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<th>Well No.</th>
<th>Well Name</th>
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<th>Type</th>
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MEMO and ROUTE SLIP (ver. 5/11/10)  

WCR 1 Check for Well No. 3586-38 (GW regulation route)  

1. From Roy (initial)  
   - Initial entry into well index □ Yes □ No  
   - Ingrid’s spreadsheet updated □ Yes □ No  

   **Pump Tests Check**  
   - Step-Drawdown Test: followed WCPI Stds □ Yes □ No  
     - Analysis attached □ Yes □ No  
     - <70 gpm no test required □ □  
   - Constant Rate Test: followed WCPI Stds □ Yes □ No  
     - Analysis attached □ Yes □ No  
     - <50 gpm no test required □ □  
   - Potential Well interference: □ Yes □ No  
   - Potential Stream Impacts: □ Yes □ No  
     - If yes, stream name(s):  
   - Additional Testing or Data Required: □ Yes □ No  
   - Pump Test Comments Attached: □ Yes □ No  
   - Proposed Pump Capacity is OK.: □ Yes □ No  

2. **Well Log Check** - Geology Code for Well Index: □ Fm Name: □ Jeremy (initial):  

3. **Construction Check** Charley/Ryan (initial)  
   - Data complete □ Yes □ No □ NA  
   - Followed Special Cond & elevations □ Yes □ No □ NA  
   - Location unchanged from WCPIPA? □ Yes □ No □ NA  
     - If yes, is SMA, CD, TMK changed? □ Yes □ No □ NA  
     - RED penciled completed location too.  

   ATTACHMENTS FOR PUMP INSTALLATION PERMIT (2x):  
   1. COVER LETTER  
   2. COUNTY COMMENTS (DWS/SMA)  
   3. DOH COMMENTS  
   4. DLNR COMMENTS (LD/OCCUDHP)  
   5. WCR 1 Accept  
   6. WELL CONST. COMPLETION CERTIFICATE  
   7. USGS MAP UPDATED  
   8. PARCEL CHECK  
   9. WELL DATABASE INPUT CHECK  
   10. PUMP TEST WORKSHEET  
   11. WELL As-Built CHECK PRINT  
   - Not necessary – only WCP or BOTH.  
   - To be sent to driller/pump installer  
   - To Landowner  
   - Staff internal checks  

4. Roy (initial) check (Entered WCR 1/WCCC accept date into database)  
5. Susan H. (initial) finalize  
6. Bill (initial) signature  
7. Charley/Ryan File & Enter PIP issue date if attached/required
Mr. Robert Essex  
General Delivery  
Keeau, HI 96749

December 13, 2011

Dear Mr. Essex:

Combined Certificate of Well Construction and Pump Installation Completion for  
Well No. 3586-38 (TMK (3) 1-5-032:013), Hawaiian Paradise Park, Island of Hawaii

We are pleased to inform you that the Well Construction and Pump Installation work permitted for the Essex Well (Well No. 3586-38) is complete and acceptable and welcome you as a new member to the community of well owners and ground water users in Hawaii. This combined certificate 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), HAR, prior to any well sealing or plugging work.

3. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at our website at www.hawaii.gov/dlnr/cwrm/resources_permits.htm.

5. Your approved pump has a capacity of 16 gpm at a head of 162 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 an annual basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. Blank water use report forms are also available at www.hawaii.gov/dlnr/cwrm/resources_permits.htm

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

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 ground water 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 per day. The Commission needs your help and asks that you 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 Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai), extension 70255.

Sincerely,

WILLIAM M. TAM
Deputy Director

Rl:ss

c: Derrick's Well Drilling and Pump Service
Mr. Derrick Moreira  
Derrick's Well Drilling and Pump Service  
P.O. Box 2187  
Keeau, HI 96778  

Dear Mr. Moreira:  

Well Completion Report Parts I & II for Well No. 3586-38  
(Hawaiian Paradise Park, Island of Hawaii)  

We received your Well Completion Report Parts I & II for the Essex Well (Well No. 3586-38) on December 9, 2011 and acknowledge that they are complete.  

This completes your obligation under the well construction and pump installation permits. Certificates of well construction and pump installation completion will be issued to the well operator/landowner and you will receive a copy. These certificates transfer responsibility of specific aspects of well usage and maintenance from you to the well operator/landowner.  

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

Sincerely,  

WILLIAM M. TAM  
Deputy Director  

RI:ss  
c: Robert Essex
Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

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<td>Well Name</td>
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<td>Cement Grout</td>
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<tr>
<td>Grouting Method</td>
</tr>
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<td>Hole Diameter</td>
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<tr>
<td>Total Depth</td>
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<td>Water Level</td>
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<td>Depth of Well below Sea Level</td>
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MEMO and ROUTE SLIP (ver4/29/10/10) 09/23/11

WCR 2 Check for Well No. 3586-38 (GW regulation route)

1. From Roy (initial)

   **Pump Tests Check**

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   **Step-Drawdown Test**

   - followed WCPI Stds analysis attached ☐ ☐ ☐<70 gpm no test required

   **Aquifer Pump Test**

   - followed WCPI Stds T & S analysis attached ☐ ☐ ☐<50 gpm no test required

   **Potential Well Interference** ☐ ☐ if yes, stream names:

   **Potential Stream Impacts** ☐ ☐ if yes, stream names:

   **Additional Testing or Data Required** ☐ ☐

   **Pump Test Comments Attached** ☐ ☐

   **Proposed Pump Capacity is OK** ☐ ☐

2. **Pump Installation Check**

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</table>

   data complete followed Special Cond & Elevations well database updated ☐ ☐ ☐

   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. PUMP TEST WORKSHEET
   9. PUMP As-Built CHECK PRINT

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

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

4. Susan H. (initial) finalize

5. Bill (initial) signature

6. Charley/ Ryan File
**State of Hawaii**  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
**Department of Land and Natural Resources**  
**WELL COMPLETION REPORT - PART I**  
**Well Construction**

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

**1. State Well No.:** 3586-38  
**Well Name:** Essex Well  
**Island:** Hawaii

**2. Address:** 15-1893 Beach Road Keaau, HI 96749  
**Tax Map Key:** 1-5-032.013

**3. Drilling Company:** Derrick's Well Drilling & Pump Services, LLC

**4. Drilling method used during construction:** ☑ Rotary  ☐ Percussion  ☐ Other (describe)

**5. Date Well Construction (drilled, cased, grouted) completed:** 6/22/11

**6. Was the subject well cored?** ☐ Yes ☑ No

**7. Step-Drawdown Test completed?** ☑ Yes ☐ No  
**Attach Step-Drawdown Test form (12/17/97 SDPTD Form)**

**8. Constant Rate Aquifer Test completed?** ☑ Yes ☐ No  
**Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)**

### Water Level Data:

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<tr>
<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>
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<td>6/16/11 11:30a</td>
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<tr>
<td>Ground = +34 ft. mast</td>
<td>26.1</td>
<td>7.9</td>
<td>6/16/11 12n</td>
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<tr>
<td>After casing installation</td>
<td>26.1</td>
<td>7.9</td>
<td>6/16/11 1:30p</td>
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**Note:** For all elevations referenced to mean sea level, take the ground elevation (surveyed or estimated if survey not required at this time) and subtract the depth to the water level.

**12. As-built section filled in completely** ☑

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

**14. GPS coordinates provided in degrees, minutes, seconds** ☑

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

**16. Remarks:** Water meter furnished and to be installed once plumbing is complete.

---

**Licensed Driller (print):** Derrick Moreira  
**C-57 Lic. No.:** C-28001

**Signature:** [Signature]  
**Date:** 6/28/11
12. AS-BUILT SECTION

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

Elevation at top of casing: 35 ft., msl*

(Cement Grout: 24.5 ft. (min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less))

Ground Elevation: 34 ft., msl*

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

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

- Length: 28.5 ft.
- Nominal Diameter: 280 in.
- Wall Thickness: 6 in.
- Bottom Elevation: 5.50 ft., msl*

Open Casing: X Perforated [ ] Screen

- Length: 8 ft.
- Nominal Diameter: 280 in.
- Wall Thickness: 6 in.
- Bottom Elevation: -2.50 ft., msl*

Open Hole:

- Length: __________ ft.
- Diameter: __________ in.
- Bottom Elevation: __________ ft., msl*

*msl = mean sea level

Solid Casing Material:

Carbon Steel: compliant with (check one or more): [ ] ANSI/AWWA C200  [ ] API Spec. 5L  [ ] ASTM A53  [ ] ASTM A139

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

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
DRILLER'S LOG

WELL NUMBER: 3586-38 Essex Well In addition to the driller's log, if a geologic log was prepared, please submit with this form

<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description</th>
<th>Water Level</th>
<th>Cl-</th>
<th>Dates</th>
<th>Depths (ft.)</th>
<th>Rock Description</th>
<th>Water Level</th>
<th>Cl-</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>0 to 10</td>
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<td>0 to</td>
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<tr>
<td>10 to 20</td>
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<td></td>
<td></td>
<td>6/16/11</td>
<td>0 to</td>
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<td></td>
</tr>
<tr>
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<td>medium hard rock</td>
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<td>6/16/11</td>
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</tr>
<tr>
<td>30 to 30.5</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks:

WCR1 Form 8/12/07 Page 3 of 5
Attach photos of completed well and concrete pad

NAD83:
Latitude: 19 degrees 35 min 784 sec
Longitude: 154 degrees 56 min 290 sec

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

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrm/

1. State Well No.: 3586-38  
   Well Name: Essex Well  
   Island: Hawaii

2. Address: 15-1893 Beach Road Kea'au, HI 96749  
   Tax Map Key: 1-5-032:013

3. Pump Installation Company: Derrick's Well Drilling & Pump Services, LLC

4. Date Pump Installed: 6/28/11

5. PERMANENT PUMP INFORMATION
   Pump Type, Make, Serial No.: Submersible, Grundfos, B10010008-P11004
   Rated Capacity: 16 gpm at head of: 162 ft.
   Motor Type, H.P., Voltage, rpm: Submersible Franklin, 3/4Hp, 230V, 3450RPM
   Pump type (check one):
   □ Deep Well Turbine  
   □ Rotary  
   □ Propeller  
   □ Submersible  
   □ Rotary-Displacement  
   □ Reciprocating  
   □ Centrifugal  
   □ Rotary-Gear  
   □ Impulse

6. Method of flow measurement:
   □ Flowmeter  
   Manufacturer Master Meter Model no. 6937071 Size 5/8"
   □ 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 Robert Essex  
    Contact Robert Essex  
    Address 16-540 Kea'au-Pahoa Road Ste. 2-268 Kea'au, HI 96749  
    Phone 360-701-4369  
    Fax none

11. Land Owner  
    Company Robert Essex  
    Contact Robert Essex  
    Address 16-540 Kea'au-Pahoa Road Ste. 2-268 Kea'au, HI 96749  
    Phone 360-701-4369  
    Fax none

12. Remarks

Pump Installation Contractor (print) Derrick Moreira  
C-57/C-57a/A Lic. No. C-28001

Signature  
Date 6/28/11
7. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 34.6 ft. mean sea level

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

Pump intake depth = 31 ft. (referenced to bench mark)

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

swl = 27.0'

If airline installed, bottom of airline elevation = +5 ft. mean sea level
PERFORMANCE CURVES

FLOW RANGE: 10 - 20 GPM
OUTLET SIZE: 1/4 " NPT
NOMINAL DIA. 4"

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
4" MOTOR STANDARD, .5 - 5 HP / 3450 RPM.
6" MOTOR STANDARD, 7.5 - 10 HP / 3450 RPM.
Performance conforms to ISO 9906, 1999 (E) Annex A
Minimum submergence is 2 feet.
# COMMISSION ON WATER RESOURCE MANAGEMENT
## ROUTE SLIP FOR PERMIT ISSUANCE 3/9/11

FROM: **RYAN**  
DATE: **6/3/11**  
TO: **CHONG, R.**  
TO: **KIMURA, J.**  
TO: **OHYE, L.**  
TO: **TAM, B.**  
TO: **UYENO, D.**  
TO: **YODA, K.**  
TO: **YOSHINAGA, M.**  
TO: **ICE, C.**  
TO: **FUJII, N.**  
TO: **HARDY, R.**  
TO: **HOAGBIN, S.**  
TO: **IMATA, R.**  
PLEASE:  
1. Review & Comment  
2. Type Draft  
3. Signature  
4. File  
5. Xeroxx copies  
6. **See Me**  
7. **Take Action**  
8. **Review & Comment**  
9. **Type Draft**  
10. **Type Final**  
11. **Review & Comment**  

### WELL NUMBER: 3586-38
### WELL NAME: Essex

**application type**  
1. WCP COVER LETTER  
2. WCP  
3. WELL CHECK PRINTOUT

**proposed well section issues?**

4. PIP COVER LETTER  
5. PIP

**COMMENTS:**  
6. SDWB  
7. WWB  
8. CWB  
9. HEER  
10. LD  
11. HP  
12. LUC not in CD  
13. OCCL not in CD  
14. SMA in SMA  
15. BWS (Oahu)

**NOTES:**

**DRILLER**  
Derrick Moreira  
Derrick's Drilling and Pump Service  
28002  
P.O. Box 2187  
Keeau, HI 96749

**phone**  
982-7627

**fax**  
982-7596

**cell**  
0

**TMK**  
1-5-032:013

**PUMP CAPACITY**  
12

**WELL OWNER**  
Robert Essex

**LAND OWNER**  
Robert Essex

**COMMENT DEADLINE**  
5/5/11

**90-DAY DEADLINE**  
1/0/00
June 14, 2011

Ref: 3586-38.pip

Mr. Derrick Moreira
Derrick's Well Drilling and Pump Service
P.O. Box 2187
Keau, HI 96749

Dear Mr. Moreira:

Pump Installation Permit
Essex Well (Well No. 3586-38)

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 14:

Special Conditions

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

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at 586-4700 to check compliance with construction noise permit requirements for this project.

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 copy to the Commission office for our files.

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

If you have any questions, please call Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), extension 70255.

Sincerely,

William J. Aila, Jr.
Chairperson

Enclosure

c: Robert Essex (with applicable comments – DOH CWB)
PUMP INSTALLATION PERMIT
Essex Well, Well No. 3586-38

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 Essex Well (Well No. 3586-38) at TMK 1-5-032:013, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

4. The pump installation permit shall be for installation of a 12 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

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

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

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

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, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

11. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

12. 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.

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

Date of Approval: May 10, 2011 Expiration Date: May 10, 2013

WILLIAM J. AILA, JR., 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-28001 Date: Derrick Moreira
Printed Name: Derrick's Well Drilling and Firm or Title: Pump Service

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

Attachments
June 14, 2011

Mr. Derrick Moreira
Derrick's Well Drilling and Pump Service
P.O. Box 2187
Keeau, HI 96749

Dear Mr. Moreira:

Well Construction Permit
Essex Well (Well No. 3586-38)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for a permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 17:

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. Also, please contact the Noise Radiation and Indoor Air Quality Branch at 586-4700 to check compliance with construction noise permit requirements for this project.

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 copy to the Commission office for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrm/forms.htm.

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

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

Sincerely,

WILLIAM J. AILA, JR.
Chairperson

Enclosures

C: Robert Essex (with applicable comments -- DOH CWB)
WELL CONSTRUCTION PERMIT

Essex Well, Well No. 3586-38

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 Essex Well (Well No. 3586-38) at TMK 1-5-032:013, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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 pumping test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/resources_permits.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 pumping installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.

4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (4 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.

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

6. In the event that historically significant remains such as artifacts, burial or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.

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

8. The 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/cwrm/resources_permits.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, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

12. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

13. 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.

14. 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), HAR, prior to any well sealing or plugging work.

15. 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.

16. 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 §13-168-12(f), HAR.

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

Date of Approval: May 10, 2011
Expiration Date: May 10, 2013

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: Derrick Moreira
C-57 License #: C-28001
Date: 
Firm or Title: Derrick's Well Drilling and Pump Service

Printed Name: Derrick Moreira

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

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

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<thead>
<tr>
<th>Data Input</th>
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<td></td>
</tr>
<tr>
<td>Well Name</td>
<td>Essex</td>
<td></td>
</tr>
<tr>
<td>Ground Elevation</td>
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<tr>
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<tr>
<td>Open Casing Length</td>
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<td></td>
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</tbody>
</table>

| Results                              |                  |                  |
| Well Depth                           |                  |                  |
| Theoretical Thickness of Aquifer     | 123              |                  |
| 1/4 Aquifer Thickness                | 30.75            |                  |
| Depth of Well below Sea Level        | -5 okay          | Section 2.2      |
| Well Casing                          |                  |                  |
| Minimum Wall Thickness               | PVC plastic      |                  |
| Material                            |                  |                  |
| Minimum Thickness per standards      | no requirement   |                  |
| Wall Thickness Provided              | 0.28 no standard | Section 2.4(b)   |
| Minimum Length of Solid Casing       | 28.8             |                  |
| 90% of ground to top of aquifer     | 30 okay          | Section 2.4(c)   |
| Length of solid casing Provided      |                  |                  |
| Casing Material Schedule 40          | In compliance    | Section 2.4(d)   |
| (for PVC only - check for 200' limit)|                  |                  |
| Annular Space                        |                  |                  |
| Depth of Grouting                    | 22.4             |                  |
| Calculated Depth of Grouting         |                  |                  |
| Depth of Grouting provided           | 23 okay          | Section 2.6(c)   |
| Minimum Annular Space required       | 2                |                  |
| Thickness of Annular Space           | 3 okay           | Section 2.6(d)   |
April 5, 2011

TO: Dr. Puaalackalani Aiu, Administrator  
Historic Preservation  
Attn: Theresa Donham

FROM: William M. Tam, Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Essex Well (Well No. 3586-38) TMK: 1-5-032:013

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 5, 2011. 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 require additional review time, please contact Ryan Imata of the Commission staff at 587-0255. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RESPONSE:

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

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

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

Contact Person: Theresa Aiu  
Phone: 808-438-7653

Signed: Theresa Aiu  
Date: 5/27/2011
Ryan,

Hope all is well with you. Please find the two following SMA requirements for wall construction/pump installation permits:

Essex Well (Well No. 586-36)
Honuapo Makai Well (Well No. 0533-04)

Let me know if you have any questions.

Thank you,

Bethany J. Morrison
Planner
County of Hawaii
Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawaii 96720-4224
Phone (808) 961-8138
Fax (808) 961-8742
Ms. Bobby Jean Leithead-Todd, Director  
Planning Department  
County of Hawaii  
101 Aupuni Street, Suite 3  
Hilo, HI 96720

Dear Ms. Leithead-Todd:

Special Management Area Use Permit Requirements for  
Well Construction/Pump Installation Permit Application  
Essex Well (Well No. 3586-38)

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

We would appreciate your comments on the captioned application with regard to the SMA permitting  
requirements specific to your division. Please respond by returning this cover memo form by May 5, 2011.  
If we do not receive comments or a request for additional review time by this date, we will assume you have  
no comments.

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

Sincerely,

[Signature]

Chairperson

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:  
SMA Except for use of the existing single-family residence.

Contact Person: [Name]  
Phone: [Number]

Signed: [Signature]  
Date: [Date]
TO: Russell Tsuji, Administrator
Land Division

FROM: William M. Tam, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Essex Well (Well No. 3586-38) TMK 1-5-032:013

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 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

RI:ss
Attachment(s)

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments: Original private title source issued prior to statehood.

Contact Person: GARY MARTIN Phone: 587-0491

Signed: ___________________________ Date: 4/11/11
April 5, 2011

TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
       Department of Health
       Attention: Acting Chief, Wastewater Branch
       Acting Chief, Chief, Safe Drinking Water Branch
       Alec Wong, Chief, Clean Water Branch
       Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
       Commission on Water Resource Management

SUBJECT: Essex Well Construction/Pump Installation Permit Application
       Well address: 15-1893 Beach Road

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 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RESPONSE:

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

2) This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should use 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.

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

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

5) For the申请人 information, a source of possible wastewater contamination | [ ] is not located near the proposed well site (information attached)

| An NDEP permit is required |
| Other relevant DOM 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: Jerry Nunogawa, Eng. in Hilo

Signed: [Signature] Date: [4-7-2011]
TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director  
Department of Health  
Attention: Acting Chief, Wastewater Branch  
Acting Chief, Chief, Safe Drinking Water Branch  
Alec Wong, Chief, Clean Water Branch  
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Essex Well (Well No. 3586-38) TMK 1-5-032:013  
Well address: 15-1893 Beach Road

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 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RI:SS  
Attachment(s)

RESPONSE:

This well qualifies as a source which will serve as a source of possible 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, §11-20-20.

This well does not qualify as a source serving a public water system (served 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 to 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.

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 DOI 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: Jerry Nunogawa, Eng. in Hilo  
Signed: [Signature]  
Date: 4-7-2011
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS
FROM: RYAN
DATE: 5-Jan-11
SUSPENSE DATE: 12-Jan-11

TO: [Blank]
INIT: [Blank]
DATE: [Blank]

WELL NUMBER: 3516.38
WELL NAME: Essex
WHP Number: [Blank]

ATTACHMENTS FOR APPLICATION PROCESSING:
1. TRANS. LETTER
2. PERMIT PROCESSING TABLE
3. CWRM MAPS
4. USGS MAPS
5. TAX MAPS
6. INGRID'S SMA/CD MAPS
7. PARCEL OWNER VERIF.
8. CONTRACTOR VERIF.
9. ALL INFO FILLED IN
10. SERIAL DEPOSIT SLIP
12. OTHERS

PLEASE: See Me
- Review & Comment
- Take Action
- Type Draft acknow
- Final, label file folder
- Update People.db
- Xerox copies
- File & Input Issue Date

FILE FOLDER: [Blank]
MADE NEW FILE FOLDER, ATACHED
FILE FOLDER ALREADY MADE, IN FILE CABINET
INCOMPLETE ACTION DATES:

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April 5, 2011

Mr. Derrick Moreira
Derrick's Well Drilling and Pump Service
P.O. Box 2187
Keeau, Hi 96749

Dear Mr. Moreira:

Well Construction/Pump Installation Permit Application for Well No. 3586-38

We received your Well Construction/Pump Installation permit application and filing fee for the Essex Well (Well No. 3586-38). We are processing your past well completion reports and there are some discrepancies that need to be resolved. However, we can still process this application for review. If the review warrants the issuance of a permit, we will either send you the approved permits or a letter of assurance in lieu of the permit if there are outstanding issues.

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

Sincerely,

WILLIAM M. TAM
Deputy Director

RI:ss

c: Robert Essex
TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Acting Chief, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Essex Well (Well No. 3586-38) TMK 1-5-032:013
Well address: 15-1893 Beach Road

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 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RESPONSE:

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 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/objections

Contact Person: Phone: --------------------------------------------

Signed: ____________________________ Date: ________________
April 5, 2011

TO: Russell Tsuji, Administrator  
Land Division

FROM: William M. Tam, Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Essex Well (Well No. 3586-38) TMK 1-5-032:013

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 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

RI:ss  
Attachment(s)

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________  Phone: ________________

Signed: ____________________________  Date: ________________
TO: Dr. Puaalaokalani Aiu, Administrator Historic Preservation
Attn: Theresa Donham

FROM: William M. Tam, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Essex Well (Well No. 3586-38) TMK: 1-5-032:013

April 5, 2011

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 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Ryan Imata of the Commission staff at 587-0255. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RESPONSE:

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

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

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

Contact Person: ___________________________ Phone: ______________

Signed: ___________________________ Date: ___________________________
Ms. Bobby Jean Leithead-Todd, Director
Planning Department
County of Hawaii
101 Aupuni Street, Suite 3
Hilo, HI 96720

Dear Ms. Leithead-Todd:

Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
Essex Well (Well No. 3586-38)

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

We would appreciate your comments on the captioned application with regard to the SMA permitting requirements specific to your division. Please respond by returning this cover memo form by May 5, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

Sincerely,

[Signature]

Chairperson

RESPONSE:

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

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

[ ] No objections

[ ] Other comments:

Contact Person: __________ Phone: __________

Signed: __________ Date: __________
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is therefore, not guaranteed.

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<tbody>
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<td>NAME: DERRICK'S WELL DRILLING &amp; PUMP SERVICES LLC</td>
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<td>ORIG LIC DATE: 06/19/2007</td>
<td>EXPIRE DATE: 09/30/2012</td>
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<td>CLASS PREFIX: C</td>
<td>SPECIAL PRIVILEGE:</td>
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<td>EDUCATION CODE:</td>
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<td>CONDITIONS AND LIMITATIONS:</td>
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<tr>
<td>BUSINESS ADDR: 15-2005 29TH AVE KEAAU HI 96749</td>
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<tr>
<td>MAILING ADDR: P O BOX 2187 KEAAU HI 96749</td>
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Click here to enter search criteria for prior complaints history ->
For prior complaints and disciplinary history, contact licensing and business information center at (808) 587-3295.
<table>
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<th>Service Description</th>
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<td>Big Island Biodiesel Blow Down Water Well</td>
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<td>Bank of Hawaii #9474 Application fee for Essex &amp; B.I. Biodiesel Wells</td>
<td>50.00</td>
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REMARKS: LINE (1) Essex Well I
        LINE (2) Big Island Biodiesel Blow Down Well
        LINE (3)
        LINE (4)
        LINE (5)
        LINE (6)
        LINE (7)
        LINE (8)
        LINE (9)
        LINE (10)
**WELL LOCATION INFORMATION**

1. **STATE WELL NO.** (if already assigned) 
2. **WELL NAME** 
   - Essex Well
3. **ISLAND** 
   - Hawaii
4. **TMK** 
   - Zone: 1
   - Sec: 5
   - T: 32
   - R: 13

The following must be attached before this application is accepted as complete (check off if attached):
- A portion of the 7.5-Minute Series USGS 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
- For dug wells, attach a grading plan with cross section profiles showing cut lines and fill grades

5. **WELL OPERATOR’S NAME/COMPANY** 
   - Wells Operator Contact: Derrick
e
6. **LANDOWNER’S NAME/COMPANY** 
   - Landowner’s Contact: Same

**PROPOSED WELL CONSTRUCTION**

7. **Proposed Work**
   - Modify Existing Well
   - New Well
   - Abandon/Seal Well

8. **Construction Type**
   - Dug
   - Shaft
   - Tunnel

**PROPOSED PUMP INSTALLATION**

9. **Proposed Pumping Rate, gpm**
10. **Proposed Amount of Withdrawal, gpd**
11. **Proposed Pumping Rate, gpm**
12. **Proposed Amount of Withdrawal, gpd**

**OTHER LEGAL REQUIREMENTS**

- Conservation District Use Permit (CDUP)
- Required: CDUP # __________ date approved
- Not Required (attach documentation from OCCL)
- I have not checked with OCCL about whether or not a CDUP is required. I understand that checking with OCCL prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

- Land is in Conservation District
- I understand that checking if the land is in a Conservation District may expedite my review. I further understand that issues raised may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

- Special Management Area Permit (SMAP)
- Required: SMA # __________ date approved
- Not Required (attach documentation from applicable County agency)
- I have not checked with the County about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application may expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

- State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources
- I have consulted with the HPD regarding potential impacts of well construction activities on historic sites. I have attached applicable documentation from the HPD.
- I have not consulted with the HPD regarding potential impacts of well construction activities on historic sites. I understand that checking with the HPD prior to making this application may expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

**SITE PHOTO**

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

**For Official Use Only:**

- DEC 22 AM 9:10

- Derrick’s Well Drilling & Pump Svc
  - C-28001
  - License business name
  - C-57/License No.
  - Derrick Moreira
  - 12/13/10

- Derrick’s Well Drilling & Pump Svc
  - C-28001
  - License business name
  - C-57C-57aA License No.
  - Derrick Moreira
  - 12/13/10
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Hole Diameter: 12 in.

Elevation at top of casing: 36 ft., msl*

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

Ground Elevation: 35 ft., msl*

Grouting method
- Positive displacement
- Other

Solid Casing: (≥ 90% x (Ground Elev.-Water Level Elev.))
- Total Length: 30 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 280 in.
- Bottom Elevation: 5 ft., msl*

Open Casing: X Perforated Screen
- Total Length: 10 ft.
- Nominal Diameter: 6 in.
- Well Thickness: 280 in.
- Bottom Elevation: 5 ft., msl*

Elevation: 3 ft., msl*

Solid Casing:
- Carbon Steel: compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
- Stainless Steel: (check one):
  - ASTM A409 (production wells)
  - ASTM A312 (monitor wells)

Open Casing:
- Carbon Steel: compliant with (check one or more):
  - ANSI/AWWA C200
  - API Spec. 5L
  - ASTM A53
  - ASTM A139
- Stainless Steel: (check one):
  - ASTM A409 (production wells)
  - ASTM A312 (monitor wells)

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

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

Example: Estimated 2 ft. Water Level Elev. --- Bottom Elevation of Well Limit = (2 ft. - .5 ft.) = 1.5 ft.

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

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

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

PVC Plastic conforming to ASTM F480 and ASTM D3517:
- Schedule 40
- Schedule 80

WIFI App. Form 10/05/04
# 1. STATE WELL NO. (If already assigned)

2. WELL NAME

3. ISLAND

4. TMK

16. Domestic - Number of units to be served: 1

17. Industrial (describe)

18. Irrigation (describe crop and no. of acres)

19. Military (describe)

20. Other (describe)

21. Conservation District Use Permit (CDUP)

22. Special Management Area Permit (SMAP)

23. State Historic Preservation Division (SHPD) of the Department of Land and Natural Resources

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

NOTE: Signing below indicates that the signatories 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 two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/abandonment report within 90 days after the completion date of the permitted work; 3) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $5,000 per day.

Deerinck's Well Drilling & Pump Svc

Derrick Moreira

12/13/10

Derrick's Well Drilling & Pump Svc

Derrick Moreira

12/13/10

WPRI App. Form 10/05/04
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Hole Diameter: __________ in.

Minimum of 2' Radius & 4" Thick Concrete Pad (to contain benchmark), Bottom elevation: __________ ft. msl

Cement Grout: __________ ft.

Rock or Gravel Packing: __________ ft.

Crushed Basalt

Material: __________ ft.

Estimated Water Level: __________ ft. msl

Open Casing: _____ perforated, ____ Screen

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

Total Length: __________ ft.

Nominal Diameter: __________ in.

Wall Thickness: __________ in.

Bottom Elevation: __________ ft. msl

Open Hole: Length: __________ ft.

Diameter: __________ in.

Bottom Elevation: __________ ft. msl

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

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

Example: Estimated + 2 ft. Water Level Elev. ---- Bottom Elevation of Well Limit = (2 - 0.25) = -18.5 ft.

Solid Casing Material:
Carbon Steel: compliant with (check one or more):

☐ ANSI/AWWA C200
☐ API Spec. 5L
☐ ASTM A53
☐ ASTM A139

And compliant with (check one or more):

☐ ASTM A242 (or A606)
☐ Type E
☐ Type S
☐ Grade B
☐ Other

Stainless Steel: (check one):

☐ ASTM A409 (production welds)
☐ ASTM A152 (monitor welds)

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

☐ Schedule 40
☐ Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)

☐ Schedule 40
☐ Schedule 80
☐ Schedule 120

Thermoplastic: (check one)

☐ Centrifugally Cast Resin Pipe conforming to ASTM D2959
☐ 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 welds)
☐ ASTM A312 (monitor welds)

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

☐ Schedule 40
☐ Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)

☐ Schedule 40
☐ Schedule 80
☐ Schedule 120

Thermoplastic: (check one)

☐ Centrifugally Cast Resin Pipe conforming to ASTM D2959
☐ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
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WCPI App. Form 10/05/04