that historic sites could
be present because the project is located near an "abandoned
trail". The probability of historic remains along trails is
relatively high and we do not know if there are significant
remains of the trail itself which could be damaged by construction
activities.

Before issuing the well permit, we ask that the applicant do one
of the following: has an archaeological inventory done of the
project area to assure that construction activities will have "no
effect" on historic remains or submit documents which demonstrate
that the ground surface has been so altered that historic remains
are unlikely.

If you have any questions about this review, please contact Holly
McEldowney at 587-0008.
State Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809

WELL CONSTRUCTION AND PUMP INSTALLATION PERMIT APPLICATIONS
APPLICANT: KEAAU-SILVERSTEIN - 3458-02; KAUPULEHU-PIA "3" - 4757-03;
   KALAOA-NANSAY - 4358-02; WAIKOLOA RESORT IRR. "4" - 5551-02;
   WAIKOLOA RESORT IRR. "5" - 5551-03; AND WAIKOLOA-HIGHLANDS
   G.C. - 5447-01

We have reviewed the subject applications and there are no comments or require­ments from this Department.

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

Dear Mr. Paty:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATION
KAUPULEHU-PIA WELL NO. 3
STATE WELL NO. 4757-03
KAUPULEHU, HAWAII

Thank you for the opportunity to review the subject document. We have reviewed the application and have the following comments to offer:

1. The application indicates that the subject well will be used for golf course irrigation. Thus, the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems," are not applicable. However, if the proposed use were to change, the applicant must notify the Safe Drinking Water Branch.

2. If the irrigation system is supplemented with potable water, adequate measures must be taken to eliminate cross-connections and backflow conditions. The potable and non-potable water systems should be clearly labeled and physically separated by an air gap or an approved backflow preventer to avoid contaminating the potable water supply.

3. The proposed well is situated above the Underground Injection Control (UIC) line. Land areas above the UIC line are considered to contain underground sources of drinking water. Thus, it is essential that the well be designed and constructed to prevent the possibility of groundwater contamination. For example, the well should have a concrete well pad and full grouting to prevent seepage or floodwaters from migrating down the well shaft.
4. The operation of the proposed well should not be allowed to adversely affect the water quality of nearby wells. For example, the proposed well will be located approximately 6,000 feet upstream of the Kona Village wells 2 and 3 (state well nos. 4858-02 and -03) which are listed as drinking water wells. The map accompanying the application also shows state well nos. 4757-01 and -02 which are located within 3,000 feet of the subject well.

If you should have any questions, please contact the Safe Drinking Water Branch at 543-8258.

Very truly yours,

[Signature]

JOHN C. LEWIN, M.D.
Director of Health

cc: Roger Harris
PIA-Kona Limited Partnership
P.O. Box 4375
Kailua-Kona, Hawaii 96745-4375
March 18, 1991

MR MANABU TAGOMORI
DEPUTY DIRECTOR
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
PO BOX 621
HONOLULU HI 96809

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATION

We have reviewed the subject permit application and have no objections to the following proposed wells being constructed.

1. Keaau-Silverstein, Well No. 3458-02
   TMK: 1-5-10: 22

2. Kaupulehu-PIA "3", Well No. 4757-03
   TMK: 7-2-03: 3

3. Kalaoa-Nansay, Well No. 4358-02
   TMK: 7-3-02: 01

4. Waikoloa Resort Irr. "4", Well No. 5551-02
   TMK: 6-8-01: 05

5. Waikoloa Resort Irr. "5", Well No. 5551-03
   TMK: 6-8-01: 05

   TMK: 6-8-02: 16

ROBERT K. YANABU, Division Chief
Engineering Division

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

Dear Manabu:

Location of Proposed Well 4757-03 in Kaupulehu, North Kona, Hawaii

This letter and its enclosures responds to your letter of March 1, 1991 to Roger Harris. The location of proposed irrigation well 4757-03 is shown on the enclosed USGS and Tax Maps. This location was correctly shown on the well drilling permit application.

Some confusion may exist because locations of the first two irrigation wells, Nos. 4757-01 and 4757-02, were shown somewhat inaccurately on their permit applications. The locations shown on the drawings accompanying this letter show their actual, as-built locations.

Sincerely,

Tom Nance

TN:It

cc: Roger Harris

Enclosures
March 4, 1991

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

Attn: Mr. Manabu Tagomori, Deputy

Dear Mr. Paty:

We have received the following water permit applications. Thank you for the opportunity to review these applications:

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The only concern we raise on the above-referenced applications is a concern regarding Makakilo Golf Course Standby #1904-04. We simply caution that water on the Ewa Plain is limited and that current applications must be balanced against future development plans for the entire area.

We have no other comments or concerns at this time.

Sincerely,

Moses K. Keale, Sr
Chair, Board of Trustees
Mr. William Sewake, Manager  
Department of Water Supply  
County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720

Dear Mr. Sewake:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, by March 22, 1991.

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

Sincerely,

MANABU TAGOMORI  
Deputy Director
Mr. Bruce C. McClure
Chief Engineer
Department of Public Works
County of Hawaii
25 Aupuni Street
Hilo, Hawaii  96720

Dear Mr. McClure:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, by March 22, 1991.

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

Sincerely,

[Signature]
MANABU TAGOMORI
Deputy Director

NF:bm
Enc.
MEMORANDUM

TO: Mr. Don Hibbard, Director
    Historic Preservation Program

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

SUBJECT: Well Construction and Pump Installation Permit Application(s)

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, by March 22, 1991.

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

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

Dear Mrs. Drake:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, by March 22, 1991.
Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
Honorable John C. Lewin, M.D.
Director
Department of Health
State of Hawaii
1250 Punchbowl Street
Honolulu, Hawaii 96813

Attn: Mr. Thomas Arizumi, Drinking Water Branch

Dear Dr. Lewin:

Well Construction and Pump Installation Permit Application(s)

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your comments to us, orally or in writing, by March 22, 1991.
Honorable John C. Lewin, M.D.
Page 2

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

Very truly yours,

[Signature]

WILLIAM W. PATY

Enc.
Mr. Thomas K. Kaulukukui, Sr.
Chairman & Trustee-At-Large
Office of Hawaiian Affairs
1600 Kapiolani Blvd., Suite 1500
Honolulu, Hawaii 96814

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

Dear Mr. Kaulukukui:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Mr. Thomas K. Kaulukukui, Sr.

Page 2

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

Very truly yours,

WILLIAM W. PATY

Enc.
Mr. Roger Harris  
PIA-Kona Ltd. Partnership  
P.O. Box 4375  
Kailua-Kona, Hawaii 96745-4375

Dear Mr. Harris:

We have received your application and filing fee for a permit to construct and install a pump in a well (Well No. 4757-03) at Kaupulehu, Hawaii (TMK 7-2-03:03). We are reviewing the application for completeness.

Please send us a property tax map showing, as accurately as possible, the location where you intend to drill the well.

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

Sincerely,

[Signature]

MANABU TAGOMORI  
Deputy Director

NF: mh
Mr. Manabu Tagomori  
Division of Water & Land Development  
Department of Land & Natural Resources  
State of Hawaii  
P. O. Box 373  
Honolulu, Hawaii 96809

Dear Manabu:

Well Construction Permit Application for  
Kaupulehu Development, North Kona, Hawaii

We are pleased to submit the enclosed permit application and $25 filing fee on behalf of PIA-Kona Ltd. Partnership. A third irrigation well is to be drilled, cased, and pump tested. If results are satisfactory, the well would be used for golf course irrigation.

If you have questions or require additional information, please call either Roger Harris at PIA–Kona Ltd. Partnership (325-0909) or me. Thank you for your attention to this matter.

Sincerely,

Tom Nance

TN:It

cc: Roger Harris  
Ray Grace  

Enclosures
BELT COLLINS AND ASSOCIATES (NANCE) LTD.

600 ALA MOANA BLVD., STE. 200
HONOLULU, HI 96813

ORDER DEPARTMENT OF LAND & NATURAL RESOURCES

JAN 16, 1991

DETACH AND RETAIN THIS STATEMENT.

THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.

IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

DELUXE FORM WVC-3 V-2

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<th>DATE</th>
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<td>$25.00</td>
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