**SECTION 1: WELL LOCATION INFORMATION**

<table>
<thead>
<tr>
<th>Island</th>
<th>KAUAI</th>
<th>Proposed Use</th>
<th>Domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>LIHUE</td>
<td>Proposed Withdrawal</td>
<td>500</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>ANAHOLA</td>
<td>System Sustainable Yield</td>
<td>36</td>
</tr>
</tbody>
</table>

**SECTION 2: WELL SECTION DATA** *(enter data in grey cells only)*

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>32 ft., m.s.l.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>35 ft., m.s.l.</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>5 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>3 ft.</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>12 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>70 ft.</td>
</tr>
<tr>
<td>Estimated Head</td>
<td>5 ft., m.s.l.</td>
</tr>
<tr>
<td>Calculated Aquifer Thickness</td>
<td>205 ft.</td>
</tr>
<tr>
<td>County Water Supply (Y/N ?)</td>
<td>No</td>
</tr>
</tbody>
</table>

**SECTION 3: CHECKLIST** *(values to check are shaded)*

<table>
<thead>
<tr>
<th>Well Depth</th>
<th>205 ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Thickness of Aquifer</td>
<td>205 ft.</td>
</tr>
<tr>
<td>1/4 Aquifer Thickness</td>
<td>51.25 ft.</td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
<td>40 ft.</td>
</tr>
</tbody>
</table>

**Well Casing**

<table>
<thead>
<tr>
<th>Minimum Wall Thickness</th>
<th>0.237 in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>PVC</td>
</tr>
<tr>
<td>County or Non-County</td>
<td>non-county</td>
</tr>
<tr>
<td>Minimum Thickness per standards</td>
<td>0.250 in.</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
<td>0.250 in.</td>
</tr>
<tr>
<td>Minimum Length of Solid Casing</td>
<td>22.5 ft.</td>
</tr>
<tr>
<td>90% of ground to top of aquifer</td>
<td>58 ft.</td>
</tr>
<tr>
<td>Casing Material</td>
<td>Sch 40</td>
</tr>
<tr>
<td>Depth of Grouting</td>
<td>17.5 ft.</td>
</tr>
<tr>
<td>Calculated Depth of Grouting</td>
<td>55 ft.</td>
</tr>
</tbody>
</table>

| Thickness of Annular Space | 4 in. | okay | (refer to HWCPIS Section 2.6 d) |
INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use and other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808) 587-0264.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Month</th>
<th>Delivery Begin Date (mm/dd/yy)</th>
<th>Delivery End Date (mm/dd/yy)</th>
<th>Quantity Delivered (gallons)</th>
<th>Type of Use*</th>
<th>Field No(s)</th>
<th>Acres Irrigated</th>
<th>Crop Type</th>
<th>Method of Measurement**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1120-19</td>
<td>January</td>
<td></td>
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<tr>
<td>1120-19</td>
<td>February</td>
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<td>1120-19</td>
<td>March</td>
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<td>1120-19</td>
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<td>1120-19</td>
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<td>1120-19</td>
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<td>1120-19</td>
<td>September</td>
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</tbody>
</table>

* Use of water code:
- A: Agriculture non-irrigation use (livestock, cane wash, etc.)
- D: Domestic
- F: Fuel power generation - cooling
- H: Hydroelectric power generation - indicate KWH of power generated
- I: Industrial-manufacturing, construction, etc.
- IS: Irrigation - Sprinkle
- IF: Irrigation - Furrow

** For estimated values use code:
- P: Power consumption
- T: Total time of operation
- D: Comparison with past data
- X: Other means - (indicate method)

Other comments or additional information:

Submitted by (print) __________________________________ Title _________________________
Signature __________________________________________ Date _________________________

Form agwdrf.fm (11/96)
ANNUAL GROUND WATER USE REPORT

K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96754

Year: ______

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808) 587-0265 (O'ahu), or 984-2400 (Maui).

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Month</th>
<th>Measurement End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/L)**</th>
<th>Temp (°F)</th>
<th>Lowest Pumping Water Level (ft. above msl)**</th>
<th>Highest Non-Pumping Water Level (ft. above msl)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1120-19</td>
<td>January</td>
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<td>1120-19</td>
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<tr>
<td>1120-19</td>
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<tr>
<td>1120-19</td>
<td>December</td>
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</tr>
</tbody>
</table>

- flow meter, electrical consumption, weir of flume, not metered (estimated).
- indicate how long pump was on or off when chloride sample was taken.
- minimum time between pump/well turned off and water level measurement must be at least 24 hours; if pumping schedule did not allow for at least 24 hours rest during the month, please indicate amount of time pump was off before measurement.

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

Submitted by (print) ____________________ _
Title ____________________
Signature ____________________ Date __________ Telephone No. __________
March 6, 2002

K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96754

Dear Ms. Thronas and Mr. Loganbill:

Well Completion Report for Well No. 1120-19

We received your executed permit on February 28, 2002 and will now accept your Well Completion Report Part II for the Thronas-Loganbill Well (Well No. 1120-19) as complete.

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

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ss

c: Steve Goldberg, Oasis Water Systems
1. **Pump Tests Check (special condition of PIP? Yes/No)**
   Glenn Bauert (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

2. **Pump Installation Check**
   Mitch Ohye (initial)
   
   - 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
   Linnel (initial) signature

7. Charley/Lenore/Ryan File
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 637
HONOLULU, HAWAII 96813

REF:CWRM-SS

K. Thonas and L. Loganbll
P.O. Box 607
Kilauea, HI 96754

Dear Ms. Thonas and Mr. Loganbll:

Pump Installation Permit
Thonas-Loganbll Well (Well No. 1120-18)

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 shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

2. Standard Condition 5 is waived. (Water usage from individual water systems where the quantity of use averaged over a one-year period does not exceed 1,700 gallons per day are exempt from the requirement for measuring and reporting monthly water use.)

The permittee is responsible for all conditions of the permit. This includes ensuring that the pump installation contractor submits a completed Part B of the Well Completion Report form (enclosed) within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

To validate your pump installation permit, please sign and have the contractor sign both permit originals and return one for our files.

IMPORTANT - Unless specifically exempted, pump installation may not proceed without a validated permit returned to the Commission. 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 - Part I as complete.

If you have any questions, please call the Commission staff at 808-687-0218 or toll-free at 274-3141, extension 70218.

Aloha,

Timothy E. Johns
Chairperson

Enclosure
PUMP INSTALLATION PERMIT
Thurston-Loganbill Well, Well No. 1120-19

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 Thurston-Loganbill Well (Well No. 1120-19) at 3741 Molokai Beach Road, Kauai, TMK 4-A-5-D/12-091, subject to the Hawaii Well Construction & Pump Installation Standards (16/2007), 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 96823, shall be notified in writing, at least two (2) weeks before any work starts for the permit commencement and 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 20 gallon capacity, or less, pump in the well.

3. The permittee shall provide and maintain an approved water or other appropriate means for measuring and recording withdrawals and water levels, and appropriate devices or means for measuring discharge, and temperature. These data shall be measured monthly and reported to the Commission on an annual 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 stream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of cumulative water rights.

5. The permittee shall provide and submit all permit applications and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Chairperson within thirty (30) days after completion of work.

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

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (16/2007). 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 at least thirty (30) days prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be property capped. If the well is to be abandoned then the permittee must apply for a well abandonment permit in accordance with §13-168-129 prior to any well sealing or plugging work.

10. The permittee, its successors, and assigns shall forever, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or damages for property damage, personal injury, or death arising out of any act or omission of the applicant, agents, 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 sheet will be incorporated herein by reference.

Date of Approval: January 6, 2000
Expiration Date: January 6, 2004

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 understood that I do not hold a valid permit until I meet the permit holder have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may result in revocation and fines of up to $1000 per day starting from the permit date of approval.

Permittee's Signature: __________________________
Printed Name: __________________________
Date: __________________________

Installer's Signature: __________________________
Printed Name: __________________________
Date: __________________________

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

Water Use
Department of Health's Office of Drinking Water & Water Supply Division

OASIS WATER

3/28/2002 00:00:00
PAGE 03
OSIS WATER SYSTEMS
# PART I - PERMANENT PUMP INSTALLATION REPORT

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>Pump Installation Company: OASIS WATER</td>
</tr>
<tr>
<td>21.</td>
<td>Name of person performing work: BARRY S. MILLER</td>
</tr>
<tr>
<td>22.</td>
<td>Date Pump Installation Completed: Nov 14, 99</td>
</tr>
</tbody>
</table>

## PUMP INSTALLATION:

<table>
<thead>
<tr>
<th>Pump Type, Make, Serial No.</th>
<th>Capacity (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub Grund Le 4D520-7</td>
<td>40</td>
</tr>
</tbody>
</table>

| Motor type, H.P., Voltage, rpm | Raw Slv 2 H.P. 240 3450 |

<table>
<thead>
<tr>
<th>Depth of Pump Intake Setting</th>
<th>110 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth to bottom of pipeline</td>
<td>110 ft. below ground</td>
</tr>
</tbody>
</table>

Pumping Head is 105 ft. Type of flow meter: which measures in

24. As-built drawings attached? Yes No

25. Other remarks/comments: (See below)

### Pump Installation Contractor (print)

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>OASIS WATER</td>
<td>Dec 6, 99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applicant (print)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARRY S. MILLER</td>
<td>Nov 14, 99</td>
</tr>
</tbody>
</table>

### 3. (cont'd) DRILLER'S LOG (cont'd):

<table>
<thead>
<tr>
<th>Depth (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Top Soil</td>
</tr>
<tr>
<td>10</td>
<td>Sand</td>
</tr>
<tr>
<td>18</td>
<td>Air Gap</td>
</tr>
<tr>
<td>48</td>
<td>Fresh Water (W2)</td>
</tr>
<tr>
<td>50</td>
<td>Air Gap</td>
</tr>
<tr>
<td>71</td>
<td>Sand</td>
</tr>
<tr>
<td>120</td>
<td>Fresh Water (W2)</td>
</tr>
<tr>
<td>120</td>
<td>Air Gap</td>
</tr>
</tbody>
</table>

### 19 & 25 Remarks

- 7-1120-19 MOLDA-MIDNAS
- Log an bill
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

1120-19

Bench mark elevation surveyed to nearest 0.01 ft. = 31.11 ft. mean sea level

2-1120-19 MOLAA - THRONAS

Elevation of top of chase tube = 32.0 ft. mean sea level

Pump intake depth = 11.0 ft. (referenced to bench mark)

Chase tube depth = 10.0 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = 60.0 ft. mean sea level

Logan bill
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96754

Dear Ms. Thronas and Mr. Loganbill:

Notice of Permit Expiration
Pump Installation Permit for Well No. 1120-19

We are notifying you of the expiration of the subject permit on January 6, 2002. If the pump installation work was completed, please send us a fully executed copy of the permit and the Well Completion Report Part 2, as required under Standard Condition 5 of your permit. Please be aware that failure to comply with the conditions of your permit may result in daily fines of up to $1000.

If the pump has not been installed, please inform us by calling us at 587-0218 (or toll-free direct at 274-3141, extension 70218) or writing to us at the address shown above.

Please also provide us with your updated phone number. We attempted to phone you, but the phone number given on your application (828-0460) has been disconnected.

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

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ss

c: All Phase Construction
K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96754

Dear Ms. Thronas and Mr. Loganbill:

Pump Installation Permit
Thronas-Loganbill Well (Well No. 1120-19)

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 shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

2. Standard Condition 3 is waived. (Water uses from individual water systems where the quantity of use averaged over a one-year period does not exceed 1,700 gallons per day are exempt from the requirement for measuring and reporting monthly water use.)

The permittee is responsible for all conditions of the permit. This includes ensuring that the pump installation contractor submits a completed Part II of the Well Completion Report form (enclosed) within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

To validate your pump installation permit, please sign and have the contractor sign both permit originals and return one for our files.

IMPORTANT - Unless specifically exempted, pump installation may not proceed without a validated permit returned to the Commission. 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 - Part I as complete.

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

Aloha,

TIMOTHY E. JOHNS
Chairperson

Enclosure
PUMP INSTALLATION PERMIT
Thronas-Loganbill Well, Well No. 1120-19

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 Thronas-Loganbill Well (Well No. 1120-19) at 3741 Moloaa Beach Road, Kauai, TMK 4-4-9-012-001, 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 20 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 an annual basis, on forms provided by the Chairperson (attached).

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

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

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

7. The pump installation permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). 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 notice of the proposed action and an opportunity to be heard.

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

10. 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: January 6, 2000
Expiration Date: January 6, 2000

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 do not hold a valid permit until I and the pump installer have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1000 per day 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 #: ___________
Printed Name: ___________________________ Firm or Title: ___________________________

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

Attachments
USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Kauai Department of Water Supply
Steve Goldberg, Oasis Water Systems
Steve Goldberg returned my call. He explained that the initial water level that was hit was at 50 ft. That was a perched layer that was sealed off after they put the casing in, and after cased, the water level was at 60 ft (that's the level on which the pump quote was made). He also said that the WCR 1 showing 92 ft of solid casing and 30 ft of perforated casing is correct. He made a mistake on transposing the numbers on the as-built.
Notes/Comments:

Aloha & Happy New Year! Just a couple questions about the attached Well Completion Report (WCR) and as-built drawing:

1. The WCR (#11) indicates the length of the solid casing is 92 ft. below ground, but the as-built shows it is 84 ft. Which is correct?

2. Similarly, the WCR (#11) indicates the length of the perforated casing is 30 ft. (92 ft to 122 ft), but the as-built shows 40 ft.

3. The WCR (#13) indicates the water level is 50 ft below ground, but the as-built shows 60 ft. (By the way, either of those would be a water level that is below sea level.)

Please check it out & let me know. We'll issue the pump permit right after that. Please call if any questions.

Thanks, Lenore
1. AS-BUILT SECTION DOES NOT MATCH WCL1.

EXAMPLE:

SOLID CASING

1. #1 on WCL1 - CASING IN WT.
   (solen)
   6" O.D. CAS. TO 92'
   BELOW GR.
   ON AS-BUILT - 84'
   SOLID CAS. BELOW GR.

PERF CASING

WCL1 92' TO 122' PERF
CAS. (TOTAL 30' PERF)
ON AS-BUILT - 40' OF
PERF. CAS.

WATER LEVEL

WCL1 - WATER IS 50'
   BELOW GR.
   ON AS-BUILT - 60'
   BOTH SHOWN W.L. BELOW SEA LEVEL.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT

Part I. Well Construction & Part II. Permanent Pump Installation

Instructions: Please print or type and submit completed report within 60 days after well completion to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-468-4644 Extension 70225.

1. State Well No.: 1120-19   Well Name: Thronas-Loganbill   Island: Kauai
2. Location/Address: 3741 Moloaa Beach Road, Kauai

PART I.
WELL CONSTRUCTION REPORT

3. Drilling Company: OASIS WATER
4. Name of driller who performed work: Barry Simmons
5. Type of rig/construction: Tandem Rotary
6. Date(s) Well Construction and pump tests (if any) completed: Nov. 4, 99
7. GROUND ELEVATION (referenced to mean sea level, msl): 31.11 ft.
   Well Bench Mark (description/location): K7 72
   Elevation(msl): 17.35 ft.
8. DRILLER’S LOG: Please attach geologic log (if available or if required by permit)
   Depths (ft.) Rock Description, Water Level, Dates, etc.
   to (Queen)
   to (Queen)
   (If more space is needed, continue on back.)
9. Total depth of well below ground: 123 ft.
10. Hole size:
    14” inch dia. from 0 ft. to 90 ft. below ground
    12” inch dia. from 12” ft. to 122” ft. below ground
    8” inch dia. from 122” ft. to 12” ft. below ground
11. Casing installed:
    6” in. I.D. x 3/8” in. wall solid section to 92’ ft. below ground
    6” in. I.D. x 3/8” in. wall perforated section to 122” ft. below ground
    Casing Material/Slot Size: PUC 1/4”
12. Annulus:
    Grouted from 0 ft. below ground to 90’ ft. below ground
    Gravel packed from 90’ ft. below ground to 122” ft. below ground
13. Initial water level: 30 ft. below ground. Date and time of measurement: 11-99
14. Initial chloride: 40 ppm Date and time of sampling: 11-10-99
15. Initial temperature: 70°F Date and time of measurement:
16. PUMPING TESTS: Reference Point (R.P.) used: Top of casing, which elevation is 33.06 ft.
    (1) Step-Drawdown Test Date (2) Long-term Aquifer Test Date
    Start water level 60 ft. below R.P. Start water level 70 ft. below R.P.
    End water level 60 ft. below R.P. End water level 70 ft. below R.P.
17. Pump Test Procedures data & graphs (12-7/97 SDPTD & CRPTD Forms) attached? Yes
18. As-built drawings attached? Yes
19. Other remarks/comments: (On back of this form)

Well Drilling Contractor (print): OASIS WATER C-57 Lic. No. 21457-58
Signature
Date: Dec 6

Surveyor (print): See Attached
Signature
Lic. No.
Date

Applicant (print): Thronas-Loganbill
Signature
Date: 11 Dec 99

Applicant (print): Thronas-Loganbill
Signature
Date: 11 Dec 99
**PART II. (PERMANENT) PUMP INSTALLATION REPORT**

20. Pump Installation Company: ________________________________

21. Name of person performing work: ________________________________

22. Date Pump Installation Completed: ________________________________

23. **PUMP INSTALLATION:**
   - Pump Type, Make, Serial No.: ________________________________
   - Capacity: ______ gpm
   - Motor type, H.P., Voltage, rpm:
   - Depth of Pump Intake Setting ______ ft. below ground □ well bench mark
   - Depth to bottom of airline ______ ft. below ground □ well bench mark
   - Pumping Head is ______ ft. Type of flow meter: ____________ which measures in ______

24. As-built drawings attached □ Yes □ No

25. Other remarks/comments: (See below)

<table>
<thead>
<tr>
<th>Pump Installation Contractor (print)</th>
<th>C-57 Lic. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Applicant (print)</td>
<td></td>
</tr>
<tr>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

8.(cont'd) **DRILLER'S LOG (cont'd):**

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 7</td>
<td>Top Soil</td>
</tr>
<tr>
<td>8 to 17</td>
<td>Boulders</td>
</tr>
<tr>
<td>18 to 47</td>
<td>Blue Rock</td>
</tr>
<tr>
<td>48 to 71</td>
<td>Fractured Blue Rock (w2)</td>
</tr>
<tr>
<td>72 to 90</td>
<td>Blue Rock</td>
</tr>
<tr>
<td>91 to 120</td>
<td>Cinder's Broken Blue Rock (w2)</td>
</tr>
<tr>
<td>120 to 122</td>
<td>Blue Rock</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
</tr>
</thead>
</table>

19. & 25. Remarks:

___________________________________________

___________________________________________

___________________________________________

___________________________________________
WELL ELEVATION

THRONAS / LOGANBILL WELL SITE # 1120-19

OWNER: LOGANBILL

T.M.K.(4)4-9-12:01

BENCHMARK USED: R.M. 72 ELEVATION OF 17.35'M.S.L.
WELL CONSTRUCTION PERMIT

Thoronas-Loganbill Well, Well No. 1120-19

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 Thoronas-Loganbill Well (Well No. 1120-19) at 3741 Molea Beach Road, Kauai, TMK 4-4-9-012-001, subject to the Hawaii Well Construction & Pump Installation Standards (12/29/7) 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 one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee 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 the event that ground water 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 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 shall stop work and contact the Department's Historic Preservation Division (692-815) 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 this 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 (reference 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 records, including time, pumping rate, drawdown, chloride content, and other data.

8. The permittee 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; HWCHPS). If the HWCHPS 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 notice of the proposed action and an opportunity to be heard.

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

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, assignee, 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: February 17, 1999
Expiration Date: February 17, 2001

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I do not hold a valid permit until I and the 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: [Signature]
Printed Name: [Name] Firm or Title: Owner
Date: 9-14-99

Driller's Signature: [Signature]
Printed Name: [Name] C-57 License #: 21458 Date: 9-30-99
Firm or Title: Oasis Water

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
October 18, 1999

State Of Hawaii
Water Commission
ATT: Chairperson
Fax # 808-587-0219

Dear Sir,

Please be advised that Oasis Water, Inc. License No. C-21457, will begin work on the Thronas-Loganbill Well # 1120-19 in two weeks.

Sincerely,

Steve Goldberg
Oasis Water Inc. C-21457
Dear Ms. Thronas and Mr. Loganbill:

Well Construction Permit
Thronas-Loganbill (Well No. 1120-19)

This letter serves as your official notice of action by the Commission on Water Resource Management (Commission) to approve your well construction permit application at their meeting on February 17, 1999. Enclosed are two (2) copies of your approved Well Construction Permit for the captioned wells that authorize well construction activities but excludes installation work for your permanent pump. As part of the Commission's approval, the following special conditions were added and are part of your permit under Permit Condition 13:

Special Conditions

1. The permittee shall obtain the signature and license number of a C-57 licensed contractor on the permit and submit a copy of the fully executed permit document to the Commission prior to the initiation of any work authorized under this permit. In the alternative, the permittee may submit, within the next six (6) months, documentation from the Department of Commerce and Consumer Affairs, Contractors License Board, that approval of All Phase Construction (license no. BC18029) to do well drilling work has been granted. If this alternative is selected, the permittee must also submit a fully executed permit document to the Commission prior to the initiation of any work authorized under this permit.

2. This permit is subject to the review comments from the Department of Health (attached).

3. Standard Condition 2 is modified to exempt the permittee from the requirements for a pump test.

4. Standard Condition 6.e. is waived.

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, 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."
a permanent pump may be installed prior to the permanent pump installation permit issuance. 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 validated well construction permit.

To validate your 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 may not proceed without a validated permit returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee is 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 the Commission staff at 587-0218 or toll-free at 274-3141, extension 70218.

Aloha,

for: 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 Thronas-Loganbill Well (Well No. 1120-19) at 3741 Moloaa Beach Road, Kauai, TMK 4-4-9-012-001, subject to the Hawaii Well Construction & Pump Installation Standards (123/57) 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 one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee 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 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 shall stop work and contact the Department's Historic Preservation Division (692-8015) immediately.

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

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

8. The permittee 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 notice of the proposed action and an opportunity to be heard.

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Date of Approval: February 17, 1999
Expiration Date: February 17, 2001

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I do not hold a valid permit until I and the 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

C: USGS
   Department of Health's Safe Drinking Water, Wastewater, and Clean Water Branches
   Honolulu Board of Water Supply
   Olaf Thronas
TO: Honorable Bruce 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 Application  
Thronas-Loganbill (Well No. 1120-19)

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 February 17, 1999.

Please find a map, attached, to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

RESPONSE:

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

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

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

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

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

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

No comments/objections

Contact Person:  
Phone: 586-4294

Signed:  
Date: 2-11-99
TO: Honorable Bruce 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 Application  
Thronas-Loganbill (Well No. 1120-19)

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 February 17, 1999.

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RESPONSE:

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

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

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

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

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

[ ] No comments/objections

Contact Person: William Wong  
Phone: 586-4258

Signed:  
Date: 02/12/99
The Department of Health, Clean Water Branch has the following comments:

1. For Well-Drilling Activities

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

2. For Well Pump Testing

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

JS/cr
K. Thronas and L. Loganbill
APPLICATION FOR WELL PERMITS
Thronas-Loganbill Well (Well No. 1120-19)
Well Construction: 4-inch Casing Diameter, 70-ft Deep Well
Pump Installation: 20 GPM for Domestic Use
TMK 4-4-9-012-001, Moloaa, Kauai

APPLICANT:
K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96754

LANDOWNER:
Olaf Thronas
P.O. Box 269
Lawai, HI 96765

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

BACKGROUND:
On June 15, 1994, the Commission on Water Resource Management (Commission) approved a well construction and pump installation permit for Well No. 1120-19. This permit, which was valid for two (2) years, expired on June 15, 1996.

On February 18, 1997, the staff sent a Notice of Expiration of Well Construction/Pump Installation Permit.

On January 15, 1998, the applicants submitted a new application for a well construction/pump installation permit. The application specified All Phase Construction, a general contractor (license no. BC18029) as the contractor.

ITEM 7
In a letter dated January 25, 1999, the staff returned the application to the applicants, requesting that the signature and license number of a C or C-57 licensed contractor be obtained on the application for the well drilling work.

On February 1, 1999, the staff received clarification from the Department of Commerce and Consumer Affairs that well drilling work must be performed by a contractor with a C-57 license.

In a follow-up telephone call on February 8, 1999, the staff of the Contractors License Board stated that an exemption from the C-57 license requirements is allowable if it is for a public works project (§444-2 Haw. Rev. Stat.). However, an individual domestic well would not qualify as a public works project. Approval for an exemption from contractors licensing requirements is the jurisdiction of the Contractors License Board.

**WATER AVAILABILITY:**

Anahola Aquifer System of the Lihue Sector  
Estimated Sustainable Yield: 36 mgd  
Aquifer System Pumpage (12-MAV as of 1991): 6.96 mgd  
Proposed Use: 500 gpd, Domestic Use

**ISSUES/ANALYSIS:**

Agency Review: Copies of the application were sent to the Department of Health’s Safe Drinking Water and Wastewater Branches. Notice of the application will be published in the March, 1999 bulletin. As of the date that this submittal was finalized, review comments from the Department of Health were not received.

Staff Review: The proposed work includes the construction of a 70-foot deep well and installation of a 15-20 gpm capacity pump for domestic use. The application identifies All Phase Construction, a general contractor (license no. BC18029), for the well drilling work. As stated above, the Commission may not approve an exemption from the licensing requirements administered by the Department of Commerce and Consumer Affairs.

There are about thirty-two (32) other wells within a mile of the proposed well. The surrounding wells are small capacity domestic wells (15 to 40 gpm). Kauai Department of Water does not provide service to this area. No adverse impacts to water resources are anticipated from the drilling activity. Wells with capacities equal to or less than 50 gpm are exempt from the requirements for pump testing. However, the total amount of water moving through the system is large compared to the amount of water being developed.
RECOMMENDATION:

A. That the Commission approve the issuance of a well construction permit for Thronas-Loganbill Well (Well No. 1120-19), subject to the standard conditions in Exhibit 3, and the following special conditions:

1. The permittee shall obtain the signature and license number of a C-57 licensed contractor on the permit and submit a copy of the fully executed permit document to the Commission prior to the initiation of any work authorized under this permit. In the alternative, the permittee may submit, within the next six (6) months, documentation from the Department of Commerce and Consumer Affairs, Contractors License Board, that approval of All Phase Construction (license no. BC18029) to do well drilling work has been granted. If this alternative is selected, the permittee must also submit a fully executed permit document to the Commission prior to the initiation of any work authorized under this permit.

2. This permit is subject to the review comments from the Department of Health.

3. Standard Condition 2 is modified to exempt the permittee from the requirements for a pump test.

4. Standard Condition 6.e. is waived.

B. That the Commission authorize the Chairperson to approve and issue a pump installation permit per Declaratory Rule DEC-ADM98-G5 or when the items required under Standard Condition 6 are received and accepted, subject to the Standard Pump Installation Conditions in Exhibit 4.

Respectfully submitted,

EDWIN T. SAKODA
Acting Deputy Director

Exhibit(s): 1 (Location Map)
2 (Proposed Well Section)
3 (Standard Well Construction Permit Conditions)
4 (Standard Pump Installation Permit Conditions)
9. **PROPOSED WELL SECTION**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing</td>
<td>32 ft., msl*</td>
</tr>
<tr>
<td>(Survey to nearest 0.01 ft.)</td>
<td></td>
</tr>
<tr>
<td>Minimum at top of casing</td>
<td></td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>30 ft., msl*</td>
</tr>
<tr>
<td>Total Depth</td>
<td>30 ft.</td>
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<tr>
<td>Minimum annular space</td>
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<tr>
<td>between hole and casing</td>
<td>2 ft.</td>
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<tr>
<td>Cement Grout</td>
<td>56 ft. (min. 70% of distance)</td>
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<td>from ground elevation to top</td>
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<td>of water surface or 500 ft.</td>
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<tr>
<td>whichever is less.</td>
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</tr>
<tr>
<td>Water Level Elevation</td>
<td>0 ft. msl*</td>
</tr>
<tr>
<td>Rock or Gravel Packing</td>
<td>15 ft.</td>
</tr>
<tr>
<td>Material</td>
<td>Crushed Basalt</td>
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<tr>
<td>Length</td>
<td>60 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>4 in.</td>
</tr>
<tr>
<td>Wall Thickness</td>
<td>5 in.</td>
</tr>
<tr>
<td>Bottom Elevation</td>
<td>-25 ft., msl*</td>
</tr>
<tr>
<td>Open Casing</td>
<td>Perforated</td>
</tr>
<tr>
<td>Material</td>
<td>Crushed Basalt</td>
</tr>
<tr>
<td>Length</td>
<td>60 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>4 in.</td>
</tr>
<tr>
<td>Wall Thickness</td>
<td>5 in.</td>
</tr>
<tr>
<td>Openings</td>
<td>3 sq. in./L.F.</td>
</tr>
<tr>
<td>Bottom Elevation</td>
<td>-40 ft., msl*</td>
</tr>
</tbody>
</table>

**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 = \( \left( \frac{\text{Water Elevation} - 0.25 \times \text{Water Level Elevation}}{4} \right) \)

Example: Estimated 2 ft. Water Level Elevation → Bottom Elevation of Well Limit = \( \left( \frac{2 - 0.25 \times 2}{4} \right) = -1.5 \) 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.

EXHIBIT 2
STANDARD WELL CONSTRUCTION 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 construction and testing of Thronas-Loganbill Well (Well No. 1120-19) at Moloaa, HI, TMK 4-4-9-012-001, 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 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 one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Commission 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 Commission.

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

4. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and contact the Department’s Historic Preservation Division (587-0045) immediately.

5. 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.

6. The following shall be submitted to the Commission 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 water quality data.

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

8. The well construction permit application and staff submittal approved by the Commission at its February 17, 1999 meeting are incorporated into the permit by reference.

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

10. 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.

EXHIBIT 3
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 Throns-Loganbill Well (Well No. 1120-19) at Moloaa, Kauai, TMK 4-4-9-012-001, 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 20 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 an annual 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 February 17, 1999 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.

EXHIBIT 4
WELL COMPLETION REPORT 2/27/98 WCR Form

Part I. Well Construction & Part II. Permanent Pump Installation

Instructions: Please print or type and submit completed report within 60 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-468-4644 Extension 70225.

1. State Well No.: 1120-19    Well Name: Thronas-Loganbill    Island: Kauai
2. Location/Address: Moloa, Kauai    Tax Map Key: 4-4-9-012-001

PART I. WELL CONSTRUCTION REPORT

3. Drilling Company: ____________________________
4. Name of driller who performed work: ____________________________
5. Type of rig/construction: ____________________________
6. Date(s) Well Construction and pump tests (if any) completed: ____________________________
7. GROUND ELEVATION (referenced to mean sea level, msl): __________ ft.    Well Bench Mark (description/location): ________
     Elevation (msl): __________ ft.
8. DRILLER’S LOG: Please attach geologic log (if available or if required by permit)

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
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<td>__________</td>
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<td>____________ to ____________</td>
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(If more space is needed, continue on back.)

9. Total depth of well below ground: __________ ft.
10. Hole size: _____________________ in. dia. from __________ ft. to __________ ft. below ground
     _____________________ in. dia. from __________ ft. to __________ ft. below ground
     _____________________ in. dia. from __________ ft. to __________ ft. below ground
11. Casing installed: __________ in. I.D. x __________ in. wall solid section to __________ ft. below ground
     __________ in. I.D. x __________ in. wall perforated section to __________ ft. below ground
     Casing Material/Slot Size: ____________________________
12. Annulus: Grouted from __________ ft. below ground to __________ ft. below ground
     Gravel packed from __________ ft. below ground to __________ ft. below ground
13. Initial water level: __________ ft. below ground.    Date and time of measurement: __________
14. Initial chloride: __________ ppm    Date and time of sampling: __________
15. Initial temperature: __________ °F    Date and time of measurement: __________
16. PUMPING TESTS: Reference Point (R.P.) used: ____________, which elevation is __________ ft.
     (1) Step-Drawdown Test Date __________
     Start water level __________ ft. below R.P.
     End water level __________ ft. below R.P.
     (2) Long-term Aquifer Test Date __________
     Start water level __________ ft. below R.P.
     End water level __________ ft. below R.P.
17. Pump Test Procedures data & graphs (12/17/97 SDPTD & CRPTD Forms) attached? __ Yes __ No
18. As-built drawings attached? __ Yes __ No
19. Other remarks/comments: (On back of this form)

Well Drilling Contractor (print) ____________________________ C-57 Lic. No. __________
Signature ____________________________ Date __________

Surveyor (print) ____________________________ Lic. No. __________
Signature ____________________________ Date __________

Applicant (print) ____________________________
Signature ____________________________ Date __________
PART II.  (PERMANENT) PUMP INSTALLATION REPORT

20. Pump Installation Company: ________________________________

21. Name of person performing work: ___________________________

22. Date Pump Installation Completed: __________________________

23. PUMP INSTALLATION:
   Pump Type, Make, Serial No.: ________________________________ Capacity: ______ gpm
   Motor type, H.P., Voltage, rpm: ________________________________
   Depth of Pump Intake Setting _________ ft. below □ ground □ well bench mark
   Depth to bottom of airline _________ ft. below □ ground □ well bench mark
   Pumping Head is __________ ft. Type of flow meter: _____________ which measures in ______

24. As-built drawings attached? __ Yes __ No

25. Other remarks/comments: (See below)

Pump Installation Contractor (print) ____________________________ C-57 Lic. No. __________
Signature ________________________________________________ Date __________

Applicant (print) __________________________________________
Signature ________________________________________________ Date __________

8.(cont’d)   DRILLER’S LOG (cont’d):

<table>
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<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, Dates, etc.</th>
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19. & 25. Remarks:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808) 587-0265 (O'ahu), or 984-2400 (Maui).

**LOWEST**

**HIGHEST**

**Measurement**

**Quantity**

**Method**

**Chloride**

**Temp**

**Lowest**

**Non-Pumping**

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Month</th>
<th>Measurement End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)***</th>
<th>Temp (°F)</th>
<th>Lowest Pumping Water Level (ft. above ms)***</th>
<th>Highest Non-Pumping Water Level (ft. above ms)***</th>
</tr>
</thead>
<tbody>
<tr>
<td>1120-19</td>
<td>January</td>
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<td>1120-19</td>
<td>February</td>
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<td>1120-19</td>
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<td>1120-19</td>
<td>October</td>
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<td>1120-19</td>
<td>December</td>
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</tbody>
</table>

**-** flow meter, electrical consumption, weir of flume, not metered (estimated).

**-** indicate how long pump was on or off when chloride sample was taken.

**-** minimum time between pump/well turned off and water level measurement must be at least 24 hours; if pumping schedule did not allow for at least 24 hours rest during the month, please indicate amount of time pump was off before measurement.

Other comments or additional information (e.g. - date and method of chloride measurement; how pumpage amounts are estimated; etc...):
### Annual Ground Water Delivery Report

**State of Hawai'i**
**Commission on Water Resource Management**
**Department of Land and Natural Resources**

**ANNUAL GROUND WATER DELIVERY REPORT**
(Information to be used by U.S. Geological Survey)

K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96757

Year of 19_

**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use and other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96806. For assistance, please call (808) 587-0264.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Month</th>
<th>Delivery Begin Date (mm/dd/yy)</th>
<th>Delivery End Date (mm/dd/yy)</th>
<th>Quantity Delivered (gallons)</th>
<th>Type of Use*</th>
<th>Field No(s)</th>
<th>Acres Irrigated</th>
<th>Crop Type</th>
<th>Method of Measurement**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1120-19</td>
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* Use of water code:
- **AQ**: Aquaculture
- **A**: Agriculture non-irrigation use (livestock, cane wash, etc.)
- **C**: Commercial
- **I**: Industrial-manufacturing, construction, etc.
- **D**: Domestic
- **H**: Hydroelectric power generation - indicate KWH of power generated
- **ID**: Irrigation - Drip
- **F**: Fuel power generation - cooling
- **IF**: Irrigation - Furrow
- **IS**: Irrigation - Sprinkle

**Other comments or additional information:**

---

Submitted by (print) __________________________ Title __________________________
Signature __________________________ Date __________________________

Form agwdrf.frm (11/96)
1. APPLICANT: (Fill out all three, if applicable, and place a check next to the primary contact)
   □ WELL OWNER: K. Thomas Logambill
       Mailing Address: P.O. Box 607, Kilauea, HI 96754
       Phone: (808) 638-0430
       Fax: ____________________________ E-mail: ____________________________
   □ LAND OWNER: Lui E. Thomas
       Mailing Address: P.O. Box 609, Kilauea, HI 96754
       Phone: ____________________________ Fax: ____________________________ E-mail: ____________________________
   □ CONTRACTOR: Alii Phoe Const.
       Mailing Address: P.O. Box 609, Kilauea, HI 96754
       Phone: (808) 638-6011 Fax: ____________________________ E-mail: ____________________________

2. WELL LOCATION/NAME: K. Thomas Logambill
       Address: 3101 Maloala Beach Rd
       Island: Kauai
       Tax Map Key: 44-9-401-0

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

3. (a) PROPOSED WORK: (Check all that apply)

   □ Drill New Well       □ Install New Pump
   □ Modify Existing Well □ Redrill
   □ Abandon/Seal
t   □ Modify Pump
   □ Replace Pump
   * Be sure to complete and submit well abandonment report upon completion of work.
   □ New Pump

(b) WELL TYPE:

   □ Dug       □ Bored       □ Driven       □ Drilled
   □ Centrifugal
   □ Rotary
   □ Rotary-Displacement
   □ Reciprocating
   □ Impulse
   □ Electric, rated horsepower:
   □ Powered by:
   □ Deep Well Turbine
   □ Rotary
   □ Propeller
   □ Diesel
   □ Submersible
   □ Rotary-Gear
   □ Reciprocating
   □ Gas
   □ Centrifugal
   □ Rotation
   □ Impulse
   □ Impulse
   □ Electric, rated horsepower:

   Is this well a part of a battery of wells? □ Yes □ No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:

   Pump Type (Check one):
   □ Deep Well Turbine
   □ Rotary
   □ Propeller
   □ Diesel
   □ Submersible
   □ Rotary-Gear
   □ Reciprocating
   □ Gas
   □ Centrifugal
   □ Rotation
   □ Impulse
   □ Electric, rated horsepower:

   Rated Pump Capacity: Max. 15-20 gallons per minute
   Gallons per minute
   If Pump replacement, Existing Pump Capacity:
   __________ gallons per minute

5. PROPOSED USE: (Check all that apply)

   □ Municipal (including hotels, stores, etc.)
   □ Industrial
   □ Domestic (individual, noncommercial water system)
   □ No. of Dwelling Units: __________
   □ Irrigation (crop)
   □ No. of Acres: __________
   □ Military
   □ Other:

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 500 gallons per day

(b) METHOD OF FLOW MEASUREMENT: Open-Pipe

7. PENDING ACTIONS:

   □ CDUA
   □ SMA
   □ EIS
   □ EA
   □ NONE
   □ Other (explain)

8. REMARKS, EXPLANATIONS: Site out of flood zone

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

I understand that approval of this application attatches the following standard conditions: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 30 days after the completion date of the permitted work; 3) monthly water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner: K. Thomas Logambill
Landowner: Lui E. Thomas
Contractor: Alii Phoe Const.

Signature Date: ____________________________
Signature Date: ____________________________
Signature Date: ____________________________
9. PROPOSED WELL SECTION

Elevation at top of casing 32 ft, msl
(Survey to nearest 0.01 ft.)

Hole Diameter: 12 in.

Minimum annular space between hole and casing ≥ 1/2 in.

Minimum of 2' Radius & 4' Thick Concrete Pad

Ground Elevation: 30 ft, msl

Cement Grout: 56 ft.
(min. 70% of distance from
ground elevation to top of
water surface or 500 ft.,
whichever is less.)

Total Depth 70 ft.

Minimum annular space
between hole and casing ≥ 1/2 in.

Rock or Gravel Packing 15 ft.

Material: 
- Crushed Basalt
- Rounded Gravel

Water Level Elevation: 0 ft, msl

Solid Casing: (≥ 50% x (Ground Elev. - Water Level Elev.))
- Material: PVC
- Material Standard: ASTM F480
- Length: 45 ft
- Diameter: 4 in
- Wall Thickness: 1/4 in
- Bottom Elevation: - 35 ft, msl

Open Casing: 
- Material: Perforated
- Material Standard: ASTM F480
- Length: 40 ft
- Diameter: 4 in
- Wall Thickness: 1/4 in
- Openings: 3 sq. in, ft.
- Bottom Elevation: - 40 ft, msl

Open Hole: 
- Length: 
- Diameter: 
- Bottom Elevation: 

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 Elev.) / 4

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 + 41 x 2) / 4 = -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.

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

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

- Thermoset Plastic: (check one)
  - Filament Wound Resin Pipe conforming to ASTM D996
  - 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

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

- 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 D996
  - 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 assure that your construction plans are in
compliance with all existing regulations.
Dear Ms. Thronas and Mr. Loganbill:

Well Construction / Pump Installation Permit Application for Well No. 1120-19

From a February 3, 1999 telephone conversation between Roy Hardy of my staff and Eugene Lopez of All Phase Construction, we understand that, due to the language in the Hawaii Well Construction and Pump Installation Standards (January, 1997), you have already entered into a contract with All Phase Construction for the well drilling work. We apologize for the confusion that has resulted. We will accept your application as complete as of the January 15, 1999 date of receipt and are planning to submit your application to the Commission for action at the next Commission meeting on February 17, 1999.

Please resubmit your original application which was returned to you with our letter of January 25, 1999.

We will send you a copy of the staff submittal when that document is finalized, approximately six days prior to the meeting date, tentatively on February 17, 1999.

Also, for your information, we will be submitting clarifications to the Hawaii Well Construction and Pump Installation Standards for adoption by the Commission. One clarification will be to restate the licensing requirement for well drilling work. Specifically, only a contractor with a C-57 license is allowed to drill wells.

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

Sincerely,

[Signature]
EDWIN T. SAKODA
Acting Deputy Director

LN:ss

c: Eugene Lopez, All Phase Construction
TO: Honorable Bruce 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 Application  
Thronas-Loganbill (Well No. 1120-19)

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 February 17, 1999.

Please find a map, attached, to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Lenore Nakama of the Commission staff at 587-0218.

LN:ss
Attachment(s)

RESPONSE:  

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

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

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

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

[ ] For the applicant's information, a source of possible wastewater contamination is 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: __________________________
K. Thronas and L. Loganbill
P.O. Box 607
Kilauea, HI 96754

Dear Ms. Thronas and Mr. Loganbill:

Well Construction / Pump Installation Permit Application for Well No. 1120-19

We have received your well construction/pump installation permit application and filing fee for the Thronas-Loganbill Well (Well No. 1120-19). However, your application is incomplete. Matters which must be addressed before we accept your application as complete are as follows:

1. Please obtain the signature and license number of a C or C-57 licensed contractor on the application for the well construction work.

We are returning your original application. Please resubmit the application with the signature and license number of your C or C-57 contractor. We have checked with the Department of Commerce and Consumer Affairs which has confirmed that the license number BC18029 is for building structures and is not applicable to well construction.

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

Sincerely,

EDWIN T. SAKODA
Acting Deputy Director

LN:ss
Enclosure (Original Well Construction/Pump Installation Permit Application)
<table>
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<th>REMARKS</th>
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<td><strong>LINE (1)</strong> WELL NO. 1120-19 (WCPA/PTPA)</td>
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<td><strong>LINE (2)</strong></td>
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<td><strong>LINE (3)</strong></td>
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State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

1. APPLICANT: (Fill out all three, if applicable, and place a check next to the primary contact)
   - WELL OWNER: K. Thomas & Loganhill
     - Contact Person: Same
     - Mailing Address: P.O. Box 607, Kilauea, HI 96754
     - Phone: __________
     - Fax: __________
   - LAND OWNER: Chi Thomas
     - Contact Person: Hanley Thomas
     - Mailing Address: P.O. Box 909, Lihue, HI 96766
     - Phone: 808-0460
     - Fax: __________
   - CONTRACTOR: All Phase Const. & Irr.
     - Contact Person: Eugene Lopez
     - Mailing Address: P.O. Box 649, Kailua, HI 96746
     - Phone: 826-6755
     - Fax: __________

2. WELL LOCATION/NAME:
   - Thomas Loganhill
   - Island: Kauai
   - Address: 7341 Melodia Beach Rd.
   - Tax Map Key: 4-4-9-012-001

   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 established to specified boundaries.

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

(b) WELL TYPE:
   - Drilled
   - Bored
   - Radial
   - Is this well a part of a battery of wells? Yes □ No □

4. PROPOSED PUMP INFORMATION:
   - Rated Pump Capacity: Max. 15-20 gallons per minute
   - Pump Type (Check one):
     - Deep Well Turbine
     - Submersible
     - Centrifugal
     - Rotary
     - Rotary-Displacement
     - Rotary-Gear
     - Impulse
   - Powered by:
     - Diesel
     - Gas
     - Electric, rated horsepower: __________
   - If Pump replacement, Existing Pump Capacity: __________ gallons per minute

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.) □
   - Domestic (individual, noncommercial water system) □
   - Irrigation (crop) □
   - Industrial □
   - No. of Dwelling Units: __________ □
   - No. of Acres: __________ □
   - Military □
   - Other: __________ □

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

(b) METHOD OF FLOW MEASUREMENT:
   - Open pipe

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

8. REMARKS, EXPLANATIONS:
   - Site out of floodzone

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 cumulative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner: K. Thomas
Landowner: Chi Thomas
Contractor: All Phase Const.

Signature: __________
Date: __________

---

Field Checked By: __________
Longitude: __________
Aquifer System Name: __________
Date: __________
Latitude: __________
State Well No: __________

WCPIFORM (11/13/98)
9. PROPOSED WELL SECTION

Hole Diameter: 12 in.

Minimum of 2'- Radius & 4'-Thick Concrete Pad

Ground Elevation: 30 ft., msl

Elevation at top of casing 32 ft., msl
(Survey to nearest 0.01 ft.)

Minimum annular space between hole and casing ≥ 1'

Total Depth 70 ft.

Cement Grout: 55 ft.
(min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Rock or Gravel Packing: 15 ft.
Material: Crushed Basalt

Water Level Elevation: 0 ft., msl

Solid Casing: (x 80% x (Ground Elev. - Water Level Elev.)
Material: PVC
Material Standard: ASTM F480
Length: 58 ft.
Diameter: 4 in.
Wall Thickness: 15
Bottom Elevation: -25 ft., msl

Open Casing: Perforated Screen
Material: Stainless
Material Standard: ASTM A312
Length: 34 ft.
Diameter: 3
Openings: 3.2

Bottom Elevation: -40 ft., msl

Open Hole:
Length: 14
Diameter: 7
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 - 41 x Water Level Elev.) Example: Estimated + 2 ft. Water Level Elev. \( \rightarrow \) Bottom Elevation of Well Limit = \( \frac{2 - 41 \times 2}{4} \) = -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.

Impermeable Casing Material:
Steel: compliant with (check one or more):
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139
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 A3TM 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

Permeable Casing Material:
Steel: compliant with (check one or more):
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139
Stainless Steel: (check one):
- ASTM A409
- ASTM A312
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- 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

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to assure that your construction plans are in compliance with all existing regulations.
Ms. Ku’ulei Thronas  
P.O. Box 607  
Kilauea, HI 96754

Dear Ms. Thronas:

Thank you for your letter dated December 3, 1998, regarding the well construction permit for Well No. 1120-19. Since the permit has expired, please complete and return the attached application for a new permit to construct your well, which has been assigned Well No. 1120-19.

You may also apply to install a permanent pump on the same application; this will expedite the processing of well-related permits. Do not forget to enclose the appropriate maps showing the proposed location of your well and your $25.00 filing fee.

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

Sincerely,

TIMOTHY E. JOHNS  
Deputy Director

LN:ss  
Enclosure
December 3, 1998

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

Dear Sirs/Madam:

I am writing to follow-up on a well construction and pump installation permit approved as Well No. 1120-19, Moloaa, Kauai, under K. Thronas and L. Loganbill, please reference enclosed correspondence from your office.

Our construction plans were put on hold and the well was not constructed. We are, however, starting the project again. I am writing for information regarding our permit. Do we apply again? If so, please mail the appropriate forms. Do we reference the well number given us previously?

Thank you for your attention to this matter.

Sincerely,

[Signature]
Kuulei Thronas

P.O. Box 607
Kilauea, HI 96754
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

K. Thronas and L. Loganbill
Application for: Well Construction/Pump Installation Permit
Moloaa-Thronas/Loganbill Well, Well No. 1120-19
Moloaa, Kauai

Applicant: K. Thronas and L. Loganbill
Landowner: Olaf Thronas

Action Requested: Permission to construct, test, and install a pump in Moloaa-Thronas/Loganbill Well (Well No. 1120-19) for domestic use. The proposed amount of use is 500 gallons per day.

Well Location: The proposed well will be located at Moloaa, Kauai (see attached map) at Tax Map Key: 4-9-12: 01.

Well Description:
- Ground elevation: 27± ft.
- Casing diameter: 4 inches
- Solid casing depth: 60 ft.
- Screen casing depth: 95 ft.
- Open hole: none
- Total depth: 95 ft.
- Grouted annulus: 0 to 60 ft.
- Proposed pump capacity: 15-20 gpm

Agency Review: The application has been sent to the Kauai Department of Water, the State Historic Preservation Division, the Office of Hawaiian Affairs, and to the State Departments of Health and Hawaiian Home Lands for review. There have been no objections to the project.

Analysis: The well will develop brackish to fresh water from a basal aquifer. There are other existing wells in the area which withdraw similar amounts of water for domestic use. There are cesspools in the area that are potential sources of contamination. The applicant is aware of the situation and has been advised that any water from the well should not be for potable use unless properly tested and treated.

Water Availability: The well is located in the Lihue Sector, Anahola System of Kauai. Sustainable yield is estimated at 36 mgd in the system. Present use is about 7 mgd. Projected water use from the aquifer by the year 2010 is about 16 mgd.

RECOMMENDATION:
That the Commission on Water Resource Management (Commission) approve the issuance of a well construction/pump installation permit for Moloaa-Thronas/Loganbill Well, subject to the following conditions:

STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

1. The Commission shall be notified before work commences.

2. The well construction/pump installation permit shall be for construction, testing, and installation of a 20 gpm capacity, or less, pump in the well. The applicant shall submit the test results and permanent pump information to the Commission.

ITEM 14
3. 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 and 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.

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

5. The applicant shall not be required to measure and report monthly water use if the quantity of use (averaged over a one-year period) remains below 50,000 gallons per month.

6. The following shall be submitted to the Commission within 30 days after completion of the work:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   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 water quality data.

7. The permit application and staff submittal approved by the Commission at its meeting on June 15, 1994 shall be incorporated by reference in the permit.

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

SPECIAL CONDITIONS

1. Water from the well shall not be used for drinking water unless properly tested and treated.

2. The applicant shall contact the State Historic Preservation Division (Telephone: Oahu 587-0047) before starting any work on the project. The applicant shall obtain a written statement from the State Historic Preservation Division indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission before work is started on the project.

Respectfully submitted,

[Signature]
RAE M. LOUI
Deputy Director

Attach.

APPROVED FOR SUBMITTAL:

[Signature]
KEITH W. AHUE, Chairperson
WELL CONSTRUCTION AND PUMP INSTALLATION PERMIT

for

Moloaa-Thronas/Loganbill Well
Well No. 1120-19
Moloaa, Kauai

TO: K. Thronas and L. Loganbill

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, test, and install a pump in Moloaa-Thronas/Loganbill Well (Well No. 1120-19), is approved subject to the following conditions:

STANDARD WELL CONSTRUCTION/PUMP INSTALLATION PERMIT CONDITIONS

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

2. The well construction/pump installation permit shall be for construction, testing, and installation of a 20 gpm capacity, or less, pump in the well. The applicant shall submit the test results and permanent pump information to the Commission.

3. 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 and 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.

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KEITH W. AHUE, Chairperson
Commission on Water Resource Management

Date of Issuance
I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ___________________________ Date: __________

Printed Name: _____________________________________________

Firm or Title: _____________________________________________

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

cc: USGS
   State Historic Preservation Division
   Department of Health
   Safe Drinking Water Branch
   Ground Water Protection Program
   Wastewater Branch
   Kauai Department of Water
AGENDA

FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: June 15, 1994
TIME: 9:00 a.m.
PLACE: Kalanimoku Building
        Board Room

1. Old Business/Announcements

2. Gentry Hawaii, Ltd., Request for Time Extension, Stream Channel Alteration Permit,
   Panakauahi Gulch, Waiawa, Oahu

3. Fletcher Pacific, Application for a Stream Channel Alteration Permit, Construction of
   Gabion Basket Retaining Wall and Drainage Outlet Structure, Waimano Stream, Pearl
   City, Oahu

4. The Reasor Residence, Application for a Stream Channel Alteration Permit, Construction
   of a Driveway Bridge, Unnamed Stream in Hanalei, Kauai

5. EXTENSION - PVT-Holdings, Inc., Pump Installation Permit, Lualualei-PVT Well, Well
   No. 2308-03, Lualualei, Oahu

   Irrigation Wells, Well Nos. 5650-01 & 02, 5651-01, and 5749-01, South Kohala, Hawaii

7. Queen Liliuokalani Trust, Application for a Pump Installation Permit, Queen Liliuokalani
   Trust Well 1, Well No. 4057-01, Keaauolo, Hawaii

8. Island Shores, Inc., Application for a Pump Installation Permit, Kahakuloa Acres Well,
   Well No. 5832-03, Kahakuloa, Maui

9. State Division of Water and Land Development, Application for a Well Construction
   Permit, Puu Anahulu Exploratory Well, Well No. 5347-01, Puu Anahulu, Hawaii
10. Kauai Department of Water, Application for a Well Construction Permit, Hanamaulu Well No. 1, Well No. 0022-01, Hanamaulu, Kauai

11. Paul Bergstedt, Application for a Well Construction/Pump Installation Permit, Kahuku-Bergstedt Well, Well No. 0347-01, Kahuku, Kau, Hawaii

12. Baldwin Malama, After-the-Fact Application for a Well Construction/Pump Installation Permit, Waiohuli I Well, Well No. 4527-12, Waiohuli, Maui

13. Jeffrey Lindner, Application for a Well Construction/Pump Installation Permit, Pilaa-Lindner Well, Well No. 1222-01, Pilaa, Kilauea, Kauai


15. Other Business

Any person may testify or present information on the public hearing subject matter or meeting agenda items. If you have a legal interest that may be adversely affected, you have a right to request an administrative contested case hearing. However, you must make the request either orally or in writing by the close of this public hearing or meeting and file a written petition for a contested case hearing within 10 days after the date of this public hearing or meeting. If you do not make such a request or fail to file a timely written petition with the Commission, the consequence is that you will be precluded from later obtaining a contested case hearing, and seeking judicial review of the adverse decision. See Chapter 13-167, Hawaii Administrative Rules of the Department of Land and Natural Resources.

Also, disabled individuals planning to attend the public hearing or meeting are asked to contact the Commission (at the above address or phone 587-0214) to indicate if they have special needs which require accommodation.
K. Thronas and L. Loganbill

Dear Mssrs. Thronas and Loganbill:

Notice of Expiration of Well Construction/Pump Installation Permit
Moloau-Thronas/Loganbill Well (Well No. 1120-19)
Moloaa, Kauai

Our records show that a well construction/pump installation permit was issued for the subject well on July 7, 1994 (attached).

Since we did not receive any written notice of the start of work (Standard Condition 1) for the subject well, we assume that no work was done under this permit, which has expired. Be advised that a new application for a well construction/pump installation permit must be made and approved by the Commission on Water Resource Management prior to any future well construction or pump installation work.

In the event that the well was constructed and a pump was installed under the permit, please submit the following items that are required under Standard Condition 6 within thirty (30) days from the date of this letter:

  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.

Be advised that failure to comply with the terms of your permit may result in daily fines of up to $1000.

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

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss
Enclosure
K. Thronas and L. Loganbill
Honolulu, HI 96817

Dear Mssrs. Thronas and Loganbill:

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Deputy Director

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Enclosure
TO:  K. Thronas and L. Loganbill

Honolulu, HI 96817

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KEITH W. AHUE, Chairperson
Commission on Water Resource Management

Date of Issuance
I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: __________________________ Date: __________

Printed Name: ________________________________________________

Firm or Title: _________________________________________________

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

cc: USGS
   State Historic Preservation Division
   Department of Health
      Safe Drinking Water Branch
      Ground Water Protection Program
      Wastewater Branch
   Kauai Department of Water
TO: ☑ Honorable Hoaliku L. Drake, Director
   Department of Hawaiian Home Lands
   Mr. Clayton H.W. Hee, Chairman & Trustee At Large
   Office of Hawaiian Affairs

FROM: ☑ Keith W. Ahue, Chairperson

SUBJECT: Well Construction & Pump Installation Permit Applications

Please review the following permit applications and submit your comments to us by June 6, 1994.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Enclosure

Response: ☑ We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ☑ Darrell Yagodich Phone: 586-3836
Signed: ☑ Darrell Yagodich Date: 6/15/94
Mr. Thomas Arizumi, Chief
Environmental Management Division
State Department of Health
Five Waterfront Plaza
500 Ala Moana Blvd., Suite 250
Honolulu, Hawaii 96813

Attn: Mr. Dennis Tulang

Dear Mr. Arizumi:

Well Construction and Pump Installation Permit Applications

Please review the following permit applications pursuant to your area of concern and submit your comments to us by June 6, 1994.

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Sincerely,

RAE M. LOUI
Deputy Director

Response:
(✓) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
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Contact Person: Lori Kajiwara
Phone: 587-4290
Date: 6-14-94
REF: WRM-KY
MAY 26 1994

TO: Honorable Hoaliku L. Drake, Director
Department of Hawaiian Home Lands

Mr. Clayton H.W. Hee, Chairman & Trustee At Large
Office of Hawaiian Affairs

FROM: Keith W. Ahue, Chairperson

SUBJECT: Well Construction & Pump Installation Permit Applications

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Enclosure

Response:
A) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: Luis A. Manrique
Phone: 594-5019
Signed: D. W. Kealoha
Date: 06/12/94
MEMORANDUM

TO: Rae M. Loui, Deputy Director
   Commission on Water Resource Management

FROM: Don Hibbard, Administrator
       State Historic Preservation Division

SUBJECT: Historic Preservation Review -- Thronas Loganbill Well
   Well No. 1120-19 (Thronas)
   TMK: 4-9-12: 01
       Moloaa, Kawaihau, Kauai

Our staff archaeologist has conducted a field inspection of the area. No significant historic sites were found. Thus, the proposed project will have "no effect" on significant historic sites.

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

NM:amk
TO:  Dr. Don Hibbard, Director  
  Historic Preservation Program  

Mr. Henry M. Sakuda, Administrator  
Division of Aquatic Resources

FROM:  Rae M. Loui, Deputy Director  
  Commission on Water Resource Management

SUBJECT:  Well Construction & Pump Installation Permit Applications

Please review the following permit applications and submit your comments to us by 

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JZ:ky

Enclosure

Response:
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( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ___________________________________________ Phone: _______________________
Signed: ___________________________________________ Date: 6/13/94
MEMORANDUM

TO: Rae M. Loui, Deputy Director
Commission on Water Resource Management

FROM: Henry Sakuda, Administrator
Division of Aquatic Resources

SUBJECT: Comments on Well Construction and Pump Installation Permit Applications for Well Nos. 0347-01 (Hawaii), 4057-01 (Hawaii), 4527-12 (Maui), 5832-03 (Maui), 1222-01 (Kauai), 1120-19 (Kauai), and 0022-01 (Kauai).

Well No. 0347-01, Well Name Kahuku-Bergstedt, Well and Pump Application

The application by Paul Bergstedt involves drilling of an exploratory well at approximately 1,200 feet in elevation above Kahuku, Hawaii to deliver approximately 20,000 gallons of water per day for domestic and agriculture use. There are no surface waters sustaining native biota in the area. We have no concerns from the aquatic biological resources standpoint.

Well No. 4057-01, Well Name Queen Liliuokalani Trust, Pump Installation Application

The application by Queen Liliuokalani Trust involves installation of a pump in an existing well above Mamalahoa Highway, Kailua, Hawaii to deliver approximately 1.5 million gallons of water per day for municipal use. We have no objections from the aquatic biological resources standpoint.

Well No. 4527-12, Well Name Waiohuli I, Well and Pump Application

The application by Baldwin Malama involves drilling of a new well near the ocean above Piilani Highway near Waiohuli-Keokea Homesteads, Maui to deliver up to 100,000 gallons per day of brackish water for fire protection, construction dust control, and other sporadic urban use. We have no objections from the aquatic biological resources standpoint.

Well No. 5832-03, Well Name Kahakuloa Acres, Pump Installation Application

The application by Island Shores, Inc. involves installation of a pump in an existing well adjacent to Kahakuloa Homesteads, West Maui to deliver approximately 300,000 gallons of
water per day for an agricultural subdivision. An existing well on the site will serve as a backup. We have no objections from the aquatic biological resources standpoint.

Well No. 1222-01, Well Name Pilaa-Linder, Well and Pump Application

The application by Jeffry Lindner involves drilling a new well near the Waiakalua Reservoir, Kilauea, Kauai and installing a pump to deliver approximately 3,500 gallons of fresh water per day for agricultural use. We have no objections from the aquatic biological resources standpoint.

Well No. 1120-19, Well Name Moloaa-Thronas/Loganbill, Well and Pump Application

The application by K. Thronas and L. Loganbill involves drilling a new well near sea level adjacent to Moloaa Bay, Kauai and installing a pump to deliver approximately 500 gallons of water per day for agricultural use. We suspect that the daily withdrawal rate may be higher than indicated, because the pump capacity is rated at 15-20 gallons per minute.

Well No. 0022-01, Well Name Hanamaulu No. 1, Well Construction Application

The application by the Department of Water, County of Kauai involves drilling and testing of a new well above Hanamaulu to assess its potential for potable service to the Lihue Water System for municipal use. Withdrawal of approximately 500,000 gallons per day is anticipated. We have no objections from the aquatic biological resources standpoint.
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
Five Waterfront Plaza  
500 Ala Moana Blvd., Suite 250  
Honolulu, Hawaii 96813  

Attn: Mr. William Wong  

Dear Mr. Arizumi:  

**Well Construction and Pump Installation Permit Applications**  

Please review the following permit applications pursuant to your area of concern and submit your comments to us by June 6, 1994.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

[Signature]  

RAE M. LOUI  
Deputy Director  

---

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority & permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested  

Contact Person: Bill Wong  
Signed: Bill Wong  
Phone: 586-1258  
Date: 6/6/94
Dear Mr. Nielsen:

Well Construction and Pump Installation Permit Applications

Please review the following permit applications pursuant to your area of concern and submit your comments to us by May 26, 1994.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI  
Deputy Director

Response:
( ☑) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: Murl T. Nielsen  
Phone: 245-6986  
Date: 6/6/94
Ms. K. Thronas & Mr. L. Loganbill

Dear Ms. Thronas & Mr. Loganbill:

We have received your application and filing fee for a permit to construct Moloaa-Thronas/Loganbill Well and install a pump in the well (Well No. 1120-19) at Moloaa, Kauai, (TMK 4-9-12:01). We are reviewing the application for completeness.

Should you have questions please call the Commission on Water Resource Management staff at 587-0225.

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

JZ:ky
Mr. Murl T. Nielsen  
Department of Water  
County of Kauai  
4398 Pualoke Street  
Lihue, HI 96766  

Dear Mr. Nielsen:

**Well Construction and Pump Installation Permit Applications**

Please review the following permit applications pursuant to your area of concern and submit your comments to us by **June 6, 1994**.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI  
Deputy Director

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Response:
(  ) We have no objections  
(  ) Not subject to our regulatory authority & permit  
(  ) Comments attached  
(  ) Additional information requested  
(  ) Extended review period requested

Contact Person: ____________________________  
Phone: __________

Signed: ____________________________  
Date: __________
Ms. Marjorie Ziegler  
Sierra Club Legal Defense Fund, Inc.  
223 South King Street, Suite 400  
Honolulu, Hawaii 96813

Dear Ms. Ziegler:

Well Construction and Pump Installation Permit Applications

Please review the following permit applications pursuant to your area of concern and submit your comments to us by June 6, 1994.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority & permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: ___________________________ Phone: ______________

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

Attn: Mr. William Wong

Dear Mr. Arizumi:

Well Construction and Pump Installation Permit Applications

Please review the following permit applications pursuant to your area of concern and submit your comments to us by June 6, 1994.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

RAE M. LOUI  
Deputy Director

__________________________

Response:  
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( ) Not subject to our regulatory authority & permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: ___________________________________________ Phone: ____________

Signed: ___________________________________________________ Date: ____________

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

Attn: Mr. Dennis Tulang

Dear Mr. Arizumi:

Well Construction and Pump Installation Permit Applications

Please review the following permit applications pursuant to your area of concern and submit your comments to us by June 6, 1994.

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Should you have any questions please contact the Commission on Water Resource Management staff at 587-0225.

Sincerely,

[Signature]
RAE M. LOUI
Deputy Director

Response:
( ) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ____________________________ Phone: ____________

Signed: ____________________________ Date: ____________

Enclosure
REF: WRM-KY
MAY 26 1994

TO: Honorable Hoaliku L. Drake, Director
Department of Hawaiian Home Lands

Mr. Clayton H.W. Hee, Chairman & Trustee At Large
Office of Hawaiian Affairs

FROM: Keith W. Ahue, Chairperson

SUBJECT: Well Construction & Pump Installation Permit Applications

Please review the following permit applications and submit your comments to us by June 6, 1994.

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Enclosure

Response:
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( ) Extended review period requested

Contact Person: ___________________________ Phone: ____________
Signed: ___________________________ Date: ____________
TO: Dr. Don Hibbard, Director  
Historic Preservation Program  
Mr. Henry M. Sakuda, Administrator  
Division of Aquatic Resources  
FROM: Rae M. Loui, Deputy Director  
Commission on Water Resource Management  
SUBJECT: Well Construction & Pump Installation Permit Applications  

Please review the following permit applications and submit your comments to us by June 6, 1994.

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JZ:ky

Enclosure

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( ) We have no objections  
( ) Not subject to our regulatory authority & permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: _____________________________ Phone: ________________

Signed: _____________________________ Date: ________________
APPLICATION FOR PERMIT

Well Construction or Pump Installation

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

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
   Firm/Name: K. Thomas & L. Loganbill
   Contact Person: Kaeli Thomas
   Address: ____________________________
   (b) LANDOWNER
   Firm/Name: Olaf Thomas
   Contact Person: Kaeli Thomas
   Address: ____________________________
   (c) CONTRACTOR
   Firm/Name: ________________________
   Contractor's C-57 License No. ____________

2. WELL LOCATION/NAME: Molokai Beach Road
   Island: Maui
   Address: ____________________________
   Tax Map Key: A-4-9-012-001

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

4. PROPOSED PUMP INFORMATION: Rated Pump Capacity: Max: 15-20 gallons per minute
   Pump Type:
   [ ] Deep Well Turbine [ ] Submersible [ ] Centrifugal
   Motor:
   [ ] Rotary [ ] Propeller [ ] Reciprocating [ ] Impulse
   [ ] Diesel [ ] Gas [ ] Electric, rated horsepower of

5. PROPOSED USE:
   [ ] Municipal (including hotels, stores, etc.) [ ] Irrigation (crop)
   [ ] Domestic (individual, noncommercial water sys.) [ ] State Land Use District:
   [ ] Industrial [ ] Urban [ ] Agriculture [ ] County Zoning (describe)
   [ ] Military [ ] Other (explain) Kauai AGRICULTURE

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 500 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   [ ] Flow-meter [ ] Open-pipe [ ] Orifice Plate [ ] Weir

7. PENDING ACTIONS: [ ] CDUA [ ] SNA [ ] EIS [ ] EA [ ] NONE
   [ ] Other (explain)

8. REMARKS, EXPLANATIONS: SITE OUT OF FLOOD ZONE

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit 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.

Well Owner: Kaeli Thomas
Signature: ____________________________
Date: 3/31/94

Landowner: OLAF THOMAS
Signature: ____________________________
Date: 3/30/94

Contractor: ____________________________
Signature: ____________________________
Date: ____________________________
9. PROPOSED WELL SECTION

Elevation at top of casing: 29 ft., mal.

Ground Elevation: 27 ft., mal*

Cement Grout: 60 ft.

Rock Packing: 35 ft.

Hole Diameter: 8 in.

Solid Casing:
- Material: PVC, Sch 40
- Length: 60 ft.
- Diameter: 4 in.
- Wall thickness: 1/4 in.

Casing:
- 9 in. OD (Outside Diameter)
- Wall thickness: 1.25 in.
- Openings: 7 sq. in./L.F.

Open Hole:
- Length: N/A
- Diameter: N/A

*Approximate elevation at time of filing application. Ground elevation above mean sea level (mal) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
TRANSMISSION REPORT

THIS DOCUMENT (REDUCED SAMPLE ABOVE) WAS SENT

** COUNT **

# 2

** SEND **

<table>
<thead>
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<th>#</th>
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<th>START TIME</th>
<th>DURATION</th>
<th>#PAGES</th>
<th>COMMENT</th>
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XEROX TELECOPYER 7020