WELL CONSTRUCTION PERMIT

Olson Well, Well No. 1222-14

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 Olson Well (Well No. 1222-14) at TMK (4) 5-1-005:040-1, Kauai, 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 pump 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 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 basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. 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, 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’ 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(1), 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 or pump installation permit in accordance with §13-168-12(1), HAR.

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

Date of Approval: May 11, 2011
Expiration Date: May 11, 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: ___________________________  C-57 License #: C-29578  Date: 6-11-11

Printed Name: Michael Lluellen  Firm or Title: Kauai Water Well

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

Attachment
Dear Mr. Lluellen:

Pump Installation Permit
Olson Well (Well No. 1222-14)

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 Charley Ice of the Commission staff at 587-0218 or toll-free at 274-3141 (Kauai), extension 70218.

Sincerely,

WILLIAM J. AILA, JR.
Chairperson

Enclosure

c:  John Olson (with applicable comments – DOH SDWB, WWB)
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 Olson Well (Well No. 1222-14) at TMK (4) 5-1-005:040-1, Kauai, 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 49 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 11, 2011
Expiration Date: May 11, 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 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-29578 Date: ___________________________
Printed Name: Michael Lluellen Firm or Title: Kauai Water Well

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

Attachments
May 25, 2011

Ref: 1222-14.wcp

Mr. Michael Lluellen
Kauai Water Well
P.O. Box 431
Anahola, HI 96703

Dear Mr. Lluellen:

Well Construction Permit
Olson Well (Well No. 1222-14)

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.

2. The well shall be cased to at least 90% of the depth from the ground to the top of the aquifer.

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/cwrmlforms.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 587-0218 or toll-free at 274-3141 (Kauai), extension 70218.

Sincerely,

William J. Aila, Jr.
Chairperson

Enclosures

c: John Olson (with applicable comments – DOH SDWB, WWB)
WELL CONSTRUCTION PERMIT

Olson Well, Well No. 1222-14

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 Olson Well (Well No. 1222-14) at TMK (4) S-1-005:040-I, Kauai, 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 pump 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 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 basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. 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, 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' 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 11, 2011
Expiration Date: May 11, 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: __________________________ C-57 License #: C-29578 Date: __________________________

Printed Name: Michael Lluellen Firm or Title: Kauai Water Well

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE 5/19/05

FROM: CHARLEY
DATE: 5/13/05
SUSPENSE DATE: 

TO: ANAKALEA, P.
INIT: 
TO: BAUER, G.
INIT: 
TO: CHING, F.
INIT: 
TO: DANBARA, S.
INIT: 
TO: FUJII, N.
INIT: 
TO: GOODING, K.
INIT: 
TO: HARDY, R.
INIT: 
TO: HIGA, D.
INIT: 
TO: ICE, C.
INIT: 
TO: IMATA, R.
INIT: 

FOR: Approval
INIT: Signature
FOR: Information
INIT: 

TO: KUNIMURA, I.
INIT: 
TO: NAKAMURA, L.
INIT: 
TO: NAKANO, D.
INIT: 
TO: OHYUE, M.
INIT: 
TO: SAKODA, E.
INIT: 
TO: SUBIA, S.
INIT: 
TO: SWANSON, S.
INIT: 
TO: UYENO, D.
INIT: 
TO: YODA, K.
INIT: 
TO: YOSHINAGA, M.
INIT: 

PLEASE: 
1 Review & Comment
2 Type Final
3 Information
4 Xerox copies

WELL NUMBER 1222-14

Olson Well

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 SDWB
4 WWB
5 CWB
6 HEER
7 LD
8 HP
9 OCCL
10 SMA
11 WELL CHECK PRINTOUT

FOR OFFICE USE ONLY

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 SDWB
4 WWB
5 CWB
6 HEER
7 LD
8 HP
9 OCCL
10 SMA
11 GLENN'S WORKSHEET

FOR OFFICE USE ONLY
<table>
<thead>
<tr>
<th>Approved</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Applicant</th>
<th>Driller</th>
<th>Pump Inst.</th>
<th>Type</th>
<th>Well Construction</th>
<th>Pump Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1120-58</td>
<td>Garcia</td>
<td>Mark &amp; Sue Garcia</td>
<td>C-29578 C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1224-01</td>
<td>Gina</td>
<td>Bill Mowry</td>
<td>C-29578 C-29578</td>
<td>PUMP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1222-14</td>
<td>Olson</td>
<td>Paul Olson</td>
<td>C-29578 C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/10/2011</td>
<td>1222-13</td>
<td>Kingston</td>
<td>David Kingston</td>
<td>C-29578 C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Record seems clear.
## Well Check Program
4/1/04 - Revised for update to Well Standards (February 2004)

### Data Input

<table>
<thead>
<tr>
<th>Data Input</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Number</td>
<td>1222-14</td>
</tr>
<tr>
<td>Well Name</td>
<td>Olson</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>320</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>150</td>
</tr>
<tr>
<td>Grouting Method</td>
<td>positive displacement</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>10</td>
</tr>
<tr>
<td>Total Depth</td>
<td>200</td>
</tr>
<tr>
<td>Water Level</td>
<td>100 Depth to water</td>
</tr>
<tr>
<td>Public Water Supply Well?</td>
<td>no</td>
</tr>
<tr>
<td>Solid Casing Material</td>
<td>pvc plastic</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
<td>Schedule 40</td>
</tr>
<tr>
<td>Solid Casing Length</td>
<td>160</td>
</tr>
<tr>
<td>Solid Casing Diameter</td>
<td>4</td>
</tr>
<tr>
<td>Solid Casing Wall Thickness</td>
<td>0.250</td>
</tr>
<tr>
<td>Open Casing Length</td>
<td>40</td>
</tr>
</tbody>
</table>

### Results

#### Well Depth

- **Theoretical Thickness of Aquifer**: 4100
- **1/4 Aquifer Thickness**: 1025
- **Depth of Well below Sea Level**: 120 okay Section 2.2

#### Well Casing

- **Minimum Wall Thickness**
  - Material: pvc plastic
  - Minimum Thickness per standards: no requirement
  - **Wall Thickness Provided**: 0.25 no standard Section 2.4(b)
- **Minimum Length of Solid Casing**
  - 90% of ground to top of aquifer: 198
  - **Length of solid casing Provided**: 160 not enough casing Section 2.4(c)
- **Casing Material**
  - Schedule 40 (90')
  - **In compliance**: okay Section 2.4(d)
- **(for pvc only - check for 200' limit)**
  - no requirement

#### Annular Space

- **Depth of Grouting**
  - **Calculated Depth of Grouting**: 154
  - **Depth of Grouting provided**: 150 not enough Section 2.6(c)
- **Minimum Annular Space required**: 1.5
- **Thickness of Annular Space**: 3 okay Section 2.6(d)

---

*yes*

*no*

*steel*

*stainless steel*
pvc plastic
abs plastic
thermoset plastic
other

pvc plastic
Schedule 40
Schedule 80
other

steel
ANSI/AWWA C200
API Spec. 5L
ASTM A53
ASTM A139
ASTM A606
other

stainless steel
ASTM A409
other

pvc plastic
Schedule 40
Schedule 80
other

positive displacement
other

steel public
steel non public

0.237

#N/A
Charley,

Our response is contained in the attached.

__________ <<1324-10 3306-18 4527-20 1222-14.pdf>> __________________________

From: Susan S Hoagbin/DLNR/StateHiUS@STATEHIUS@DOHMAIL On Behalf Of Susan S Hoagbin/DLNR/StateHiUS@DOHMAIL
Sent: Tuesday, April 12, 2011 2:34 PM
To: CleanWaterBranch; Morikami, Lori N; Miyahira, Michael M; Palmer, Richard
Cc: Charley F Ice
Subject: Review for Comments

Please respond to this email request for comments to charley.f.ice@hawaii.gov

1324-10 3306-18 4527-20 1222-14.pdf
April 11, 2011

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Acting 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

Olson Well (Well No. 1222-14) TMK (4) 5-1-005:040-001
Well address: 4540 Waikalua 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 11, 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 Charley ice of the Commission staff at 587-0218.

Contact Person: Michael Mikahira
Phone: 586-4254

Signed:

Date: 4/13/11

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, §1-20-29.

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 utilizing 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 outlets 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 in the area 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.
CWRM Application Source: Olson Well
(Well No. 1222-14)
TMK: (4) 5-1-005:040-001

Safe Drinking Water Branch (SDWB) - Engineering Section

- See attached Private Wells information sheet.

SDWB Underground Injection Control (UIC) Section

- In general, a shallow well, or a well that recharges quickly from local rainfall, should not be used as a potable water source because such a well increases the risk of having unsatisfactory groundwater quality that when consumed may compromise health. Factors that directly influence a well's groundwater quality include wastewater disposal systems (cesspools, septic systems, drainage wells), lawn/garden/crop-growing activities, and even the proximity to the ocean where salt water intrusion may occur.

- Well water quality should be initially and periodically tested for it's acceptable and intended use, especially if for human consumption. Water quality should not be presumed acceptable and unchanging. Land-based activities around the well and within the well's recharge area may, over time, have an unacceptable effect on the well's water quality. Well construction materials and related equipment could also affect water quality.

CWRM Well Application Standard Comments (SDWB)
Vers. 4/8/08
WARNING! As the owner of a privately-owned well, you should NOT assume that water from your well is safe for consumption. It is your responsibility to make sure that your well water is safe to drink. The only way to do this is to have your well regularly tested for bacteriological and chemical contaminants.

There are no regulations controlling water quality in private wells serving individual residences as there are for public water systems (public or privately owned utilities supplying water to 25 or more people or 15 service connections). In other words, there are no enforceable limits for contaminants and no requirements for regular testing. Private wells are often found in rural areas, where many activities such as onsite wastewater disposal can contaminate the ground water.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) RECOMMENDATIONS

The EPA recommends that private well owners test their well water each year for such contaminants as Total Coliform Bacteria, Nitrates, as well as any other contaminants that may be of concern in your area. More frequent testing may be appropriate if you suspect a problem. EPA also suggests that you consider testing for pesticides, organic chemicals, and heavy metals before using it for the first time. Please refer to the EPA website on Private Drinking Water Wells at http://www.epa.gov/safewater/privatewells/faq.html

OTHER CONTAMINANTS

Water testing can be very expensive. It is important that you spend time to identify what other potential contaminants may be of concern. Please refer to the EPA website on Private Drinking Water Wells at http://www.epa.gov/safewater/privatewells/whatyoucando.html for more helpful information. Be aware of what and how you use and dispose of household and garden chemicals. Also determine the location of nearby septic tanks or cesspools, and agricultural or industrial activities in the area. General information on known chemical contamination of ground water in Hawaii can also be found at the DOH website www.hawaii.gov/health/environmental/water/sdwb/conmaps/pdf/conmaps05.pdf

LABORATORIES

Local commercial laboratories can be found in the yellow pages of the telephone book under “Laboratories, Analytical.” Whenever possible, utilize a laboratory that is certified or approved for the specific drinking water tests and carefully follow their instructions for collecting, storing, and transporting the samples. Just be sure to ask the lab to use EPA approved methods for drinking water analysis. A list of labs certified or approved by the Department of Health can be found at www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/Testing%20Labs.pdf. As lab certification status changes constantly, confirm their status when you contact the lab. Please note that the list is limited to currently regulated contaminants in public water systems.

CWRM Well Application Standard Comments (SDWB) Vers. 4/8/08
RESULTS

Once the lab provides you with the test results, you will be in a better position to determine if your well water is safe to drink or what contaminant you need to treat for. Generally, you should compare the results with Federal (http://www.epa.gov/safewater/mcl.html) and State (www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/State%20MCL.pdf) drinking water standards. Where your test results are greater than the State or Federal maximum contaminant levels, your well water should be considered as **unsafe** for consumption.
April 11, 2011

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Acting 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
Olson Well (Well No. 1222-14) TMK (4) 5-1-005:040-001
Well address: 4540 Waikalua 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 11. 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 587-0218.

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. 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.

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.

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.

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 be applicable, and we do not need to review the new location.

No comments/objections

Contact Person: Lori Vetter, Eng. on Kauai
Signed: Date: 4-14-2011
<table>
<thead>
<tr>
<th>IWS Application Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit ID: 19620</td>
<td></td>
</tr>
<tr>
<td>Legacy File#: 2924</td>
<td></td>
</tr>
<tr>
<td>eHawaii ID: N/A</td>
<td></td>
</tr>
<tr>
<td>Island: Kauai</td>
<td></td>
</tr>
<tr>
<td>IWS Type: Septic Tank</td>
<td></td>
</tr>
<tr>
<td>Status: Use Approved</td>
<td></td>
</tr>
<tr>
<td>Assigned To: Vetter, Lori</td>
<td></td>
</tr>
<tr>
<td>Source: WWB</td>
<td></td>
</tr>
<tr>
<td>Description:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Information</th>
<th>Review Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer: Peter Taylor</td>
<td>Submit Date: 11/28/1994</td>
</tr>
<tr>
<td>TMK: 451005040</td>
<td>Reviewed: 12/13/1994</td>
</tr>
<tr>
<td>Street Address: 4540 WAIAKALUA RD.</td>
<td>Plan Approved: 12/13/1994</td>
</tr>
<tr>
<td>Street Address 2:</td>
<td>No Final Approval Ltr:</td>
</tr>
<tr>
<td>Suite/Apt.:</td>
<td>Inspection Date: 5/30/1995</td>
</tr>
<tr>
<td>City: KILAUEA, HI</td>
<td>Final Approval: 6/20/1995</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>Termination Date:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Type: N/A</td>
<td>Check Number:</td>
</tr>
<tr>
<td>Check Date: 1/1/1899</td>
<td>Payor: n/a</td>
</tr>
<tr>
<td>Amount: 0</td>
<td></td>
</tr>
</tbody>
</table>

Added By: phsieh 2/26/2007 10:52 AM  Last Modified:
## IWS System Information

### Septic Tank Information
- **Septic Tank Liquid Volume:** [Input Field]
- **6' Inspection Port(s) to grade:** [Radio Button]
- **Manhole openings brought to grade:** [Radio Button]
- **Remarks:** [Input Field]

### Soil Profile Information
- **Percolation Rate:** 28
- **Minimum Soil Absorption:** 242 sq. ft./bd
- **3' Groundwater Setback:** [Radio Button]
- **Total Min. Soil Absorp. Required:** 726 sq. ft.
- **Total Soil Absorp. Provided:** 0 sq. ft.

### Soil Absorption Information
- **Soil Absorption Bed:** [Input Field]
- **Soil Absorption Trenches:** [Input Field]
- **Seepage Pit:**
  - **Length:** [Input Field]
  - **Width:** [Input Field]
  - **Diameter:** [Input Field]
  - **Depth:** [Input Field]
  - **Lining Type:** [Input Field]
  - **Access Opening:** [Input Field]
  - **Cover Diameter:** [Input Field]
  - **6' Inspection Port:** [Radio Button]

**Added By:** phsieh 2/26/2007 10:52 AM  **Last Modified:**
Good Morning Charley –

Here are Wastewater Branch comments on the well construction / pump installation permit application requests (4).

Hard copies are to follow via Messenger.

Aloha,

Lori @WWB

Lori Morikami, Planner

Planning & Design Section

Wastewater Branch

Phone (808) 586-4294 Fax (808) 586-4300

<<166028001-NSLF-ID650.pdf>>
<<451005040-olson-ID653.pdf>>

From: Susan S Hoagbin/DLNR/StateHiUS@STATEHUIS@DOHMAIL On Behalf Of Susan S Hoagbin/DLNR/StateHiUS@DOHMAIL
Sent: Tuesday, April 12, 2011 2:34 PM
To: CleanWaterBranch; Morikami, Lori N; Miyahira, Michael M; Palmer, Richard
Cc: Charley F Ice
Subject: Review for Comments

Please respond to this email request for comments to charley.f.ice@hawaii.gov
TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Acting Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawakoa, 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
Olson Well (Well No. 1222-14) TMK (4) 5-1-005:040-001
Well address: 4540 Waikana Road

April 11, 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 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 11, 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 Charley Ike of the Commission staff at 587-0218.

Class
Attachment(s)

RESPONSE:

1. This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and shall 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, §11-30-29.

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 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.

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 locating all non-potable apertures 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.

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: Lori Vetter, Eng. on Kauai
Signed: Wigmont C. Yabu
Date: 4-14-2011
<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit ID</td>
<td>19620</td>
</tr>
<tr>
<td>Legacy File</td>
<td>2924</td>
</tr>
<tr>
<td>Island</td>
<td>Kauai</td>
</tr>
<tr>
<td>Source</td>
<td>WWB</td>
</tr>
<tr>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>Engineer</td>
<td>Peter Taylor</td>
</tr>
<tr>
<td>TMK</td>
<td>451005040</td>
</tr>
<tr>
<td>Street Address</td>
<td>6450 WAIACALUA RD.</td>
</tr>
<tr>
<td>City</td>
<td>KLAUEA</td>
</tr>
<tr>
<td>Zip Code</td>
<td>Hi</td>
</tr>
<tr>
<td>Payment Type</td>
<td>N/A</td>
</tr>
<tr>
<td>Check Number</td>
<td>1</td>
</tr>
<tr>
<td>Amount</td>
<td>0</td>
</tr>
</tbody>
</table>

**Submit Date:** 11/28/1994
**Reviewed:** 12/13/1994
**Plan Approved:** 12/13/1994
**No Final Approval Ltr:**
**Inspection Date:** 5/30/1995
**Final Approval:** 6/20/1995
**Termination Date:**

**Added By:** phsieh 2/26/2007 10:52 AM  **Last Modified:**
IWS System Information

Septic Tank Information
- Septic Tank Liquid Volume: 
- 6" Inspection Port(s) to grade: 
- Manhole openings brought to grade: 
- Remarks:

Soil Profile Information
- Percolation Rate: 20
- Minimum Soil Absorption: 242 sq. ft./bd
- 3' Groundwater Setback:
- Total Min. Soil Absorp. Required: 726 sq. ft.
- Total Soil Absorp. Provided: 0 sq. ft.

Soil Absorption Information
- Soil Absorption Bed
- Soil Absorption Trenches
- Seepage Pit
- Length: ft
- Width: ft
- Diameter: ft
- Depth: ft
- Lining Type:
- Access Opening: inches
- Cover Diameter: ft
- 3' Soil Replacement: 
- # of Trenches: 

Added By: phsieh 2/26/2007 10:52 AM Last Modified:
April 11, 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
          Olson Well (Well No. 1222-14) TMK (4) 5-1-005:040-001

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 11, 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 Charley Ice of the Commission staff at 587-0218.

RESPONSE:

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

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

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

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

[ ] No objections

K] Other comments: Original source of private title is Grant 381 issued prior to statehood.

Contact Person: Gary Martin Phone: 587-0421

Signed: Gary Martin Date: April 13, 2011
April 11, 2011

Mr. Michael Lluellen
Kauai Water Well
P.O. Box 431
Anahola, HI 96703

Dear Mr. Lluellen:

Well Construction/Pump Installation Permit Application for Well No. 1222-14

We received your Well Construction/Pump Installation permit application and filing fee for the Olson Well (Well No. 1222-14). We are processing your past well completion reports. There are some discrepancies that you need to resolve. However, we can still process this application for review. If the review warrants the issuance of a permit, we will either send you: 1) the approved permits, or 2) a letter of assurance that the permit will be issued to you once your outstanding completion report issues are resolved to our satisfaction.

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

Sincerely,

WILLIAM M. TAM
Deputy Director

cc: John Olson
April 11, 2011

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Acting 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

Olson Well (Well No. 1222-14) TMK (4) 5-1-005:040-001
Well address: 4540 Waikalua 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 11, 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 Charley Ice of the Commission staff at 587-0218.

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (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 II, 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 11, 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
         Olson Well (Well No. 1222-14) TMK (4) 5-1-005:040-001

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 11, 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 Charley Ice of the Commission staff at 587-0218.

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: _______________

Attachment(s)
April 11, 2011

TO: Dr. Puu_laokalani Aiu, Administrator
   Historic Preservation

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

SUBJECT: Well Construction/Pump Installation Permit Application
         Olson Well (Well No. 1222-14) TMK: (4) 5-1-005:040-001

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 11, 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 Charley Iie of the Commission staff at 587-0218. 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: __________
April 11, 2011

Mr. Ian Costa, Director
Planning Department
County of Kauai
4444 Rice Street, Ste. A473
Lihue, Hawaii 96766

Dear Mr. Costa:

Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
Olson Well (Well No. 1222-14)

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 11, 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 Charley Ice of the Commission staff at 587-0218.

Sincerely,

WILLIAM J. AILA, JR.
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: ________________
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: CHARLEY
DATE: 31-Mar-11
SUSPENSE DATE: 7-Apr-11

TO: INIT. TO: INIT. FOR: PLEASE:
FUJII, N. 3 KUNIMURA, I. 1 Approval
HARDY, R. 3 TAM, W. 2 Review & Comment
HOAGBIN, S. 2 UYENO, D. 3 Take Action
IMATA, R. 3 YODA, K. 1 Type Draft acknowledgment

WELL NAME Olson WUP Number na

WELL NUMBER 1222 - 14

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated
1 TRANS. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAPS
4 APPL. FORM (11 COPIES)
5 USGS MAPS (11 COPIES)
6 TAX MAPS (11 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 pre-screen
13 EA 343 5(a) triggers?

☐ WELL CONSTRUCTION ☑ PUMP INSTALLATION

☐ WUPA ☐ WUP Transfer

(SMA map printout http://gis.hicentral.com/website/parcelzoning/viewer.htm, or INGRID'S SMA/CD MAP)
(LUC map printout http://luc.state.hi.us/luc_maps.htm, or INGRID'S SMA/CD MAP)

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

INCOMPLETE ACTION DATES:

DATE ACTION

Jack Ross 5-6 still trying to nail down location shall we hold up until he does?

I can't send out letter w/ acceptance language I recently edited in merge?
<table>
<thead>
<tr>
<th>Approved</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Applicant</th>
<th>Driller</th>
<th>Pump Inst.</th>
<th>Type</th>
<th>Well Construction Issued</th>
<th>Signed</th>
<th>WCR1 Accept</th>
<th>Pump Installation Issued</th>
<th>Signed</th>
<th>WCR2 Accept</th>
</tr>
</thead>
<tbody>
<tr>
<td>1323-02</td>
<td>Rosenblum</td>
<td>Elliott Rosenblum</td>
<td>C-29578</td>
<td>C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1120-58</td>
<td>Garcia</td>
<td>Mark &amp; Sue Garcia</td>
<td>C-29578</td>
<td>C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/29/2009</td>
<td>Friedman</td>
<td>Melinda Friedman</td>
<td>C-29578</td>
<td>C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1120-55</td>
<td>High House</td>
<td>Patricia Hanwright</td>
<td>C-29578</td>
<td>C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/20/2010</td>
<td>Jack</td>
<td>Jack Gardner</td>
<td>C-29578</td>
<td>C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/10/2011</td>
<td>Kingston</td>
<td>David Kingston</td>
<td>C-29578</td>
<td>C-29578</td>
<td>BOTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F YR APP D</td>
<td>SRC/ OBJ CTR</td>
<td>PROJECT PH ACT</td>
<td>AMOUNT</td>
<td>NAME/DESCRIPTION (WANG INPUT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>----------------</td>
<td>--------</td>
<td>-------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S 11 326 C</td>
<td>1026 0752</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1) $25.00</td>
<td>Diamond Drilling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) $25.00</td>
<td>Kauai Water Well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
<td>$ 50.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REMARKS:

LINE (1) Birdhouse Well
LINE (2) TMK: 5-1-005:040-001 Olsen Well
LINE (3)
LINE (4)
LINE (5)
LINE (6)
LINE (7)
LINE (8)
LINE (9)
LINE (10)
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by 10 copies and a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 887-0225. For further information and updates to this application, visit http://www.hawaii.gov/dlnr/cwrm.

WELL LOCATION INFORMATION

1. STATE WELL NO. (if already assigned) 2. WELL NAME 3. ISLAND 4. TMK

The following must be attached before this application is accepted as complete:
- Portion of 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 existing and finish grades

5. WELL OPERATOR'S NAME/COMPANY

6. ADDRESS OF WELL OPERATOR

7. LOCATION INFORMATION

8. PHONE Fax E-mail

9. STATE Natural Resources Commission

10. FIELD OFFICER'S NAME/COMPANY

11. ADDRESS OF FIELD OFFICER

12. PHONE Fax E-mail

13. CODES AND PERMITS

14. SIGNATURES

15. Municipal (water systems serving greater than 25 individuals or 15 service connections)
16. Domestic
17. Industrial (describe)
18. Irrigation (describe crop and no. of acres)
19. Military (describe)
20. Other (describe)

OTHER LEGAL REQUIREMENTS

21. Conservation District Use Permit (CDUP)
   - Required, CDUP # __________________________ date approved __________________________
   - Not Required (attach documentation from CDCC)

22. 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 a SMA Permit is required.

23. Special Management Area Permit (SMA)
   - I have not consulted with the SHPD regarding potential impacts of well construction activities on historic sites. I have attached applicable documentation from the HPD.

24. Chapter 343
   - A Finding of No Significant Impact has been determined (attach letter), Publication date in The Environmental Notice:

25. Water Use Permit No. (if applicable): __________

26. WELL DRILLER (Must be filed out if application is for Well Construction)

27. PUMP INSTALLER (Must be filed out if application is for Pump Installation)

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

For Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:

For the Official Use Only:
PROPOSED WELL SECTION

**Please attach schematic if different from diagram provided below**

- **Elevation at top of casing**: 322 ft, msl
- **Cement Grout**: 150 ft
  - (min. 70% of distance from ground elevation to top of water surface or 500 ft, whichever is less.)
- **Annular space between hole and casing**: 3 in.
- **Rock or Gravel Packing**: 50 ft
  - Material:
    - Crushed Basalt
    - Rounded Gravel
- **Ground Elevation**: 320 ft, msl
- **Minimum of 2' Radius & 4" Thick Concrete Pad** (to contain benchmark surveyed to nearest 0.01 ft.)

**Grouting method:**
- Positive displacement
- Other

**Solid Casing Material:**
- Stainless Steel:
- PVC Plastic conforming to ASTM F480 and (ASTM 01785 or ASTM 02241): (check one): Schedule 40
- Other

**Estimated Water Level**
- Elevation: 220 ft, msl

**Solid Casing**:
- Total Length: 160 ft
- Nominal Diameter: 4 in
- Wall Thickness: 3/16 in
- Bottom Elevation: 160 ft, msl

**Open Casing**:
- Total Length: 40 ft
- Nominal Diameter: 4 in
- Wall Thickness: 3/16 in
- Bottom Elevation: 120 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
- 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
- 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

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

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

Example: Estimated + 2 ft. Water Level Elev. = Bottom Elevation of Wall Limit = (2 - 4(1 X 2 ft.)) = -18.5 ft.

**INSTALLATION STANDARDS**

- Hewitt Well Construction and Pump Installation Standards to ensure that your as-built is in compliance with applicable standards.

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

Example: Estimated + 2 ft. Water Level Elev. = Bottom Elevation of Wall Limit = (2 - 4(1 X 2 ft.)) = -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 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

WCPI Application Form 08/31/2010
Kilauea Bay

Proposed
drill well

Point

Makapili
Rock

Kahilii
Point

Pohaku
Malumad

Kapihau
Helau

Kaliapa
Point

Kepuhi
Point

Kilauea
Bay

Wanaikua
Reservoir

Makaha
Reservoir

Pilapila
Lepeuli

Kamoku

Wayapa

Maluwa

Stream

Gum

35

240

120

38

Kahi Point

Kahilii

Point

Wanaikua
Reservoir

15

20

59

7

809

334

317

277

100

89
Plot Plan

TMK 59-005-040
4540 Waialakuna St.

True North

PROPOSED OLSON WELL

X

195.0

210.81

Kuhio Hwy

Proposed Goat Milking Shed

10'

25'

30'

Ex. Residence
Unit 1

Septic

25'

10'

10'

Storage Yard

250.0

195.0