### SECTION 1: WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>MAUI</th>
<th>Proposed Use</th>
<th>Irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>LAHAINA</td>
<td>Proposed Withdrawal</td>
<td>50000</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>#</td>
<td>System Sustainable Yield</td>
<td>8</td>
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</table>

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

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>Solid Casing</th>
<th>Casing</th>
<th>Open Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>Material</td>
<td>Designation</td>
<td>Length</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>Plastic</td>
<td>Sch 40</td>
<td>12 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>Diameter</td>
<td>6 in.</td>
<td></td>
</tr>
<tr>
<td>Total Depth</td>
<td>Wall Thickness</td>
<td>0.25 in.</td>
<td></td>
</tr>
<tr>
<td>Estimated Head</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculated Aquifer Thickness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Water Supply (Y/N ?)</td>
<td>NO</td>
<td></td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Well Depth</th>
<th>Theoretical Thickness of Aquifer</th>
<th>82 ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 Aquifer Thickness</td>
<td>20.5 ft.</td>
<td>okay (refer to HWCPIS Section 2.2)</td>
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<tr>
<td>Depth of Well below Sea Level</td>
<td>15 ft.</td>
<td>(disregard if the well is not basal, deep monitor or salt water)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Well Casing</th>
<th>Minimum Wall Thickness</th>
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<tbody>
<tr>
<td>Material PVC</td>
<td>non-county</td>
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<tr>
<td>Minimum Thickness per standards</td>
<td>0.280 in.</td>
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<tr>
<td>Wall Thickness Provided</td>
<td>0.250 in.</td>
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<td>Minimum Length of Solid Casing</td>
<td>30.6 ft.</td>
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<td>90% of ground to top of aquifer Length of solid casing Provided</td>
<td>39 ft.</td>
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<td>Casing Material</td>
<td>Sch 40</td>
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<table>
<thead>
<tr>
<th>Annular Space</th>
<th>Calculated Depth of Grouting</th>
<th>23.8 ft.</th>
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<tbody>
<tr>
<td>Depth of Grouting</td>
<td>33 ft.</td>
<td>okay (refer to HWCPIS Section 2.6 c)</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
<td>3.25 in.</td>
<td>okay (refer to HWCPIS Section 2.6 d)</td>
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Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

<table>
<thead>
<tr>
<th>Data Input</th>
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<tr>
<td>Well Number</td>
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<tr>
<td>Well Name</td>
</tr>
<tr>
<td>Ground Elevation</td>
</tr>
<tr>
<td>Cement Grout</td>
</tr>
<tr>
<td>Grouting Method</td>
</tr>
<tr>
<td>Hole Diameter</td>
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<tr>
<td>Total Depth</td>
</tr>
<tr>
<td>Estimated Head</td>
</tr>
<tr>
<td>Public Water Supply Well?</td>
</tr>
<tr>
<td>Solid Casing Material</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
</tr>
<tr>
<td>Solid Casing Length</td>
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<tr>
<td>Solid Casing Diameter</td>
</tr>
<tr>
<td>Solid Casing Wall Thickness</td>
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<tr>
<td>Open Casing Length</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Results</th>
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<tbody>
<tr>
<td>Well Depth</td>
</tr>
<tr>
<td>Theoretical Thickness of Aquifer</td>
</tr>
<tr>
<td>1/4 Aquifer Thickness</td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
</tr>
<tr>
<td>Well Casing</td>
</tr>
<tr>
<td>Minimum Wall Thickness Material</td>
</tr>
<tr>
<td>Minimum Thickness per standards</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
</tr>
<tr>
<td>Minimum Length of Solid Casing</td>
</tr>
<tr>
<td>90% of ground to top of aquifer</td>
</tr>
<tr>
<td>Length of solid casing Provided</td>
</tr>
<tr>
<td>Casing Material</td>
</tr>
<tr>
<td>(for pvc only - check for 200’ limit)</td>
</tr>
<tr>
<td>Annular Space</td>
</tr>
<tr>
<td>Depth of Grouting</td>
</tr>
<tr>
<td>Calculated Depth of Grouting</td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
</tr>
<tr>
<td>Minimum Annular Space required</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
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</tbody>
</table>
MEMO and ROUTE SLIP (ver. 03/04/2008)

WCR 1 Check for Well No. 5240-09 (survey to regulation memo)

1. **Pump Tests Check**
   - **Diane England** (initial)
   - **Step-Drawdown Test**: followed WCPI Stds
     - Yes: ☐
     - No: ☐
     - ☐<70 gpm no test required
   - **Constant Rate Test**: followed WCPI Stds
     - Yes: ☐
     - No: ☐
     - ☐<51 gpm no test required
   - Potential Well Interference: ☐
   - Potential Stream Impacts: ☐
   - Additional Testing or Data Required: ☐
   - Pump Test Comments Attached: ☐

2. **Well Log Check**
   - Geology Code for Well Index: TW
   - Fm Name: Wailuku Volc.
   - **Mitch England** (initial)
   - Data complete: ☐
   - Followed Special Cond & elevations: ☐
   - Well database updated: ☐
   - Latitude: NAD27 20° 52' 10"
   - Longitude: NAD83 156° 05' 54"

3. **Construction Check**
   - **Mitch Ohye** (initial)
   - Data complete: ☐
   - Followed Special Cond & elevations: ☐
   - Well database updated: ☐
   - Latitude: NAD27 20° 52' 10"
   - Longitude: NAD83 156° 05' 54"

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

5. **Roy** (initial) check (Entered WCR 1/WCCC accept date into database)
6. **Susan Hoagbin** (initial) finalize
7. **Ken** (initial) signature
8. **Mitch** (initial) signature (Entered PIP issue date if attached/required)
9. **Charley/Ryan** File
Mr. Michael Robertson  
P.O. Box 790299  
Paia, HI 96779  

Dear Mr. Robertson:  

Well Completion Report Parts I and II for Well No. 5240-09  

We received your Well Completion Report Part I (on March 6, 2008) and Part II (on March 7, 2008) for the Kahoma Irrigation Well (Well No. 5240-09) and acknowledge that they are complete.  

This completes your obligation under the well construction permit. A certificate of well construction completion will be issued to the well operator/landowner and you will receive a copy. This certificate transfers responsibility of specific aspects of well usage and maintenance from you to the well operator/landowner.  

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

Sincerely,  

KEN C. KAWAHARA, P.E.  
Deputy Director  

CI:ss  
c: Kahoma Development Co., LLC
May 5, 2008

Ms. Michele Cockett
Kahoma Development Co., LLC
635 Kenolio Road
Kihei, HI 96753

Dear Ms. Cockett:

Certificate of Well Construction Completion for Well No. 5240-09 (TMK 4-5-011:001)

We are pleased to inform you that the Well Construction work permitted for the Kahoma Irrigation Well (Well No. 5240-09) is complete and acceptable.

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

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

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

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

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

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

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

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

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

cc: Maui Department of Water Supply
Wailani Drilling, Inc.
May 5, 2008

Ms. Michele Cockett
Kahoma Development Co., LLC
635 Kenolio Road
Kihei, HI 96753

Dear Ms. Cockett:

Certificate of Pump Installation Completion for Well No. 5240-09 (TMK 4-5-011:001)

We are pleased to inform you that the Pump Installation work permitted for the Kahoma Irrigation Well (Well No. 5240-09) is complete and acceptable. This certificate of pump installation completion allows you to commence pumping your well for reasonable & beneficial water use.

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

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

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

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

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

5. Your approved pump has a capacity of 150 gpm at a head of 280 ft. In the future, pump replacements of equal or lesser capacity will not require an additional permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer. If the pump replacement is greater than the existing pump, you will need to apply for a new pump installation permit.
6. The landowner shall cause the well operator to maintain the installed meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR.

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

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

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

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

Sincerely,

[Signature]
KEN C. KAWAHARA, P.E.
Deputy Director

CI:ss
Encl: Water Use Report Forms

c: Maui Department of Water Supply
   Wailing Drilling, Inc.
Pump Test Analysis – Comments

Well ID: 5240-09  
Analysis Date: 2-1-06  
Test Date: 3-13-08  
Geologist: Diane England

1. No deviations from the “Pump Test Requirements” guidance

Constant Rate Pumping Test

1. No drawdown after 1500 min. T & K too high to be estimated via curve matching.

Well Interference & Stream Impacts

1. Based on preliminary analysis, no adverse stream or well impacts are expected.

Proposed Pump Capacity OK? : YES
<table>
<thead>
<tr>
<th>Elapsed Time (min)</th>
<th>Drawdown (ft)</th>
<th>Pump Rates (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<tr>
<td>1</td>
<td>1.6</td>
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</tr>
<tr>
<td>2</td>
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<td>4</td>
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<tr>
<td>1500</td>
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Average: 160.00
Step Drawdown Test
Well 5240-09 (1-31-06)

Pumping Rate
Well 5240-09 (1-31-06)
<table>
<thead>
<tr>
<th>Step-Drawdown Test (5240-09)</th>
<th>Pumping Rate (5240-09)</th>
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<tbody>
<tr>
<td>Time (min)</td>
<td>Drawdown (ft)</td>
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State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART I  
Well Construction

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-687-0226. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrm/

1. State Well No.: 5240-09  
2. Well Name: Kahome Irrigation Well  
3. Island: Maui  
4. Address: Kahome Stream nr Honopu Valley  
5. Tax Map Key: H-5-011-001  

11. DRILLING METHOD USED DURING CONSTRUCTION:  
   □ Rotary  □ Percussion  □ Other (describe)  
   (describe)

12. Date Well Construction (drilled, cased, grouted) completed: 1/27/00  
   Attach Completed Driller's Log  
   (month/day/year)

13. WAS THE SUBJECT WELL CORED?  
   □ Yes  □ No

14. Step-Drawdown Test completed?  
   □ Yes  □ No  
   Attach Step-Drawdown Test form (12/17/97 SDPTD Form)

15. Constant Rate Aquifer Test completed?  
   □ Yes  □ No  
   Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

<table>
<thead>
<tr>
<th>Water Level Data:</th>
<th>Reference point elevation</th>
<th>Depth to water (feet)</th>
<th>Water Level ft. above mean sea level (see note below)</th>
<th>Date/time of measurement</th>
</tr>
</thead>
</table>
| 9. Initial encountered during drilling (this should also be filled in on the driller's log) | 27.09  
Ground = ft. msl | 24.49 | 3.5 | 1:24:00 |
| 10. Just prior to casing installation | 24.49 | 3.5 | 1:25:00 |
| 11. After casing installation (this information should be before any pump tests are performed with casing installed) | 25.49 | 3.5 | 1:27:00 |

Chloride: 820 ppm, Temperature: 70°F  

16. Remarks:  
   (provide additional information or comments)

Licensed Driller (print) Michael Robertson  
C-57 Lic. No. 20115  
Signature  
Date 2:14:00
12. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below)

Minimum of 2" Radius & 4" Thick Concrete Pad

Ground Elevation: 29.44 ft., msl

Surveyed □ Estimated

Elevation at top of casing 29.29 ft., msl*
(to nearest 0.01 ft.)

Hole Diameter: 12.6 in.

Bench mark elevation:
28.99 ft., msl*
(Surveyed to nearest 0.01 ft.) □ (Estimated)

Grouting method:
□ Positive displacement (if annular space is less than two inches, attach photo of tremie) □ Other

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

Rock or Gravel Packing:
\( \frac{N}{2} \) ft.

Material:
□ Crushed Basalt
□ Rounded Gravel

Water Level Elevation: 25.49 ft., msl*
(item 11 from page 1)

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

Length: 38 ft.
Nominal Diameter: 10 in.
Wall Thickness: 2.80 in.
Bottom Elevation: -9.01 ft., msl

Open Casing:
□ Perforated □ Screen

Length: 20 ft.
Nominal Diameter: 6 in.
Wall Thickness: 1.20 in.
Bottom Elevation: -29.01 ft., msl

Open Hole:
Length: \( \frac{n}{2} \) ft.
Diameter: \( \frac{n}{2} \) in.
Bottom Elevation: \( \frac{n}{2} \) ft., msl

Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 or A606 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one):
□ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
And compliant with (check one or more): □ ASTM A242 or A606 □ Type E □ Type S □ Grade B □ Other
Stainless Steel: (check one):
□ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one): □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2996
□ Centrifugally Cast Resin Pipe conforming to ASTM D2997
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
□ PTFE Fluorocarbon Tubing conforming to ASTM D3296
□ FEP Fluorocarbon Tubing conforming to ASTM D3296
WELL CONSTRUCTION PERMIT

Kahoma Irrigation Well, Well No. 5240-09

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kahoma Irrigation Well (Well No. 5240-09) at TMK 4-5-11:1, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

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

6. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources’ Division of Historic Preservation.

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

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

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

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

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

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

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

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

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

W. Low Young

Date of Approval: May 4, 2005
Expiration Date: May 4, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Driller's Signature: Michael Robertson
C-57 License #: C-20115 Date: 5/26/05

Printed Name: Michael Robertson
Firm or Title: Wailani Drilling Co.

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

Attachment:

Maul Department of Water Supply
Kahoma Development Co., LLC
**2000 DRILLER'S LOG**

**WELL NUMBER: 5240-09**  
In addition to the driller's log, if a geologic log was prepared, please submit with this form.

<table>
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<th>Depths (ft.)</th>
<th>Rock Description</th>
<th>Water Level</th>
<th>Ct.</th>
<th>Dates</th>
<th>Depths (ft.)</th>
<th>Rock Description</th>
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**Remarks:** Hit water at 25.5'
STEP-DRAWDOWN PUMP TEST DATA
(not required for wells producing < 100,000 gpd or 70 gpm)

Pumped Well No. 5240-09  Observation Well No. n/a
Pumped Well Name Kahuna Irrigation
Target Q 160 gpm
Distance between Obs. & Pumped Well n/a ft.
Reference pt. for depth to water 24.29 ft. msl
Static Water Level @ start of test 25.79 ft. msl

Water level measurements by:
- electrical sounder
- pressure transducer
- airline

START TEST Date: 1.31.00  Time of day: 1000
Flow Meter Reading Start: 0.0 gallons

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<th>Actual Elapsed Time</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (umhos)</th>
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Data in this table is for:
- Pumped Well
- Observation Well

Remarks

Chloride sample taken
Step 2 begin?
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<th>Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC</th>
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</table>

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

Begin recovery data next page
Flow meter reading at end of pumped period: 10969 gals

1 starting pumping rate Q
2 minimum length of step period of constant pumping rate
3 minimum mandatory Chloride (Cl⁻) measurement/sampling at end of every step
4 Use same ending drawdown figure as start for recovery
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to Water (nearest 0.1 ft)</th>
<th>Recovery Drawdown (unadjusted to nearest 0.1 ft)</th>
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Pump off, start recovery

END TEST Date: 1-31-00 Time of day: 16:25
ADDITIONAL REMARKS: ___________________

Signature: _______________

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

(not required for wells producing < 50 gpm)

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**Target Q** 160 gpm  

**Water level measurements by:** electrical sounder □ pressure transducer □ airline

**Distance between Obs. & Pumped Well (ft.):** 29.29 ft. msl

**Static Water Level at start of test (ft. msl):** 25.74 ft.

**START TEST DATE:** 2.1.00  
**Time of day:** 0900

**Flow Meter Reading Start:** 10969 gallons

**Remarks**

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<th>EC (mhos)</th>
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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
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END TEST Date: 2-2-04 Time of day: 1100

ADDITIONAL REMARKS: ____________________________

Person in charge of pump test (print): ____________________________

Signature: ____________________________

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)

Provide Latitude and Longitude of well referenced to NAD83 to nearest second

Latitude: 20 degrees 52 min 58 sec
Longitude: 156 degrees 40 min 40 sec
Well Elevation

Benchmark Elevation: 28.89

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

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

[Signature]
Surveyor

[License No.]

[Date] 11/30/07
6.5240-09 KAHOMA IRR.
1. **Pump Tests Check** *(special condition of PIP? Yes/No)*  
   **Yes**  
   **No**  
   If no, describe deficiency

   **Step-Drawdown Test:**
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.
   
   **Aquifer Pump Test:**
   - followed WCPI Stds
   - T & S analysis attached
   - □<50 gpm no test required

2. **Pump Installation Check**  
   **Mitch Ohye**  
   **Yes**  
   **No**  
   If no, describe deficiency

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

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

   ATTACHMENTS FOR ACCEPTANCE:
   1. WCR2 ACCEPTANCE LETTER
   2. PUMP INST. COMPLETION CERTIFICATE
   3. METER INSTALL. REPORT (IF NECESSARY)
   4. WUR FORM (IF NECESSARY)
   5. USGS MAP UPDATED
   6. PARCEL CHECK
   7. WELL DATABASE INPUT CHECK
   8. GLENN'S PUMP TEST WORKSHEET
   9. PUMP As-built CHECK PRINT

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

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

5. Susan Hoagbin **(initial) finalize**

6. Ken **(initial) signature**

7. Faith Ching **(initial) enter into WUR database**

8. Charley/ Ryan File
1. State Well No.: 5240-09  Well Name: Kahama Irrigation Well Island: Maui
2. Address: Kahama Stream nr. Hanaipilani Tax Map Key: 45111
4. Date Pump Installed: 2/7/06
5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: 1605100, pumpname
   Rated Capacity: 150 gpm at head of: 280 ft.
   Motor Type, H.P., Voltage, rpm: Submersible 10 H.P.
   Pump type (check one):
   □ Deep Well Turbine □ Rotary □ Propeller
   □ Submersible □ Rotary-Displacement □ Reciprocating
   □ Centrifugal □ Rotary-Gear □ Impulse
6. Method of flow measurement:
   □ Flowmeter w/ totalizer Manufacturer Miuelizer Model no. Miuelizer Size 3"
   □ Other, explain and attach schematic
7. Fill in the as-built section on the other side of this sheet.
8. Attach the rating curve for the installed pump.
9. Attach photograph of well clearly showing the benchmark on the concrete pad, the well head, and the method of flow measurement.
10. Well Owner Company: Kahama Development Co. Contact: Michelle Lockett
    Address: 1357 Keonia Rd
    Phone: (808) 879-5395 Fax: (808) 879-5159
11. Land Owner Company: 52me Contact: 
    Address: 
    Phone: 
    Fax: 
12. Remarks 

Pump Installation Contractor (print) Michael Robertson C-57/C-57a/A Lic. No. 2015
Signature: Michael Robertson Date: 3/22/06

WCR2 Form 02/26/07 Page 1 of 2

rec'd via email 07March 08, 2:39 pm
7. AS-BUILT PUMP SECTION  (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 2.091 ft. mean sea level

Elevation of top of chase tube 24.24 ft. mean sea level

Pump intake depth = 37.5 ft. (referenced to bench mark)

Chase tube depth = 36.5 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = 11.2 ft. mean sea level
Performance Curves 150 GPM
Model 150S

FLOW RANGE: 30 - 220 GPM
OUTLET SIZE: 3" NPT
NOMINAL DIA. 6"

3450 RPM
3525 RPM

Most Efficient Range: 100 to 220 GPM
COURSES BELOW 100 GPM
SEE BS MODELS

FEFF.

Performance conforms to ISO 9906 Annex A
@ 5 ft. min. submergence.

Specifications subject to change without notice.

4" MOTOR STANDARD, 2-10 HP/3450 RPM
6" MOTOR STANDARD, 7.5-60 HP/3450 RPM.
PUMP INSTALLATION PERMIT
Kahoma Irrigation Well, Well No. 5240-09

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Kahoma Irrigation Well (Well No. 5240-09) at TMK 4-5-11:1, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

4. The pump installation permit shall be for Installation of a 160 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

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

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

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

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

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

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

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

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

Date of Approval: May 4, 2005
Expiration Date: May 4, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Installer's Signature: Michael Robertson
C-57, C-57E, or A License #: C-20115
Date: 5-20-05

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

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
PUMP INSTALLATION PERMIT
Kahoma Irrigation Well, Well No. 5240-09

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the pump installation for Kahoma Irrigation Well (Well No. 5240-09) at TMK 4-5-11:1, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

4. The pump installation permit shall be for installation of a 160 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

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

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

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

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

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

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

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

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

Date of Approval: May 4, 2005
Expiration Date: May 4, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Installer’s Signature: Michael Robertson
License #: C-20115
Date: 5/9/05

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

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

Attachments
Performance Curves 150 GPM Model 150S

FLOW RANGE: 30 - 220 GPM
OUTLET SIZE: 3" NPT
NOMINAL DIA. 6"

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
4" MOTOR STANDARD, 2-10 HP/3450 RPM
6" MOTOR STANDARD, 7.5-60 HP/3450 RPM.
March 29, 2005

Mr. Michael W. Foley, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, HI 96793

Dear Mr. Foley:

Special Management Area Use Permit requirements for
Well Construction/Pump Installation Permit Application
Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ise of the Commission staff at 587-0251.

Sincerely,

[Signature]

DEAN A. NAKANO
Acting Deputy Director

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: [Name]
Phone: 512-2560

Signed: [Signature]
Date: 06/19/05
TO:  
  
INIT.  

TO:  

INIT.  

FOR:  

PLEASE:  

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

- Please See Me

01 Nov 04

CC:  

MISSION ON WATER RESOURCE MANAGEMENT

FROM: Charley  

DATE: 26 May 05

PLEASE:

Review & Comment
Type Draft
Type Final
File
Xerox copies
Take Action:

Please See Me

a.f.f to accompany memo
Ref:5240-09.pip

May 31, 2005

Mr. Michael Robertson
Wailani Drilling, Inc.
77-181 Laaloa Road
Kona, HI 96740

Dear Mr. Robertson:

Pump Installation Permit
Kahoma Irrigation Well (Well No. 5240-09)

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

Special Conditions

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

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

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

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

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

Sincerely,

Peter T. Young
Chairperson

Enclosure
c: Kahoma Development Co., LLC (with applicable comments – DOH SDWB & WWB, Land Division)
USGS
DWS
PUMP INSTALLATION PERMIT
Kahoma Irrigation Well, Well No. 5240-09

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the pump installation for Kahoma Irrigation Well (Well No. 5240-09) at TMK 4-5-11:1, Maui, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

4. The pump installation permit shall be for installation of a 160 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

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

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

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

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

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

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

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

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

Date of Approval: May 4, 2005
Expiry Date: May 4, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Installer’s Signature: __________________________ C-57, C-57a, or A License #: C-20115 Date: ________

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

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

Attachments
May 13, 2005

Ref:5240-09.wcp

Mr. Mike Robertson
Wailani Drilling, Inc.
77-181 Laaloa Avenue
Kona, HI 96740

Dear Mr. Robertson:

Well Construction Permit
Kahoma Irrigation Well (Well No. 5240-09)

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

Special Conditions

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

2. Attached for your information is a copy of the State Department of Land and Natural Resources Land Division’s comments related to water lease requirements.

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

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

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

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

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.
If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 974-4000 (Hawaii), or 984-2400 (Maui), extension 70251.

Sincerely,

[Signature]

Peter T. Young
Chairperson

Enclosures

c: Kahoma Development Co., LLC
    USGS
    DWS
WELL CONSTRUCTION PERMIT
Kahoma Irrigation Well, Well No. 5240-09

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

In accordance with Department of Land and Natural Resources, Commission on Water Resources Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Kahoma Irrigation Well (Well No. 5240-09) at TMK 4-5-11:1, Maul, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

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

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

6. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources Division of Historic Preservation.

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

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

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

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

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

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

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

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

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

______________________________
W. Roy Young

Date of Approval: May 4, 2005
Expiration Date: May 4, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

Driller's Signature: ____________________________ C-57 License #: C-20115 Date: ________________
Printed Name: Michael Robertson Firm or Title: Wailani Drilling Co.

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

Attachment
C: USGS
Maul Department of Water Supply
Kahoma Development Co., LLC

May 4, 2005
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR PERMIT ISSUANCE**

<table>
<thead>
<tr>
<th>FROM: CHARLEY</th>
<th>DATE: 11 May 05</th>
<th>SUSPENSE DATE:</th>
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<tr>
<td>TO: BAUER, G.</td>
<td>TO: KUNIMURA, I.</td>
<td>FOR: Approval</td>
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<td>CHING, F.</td>
<td>MATHIAS, T.</td>
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<td>DANBARA, S.</td>
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<td>YODA, K.</td>
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**WELL NUMBER**: 5420-09  **WELL NAME**: Kahoma Irrigation Well

**ATTACHMENTS FOR WELL CONSTRUCTION PERMIT**

1. COVER LETTER
2. PERMIT (2x)
3. COMMENTS
4. SDW
5. WWB
6. CBW
7. HEER
8. LD
9. HP
10. PUMP TEST
11. WELL CHECK PRINTOUT

**ATTACHMENTS FOR PUMP INSTALLATION PERMIT**

1. COVER LETTER
2. PERMIT (2x)
3. SDW
4. WWB
5. CBW
6. HEER
7. LD
8. HP
9. WCR II FORM
10. WUR FORM
11. GLENN'S WORKSHEET

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

[ ] PUMP INSTALLATION

[ ] WELL CONSTRUCTION

PLEASE:

See Me
1. Review & Comment
Take Action
2. Type Final
File
3. Xerox copies

Type Draft

FOR OFFICE USE ONLY

Xerox copies

See Me
1. Review & Comment
Take Action
2. Type Final
File
March 29, 2005

TO: Warren Wegesend, Jr., Administrator
Land Division

FROM: Dean Nakano, Acting Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments: Original source of private title is Land Commission Award No. 7750:1 issued between 1845 and 1855.

Contact Person: Gary Martin
Phone: 587-0421

Signed: 
Date: MAY 3, 2005
March 29, 2005

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

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

SUBJECT:  
Well Construction/Pump Installation Permit Application
Kahuna Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

Class:  
Attachment(s)

RESPONSE:

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

II. 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 well 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.

III. 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 systems with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

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

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

VI. An NPDES permit is required.

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

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

IX. No comments or additions.

Contact Person:  
William Wong  
Phone: 586-4258  
Date: APR 5 2005

Signed:  
William Wong

LINDA UNGE
DEAN A. NAKAKO
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: ROY
DATE: APR - 6 2005
SUSPENSE DATE: 

TO: ANAKALEA, P. INIT: KUNIMURA, I.
TO: BAUER, G. INIT: NAKAMA, L.
TO: CHING, F. INIT: NAKANO, D.
TO: DANBARA, S. INIT: OHYE, M.
TO: FUJII, N. INIT: SAKODA, E.
TO: GOODING, K. INIT: SUBIA, S.
TO: HARDY, R. INIT: SWANSON, S.
TO: HIGA, D. INIT: UYENO, D.
TO: ICE, C. INIT: YODA, K.
TO: IMATA, R. INIT: YOSHINAGA, M.

FOR: Approval
FOR: Signature
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FOR: Information

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

WC&PI permits on their way sometime soon?
Ms. Michelle Cockett  
P. O. Box 1633  
Makawao, Hawaii 96768

Dear Ms. Cockett:

RE: Special Management Area Minor Permit for the Proposed Drilling and Installation of an Irrigation Well, Water Tank, and Pump House located off Haumana Road, TMK: (2) 2-8-004:033 (SMX 2005/0185) (SM2 2005/0044)

In response to your application received on March 23, 2005, and in accordance with the Special Management Area Rules for the Maui Planning Commission, Sections 12-202-12 and 12-202-14, a determination has been made relative to the above project that:

1. The project is a development;

2. The project has a valuation not in excess of $125,000.00 (Valuation: $30,000.00);

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

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

In consideration of the above determination, you are hereby granted a Special Management Area Minor Permit approval, subject to the following conditions:

1. That a Well Construction Permit and a Pump Installation permit from the Commission on Water Resource Management (CWRM) shall be obtained before ground water is developed as a source of supply for the project.
2. That the applicant shall coordinate with the Department of Water Supply to incorporate the project into the Water Use and Development Plan.

3. That water conservation measures, including but not limited to, utilization of low-flow fixtures and devices and use of climate-adapted plants, shall be incorporated into daily operations.

4. That at a minimum the following Best Management Practices (BMPs) shall be implemented in the immediate area around the well site:

   a. Vehicles shall not be parked in the immediate well area, even when working on well maintenance or repair, unless required for power supply.

   b. Motor oil, fuel, paints, and any maintenance chemicals shall not be stored in the pump house or immediate zone.

   c. Underground storage tanks, hazardous materials, and septic systems shall be removed or relocated from this zone, where possible.

   d. Hazardous materials shall be stored in a secure building on an impermeable surface with adequate spill containment.

   e. Propane gas shall be used for power pumps.

   f. Non-well maintenance activities shall be kept out of immediate well area.

5. That a qualified archaeological monitor shall be present during all ground-altering activities in order to identify and document any historic properties which may be encountered during the proposed undertaking and to provide appropriate mitigation measures as necessary. An acceptable monitoring plan shall be submitted to the State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division (SHPD) for review and approval prior to the commencement of any ground-altering activities. An acceptable report documenting the findings of the monitoring activities shall be submitted to SHPD for review and approval within 180 days following the completion of the proposed undertaking.
6. That the SHPD Oahu and Maui offices shall be notified at least one week prior to the onset of the project.

7. That Best Management Practices (BMPs) shall be implemented to prevent erosion.

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

Thank you for your cooperation. If additional clarification is required, please contact Ms. Livit U. Callentine, Staff Planner, of this office at 270-5537.

Sincerely,

MICHAEL W. FOLEY
Planning Director

MWF:LUC:Iar

Wayne Boteilho, Deputy Planning Director
Clayton Yoshida, AICP, Planning Program Administrator
Aaron Shinmoto, PE, Planning Program Administrator (2)
Livit U. Callentine, Staff Planner
Charley Ice, CWRM
DWS
SHPD
DSA (2)
05/SM2 Minor Permit File
General File
K:\WP_DOCS\PLANNING\SM2\2005\0044_ClarkWellApproval.wpd
March 29, 2005

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

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

SUBJECT: Well Construction/Pump Installation Permit Application
        Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

Class: Attachment(s)

RESPONSE:

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

- 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 than Director of Health approval is required prior to implementation.

- If the well is 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 sumps with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

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

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

- An NPDES permit is required.

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

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

No comments/objectives.

Contact Person: Alec Wong  Phone: 808-4309
Signed: Alec Wong  Date: 4/4/05
The Department of Health, Clean Water Branch has the following comments:

1. For Well-Drilling Activities

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

2. For Well Pump Testing

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

JS/cr
March 29, 2005

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director’s Office
Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

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

SUBJECT: Well Construction/Pump Installation Permit Application
Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

Cl:ss
Attachment(s)

RESPONSE:

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

[ ] An NPDES permit is required.

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

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

No comments/objections

Contact Person: Lon Kajiwara
Phone: 586-2214

Signed: [Signature]
Date: 4-1-05
LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

March 29, 2005

Mr. Michael Robertson
Wailani Drilling, Inc.
77-181 Laaloa Avenue
Kona, HI 96740

Dear Mr. Robertson:

Well Construction/Pump Installation Permit Application for Well No. 5240-09

We acknowledge receipt, on March 14, 2005, of your completed Well Construction/Pump Installation permit application and filing fee for the Kahoma Irrigation Well (Well No. 5240-09). You can expect your application to be processed within ninety (90) days from this date.

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

Upon completion of the work required under the permit, a certificate of well completion will be issued to the landowner, which transfers responsibilities for the well from the driller/pump installer to the landowner and/or operator. Until that time, the driller is responsible for all conditions of the permit.

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

If you have any questions about your permit application, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 974-4000 (from Hawaii), extension 70251.

Sincerely,

W. Roy Hardy

DEAN A. NAKANO
Acting Deputy Director

Cl: ss
Attachment

c: Michelle Cockett, Kahoma Development Co.
March 29, 2005

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

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

SUBJECT: Well Construction/Pump Installation Permit Application
   Kahoma Irrigation Well (Well No. 5240-09)

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Cl: ss
Attachment(s)

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

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

No comments/objections

Contact Person: ____________________ Phone: ____________________

Signed: ____________________ Date: ____________________
TO: Warren Wegesend, Jr., Administrator  
Land Division  

FROM: Dean Nakano, Acting Deputy Director  
Commission on Water Resource Management  

SUBJECT: Well Construction/Pump Installation Permit Application  
Kahoma Irrigation Well (Well No. 5240-09)  

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

RESPONSE:

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

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

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

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

[] No objections

[] Other comments:

Contact Person: ___________________________ Phone: _____________

Signed: ___________________________ Date: ______________
March 29, 2005

TO: Melanie Chinen, Administrator
Historic Preservation

FROM: Dean Nakano, Acting Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Charley Ice of the Commission staff at 587-0251. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RESPONSE:

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

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

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

Contact Person: ___________________________ Phone: _____________

Signed: _____________________________________________________________________________ Date: ______________
March 29, 2005

TO: Samuel J. Lemmo, Administrator
    Office of Conservation and Coastal Lands

FROM: Dean A. Nakano, Acting Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
         Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application with regard to the
programs, plans, and objectives specific to your division. Please respond by returning this
cover memo form by May 2, 2005. If we do not receive comments or a request for additional
review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions
about this permit application, request additional information, or request additional review time,
please contact Charley Ice of the Commission staff at 587-0251.

CI:ss
Attachment(s)

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________ Phone: ________________

Signed: ____________________________ Date: ________________
March 29, 2005

Mr. Michael W. Foley, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, HI 96793

Dear Mr. Foley:

Special Management Area Use Permit requirements for
Well Construction/Pump Installation Permit Application
Kahoma Irrigation Well (Well No. 5240-09)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by May 2, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-0251.

Sincerely,

W. Roy Naka
Acting Deputy Director

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ______________________ Phone: ______________________

Signed: ______________________ Date: ______________________
FROM: CHARLEY       DATE: 15-Mar-05       SUSPENSE DATE: 22-Mar-05

TO: BAUER, G.       TO: NAKAMA, L.       INIT: 1 Approval
__________        _________        ______
CHING, F.        NAKANO, D.        1 Signature
__________        _________        ______
FUJI, N.        OHYE, M.        3 Information
__________        _________        ______
GOODING, K.        SAKODA, E.        2 Review & Comment
__________        _________        ______
HARDY, R.        SUBIA, S.        1 Take Action
__________        _________        ______
HIGA, D.        SWANSON, S.        2 Type Draft acknow letter
__________        _________        ______
ICE, C.        UYENO, D.        3 Type Final w/elec. signat., label file folder
__________        _________        ______
IMATA, R.        YODA, K.        4 File
__________        _________        ______
KUNIMURA, I.        YOSHINAGA, M.        4 Xerox copies

WELL NUMBER 5240.09    WELL NAME Kahoma Irrigation Well

WELL CONSTRUCTION
PUMP INSTALLATION

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

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

INCOMPLETE ACTION DATES:

DATE  ACTION

5.5 acres for irrigation

same yellow as Kahoma irrigation see
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Tuesday, March 15, 2005
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Tuesday, March 15, 2005  
Page 5 of 6
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*Well Construction*

*Pump Installation*
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Copyright © 2005 State of Hawaii Bureau of Conveyances
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**TOTAL** $ 75.00

**REMARKS:**
- LINE (1) Kahakuloa-Winn Well
- LINE (2) Oili-Garcia Well and Kahoma Well
- LINE (3) 
- LINE (4) 
- LINE (5) 
- LINE (6) 
- LINE (7) 
- LINE (8) 
- LINE (9) 
- LINE (10)
Return Receipt Fax Memo

For: Charley Ice
Re: WCPA's

Charley. Enclosed are the following items:

- WCPA for Peter Winn- Oili Rd. Haiku Well with maps and SMA
- WCPA for Villas of Kahoma - Betsill Well with maps and photo of site.
- Check for $50.00 for both projects above @ 25.00 ea
- WCPA for Peter Winn- Kahakuloa Well with maps.
- 25.00 Check for above well.
- WCR II and signed PIP for Moomuku 3725-01 and pump curve

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at 808-322-6797

Thank you: 
Michael Robertson
APPLICANT FOR
WELL CONSTRUCTION / PUMP INSTALLATION PERMIT

WELL LOCATION INFORMATION

1. STATE WELL NO. (if already assigned) 2. WELL NAME 3. ISLAND 4. TMK
Kahana Well Maui 4 - 50 01 1001

The following be attached before this application is accepted as complete (check off if attached):
- Portion of 7.5 minute Series U.S.G.S. topographic map (scale 1:24,000) with well location labeled and include the name of the quad map
- Property tax map, showing well location referenced to established property boundaries
- Photograph of the proposed well site
- A schematic diagram showing the well site, access road and proposed well infrastructure (if applicable)

5. WELL OPERATOR'S NAME/COMPANY 6. LANDOWNER'S NAME/COMPANY
Kahana Development Co. Same
Michelle Carrett Same

Landowner's Contact

Landowner's Listing Address
635 Kamehi Rd. Same
Kula HI 96793 Same

Landowner's Phone Landowner's Fax Landowner's E-mail
874-5375 874-5159 Same

7. Have you consulted with the Historic Preservation Division of the Department of Land and Natural Resources regarding potential impacts of well construction activities on historic sites? Yes (please attach applicable documentation from Historic Preservation)

If No (attach a brief description of history of use and land use)

8. PROPOSED WELL CONSTRUCTION

9. PROPOSED PUMP INSTALLATION

- Construction Type
- Drilled
- Shaft
- Tunnel

11. Proposed Work
- Construct New Well
- Modify Existing Well
- Abandon/Seal Well

- Install New Pump
- Replace Pump

12. Proposed Pumping Rate, gpm (gallons per minute)
160 at 150 ft

13. Proposed Amount of Withdrawal, gpd (gallons per day)
50,000

14. Method of flow measurement
- Flowmeter
- Open Pipe
- Weir
- Orifice
- Other (explain)

PROPOSED USE

- Municipal (water systems serving greater than 25 individuals or 15 service connections)
- Domestic

- Number of units to be served:

- Industrial (describe)
- Irrigation (describe crop and no. of acres) 5 1/2

- Military (describe)
- Other (describe)

OTHER LEGAL REQUIREMENTS if required, Items 22, and 23. must be obtained before the Commission can legally issue a permit:

22. Conservation District Use Permit (CLUDP)
- Required, CLUDP # date approved
- Not Required (attach documentation from OCLP)

23. Special Management Area Permit (SMAP)
- Required, SMAP # date approved
- Not Required (attach documentation from applicable County agency)

Additional remarks, explanations, etc. (attach additional sheet if more space is needed)

NOTE: Signing below indicates that the signature understand and swear that the information provided is accurate and true to the best of their knowledge.

Further, the signatories understand that upon permit approval: 1) the proposed work is to be completed within 2 (two) years of the approval date; 2) the contractor shall submit to the Commission a well construction/completion report within 60 days after the completion date of the permitted work; 3) if the event that the application is not completed correctly, any permit may be suspended until the item is brought to compliance, and any work done while the permit is in suspension may result in fines of up to $500 per day.

24. WELL DRIILLER (must be filled out if application is for Well Construction)

25. PUMP INSTALLER (must be filled out if application is for Pump Installation)

JCPC App. Form 100504
PROPOSED WELL SECTION

(Please attach schematic if differed from diagram provided below)

Elevation at top of casing: 31 ft, mal

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

Ground Elevation: 36 ft, mal*

Hole Diameter: 13.5 in.

Grouting method:
- Positive displacement
- Other

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev))
- Total Length: 39 ft
- Nominal Diameter: 6 in.
- Wall Thickness: 0.25 in.
- Bottom Elevation: -2 ft, mal*

Open Casing:
- Total Length: 12 ft
- Nominal Diameter: 6 in.
- Wall Thickness: 0.25 in.
- Bottom Elevation: -14 ft, mal*

Rock or Gravel Packing:
- Depth: 3 in.

Estimated Water Level Elevation: 51 ft, mal*

Grout Material:
- Crushed Basalt
- Rounded Gravel

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

Example: Estimated + 2 ft, Water Level Elev. ➔ Bottom Elevation of Well Limit = (2 ft, mal + 1/4 x 4 ft, mal) = -1.5 ft

Solid Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
Compliant with (check one or more): □ ASTM A242 (or A506) □ Type E □ Type S □ Grade B □ Other

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

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

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

Thermoset Plastic: (check one): □ Filament Wound Resin Pipe conforming to ASTM D2996 □ Centrifugally Cast Resin Pipe conforming to ASTM D2997

Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
PTFE Fluorocarbon Tubing conforming to ASTM D3296
FEP Fluorocarbon Tubing conforming to ASTM D3296

Open Casing Material:
Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
Compliant with (check one or more): □ ASTM A242 (or A506) □ Type E □ Type S □ Grade B □ Other

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Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
PTFE Fluorocarbon Tubing conforming to ASTM D3296
FEP Fluorocarbon Tubing conforming to ASTM D3296

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

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

Example: Estimated + 2 ft, Water Level Elev. ➔ Bottom Elevation of Well Limit = (2 ft, mal + 1/4 x 4 ft, mal) = -1.5 ft

WCPI App. Form 10/05/04
Hi Mike,
Hope these photos are sufficient, if not, let me know..
Talk to you soon.
Michelle :)

Your files are attached and ready to send with this message.