**SECTION 1: WELL LOCATION INFORMATION**

- **Island**: HAWAII
- **Aquifer System**: KOHALA
- **Aquifer Sector**: MAHUKONA
- **Proposed Use**: Irrigation
- **Proposed Withdrawal System**: 54000
- **System Sustainable Yield**: 17

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing</td>
<td>207 ft., m.s.l.</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>205 ft., m.s.l.</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>150 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>0 ft.</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>13 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>225 ft.</td>
</tr>
<tr>
<td>Estimated Head</td>
<td>1.5 ft., m.s.l.</td>
</tr>
<tr>
<td>Calculated Aquifer Thickness</td>
<td>61.5 ft.</td>
</tr>
<tr>
<td>County Water Supply (Y/N ?)</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Solid Casing**

- **Material**: Steel
- **Designation**: ASTM A139
- **Length**: 200 ft.
- **Diameter**: 6 in.
- **Wall Thickness**: 0.25 in.

**Casing**

- **Material**: Steel
- **Designation**: ASTM A139
- **Length**: 25 ft.
- **Diameter**: 5 in.
- **Wall Thickness**: 0.25 in.

**Openings**

- **Length**: 0 ft.
- **Diameter**: 0 in.

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

**Well Depth**

- **Theoretical Thickness of Aquifer**: 61.5 ft.
- **1/4 Aquifer Thickness**: 15.38 ft.
- **Depth of Well below Sea Level**: 20 ft.

- **Depth of Grouting provided**: 150 ft.

**Well Casing**

- **Minimum Wall Thickness**
  - Material: Steel
  - County or Non-County: non-county
  - Minimum Thickness per standards: #N/A in.
  - Wall Thickness Provided: 0.250 in.

- **Minimum Length of Solid Casing**: 183.2 ft.
- **Length of solid casing Provided**: 200 ft.

**Casing Material**: ASTM A139

**Annular Space**

- **Depth of Grouting**: 142.5 ft.
- **Thickness of Annular Space**: 3.5 in.

- **Well Depth too deep** *(refer to HWCPIS Section 2.2)*
- **(disregard if the well is not basal)*

- **Well Casing Wall Thickness Provided**: #N/A (refer to HWCPIS Section 2.4 c)
- **(disregard this if this is a non-county well)*

- **Well Casing Minimum Length of Solid Casing**: okay *(refer to HWCPIS Section 2.4 d)*
- **Casing Material**: okay *(refer to HWCPIS Section 2.4 e)*

- **Annular Space Calculated Depth of Grouting**: 142.5 ft.
- **Annular Space Depth of Grouting provided**: 150 ft.
- **Annular Space Thickness of Annular Space**: 3.5 in.

- **Okay** *(refer to HWCPIS Section 2.6 c)*
- **Okay** *(refer to HWCPIS Section 2.6 d)*
<table>
<thead>
<tr>
<th>Taxkey</th>
<th>Subdiv/Condo</th>
<th>Tnr</th>
<th>Property Address</th>
<th>Owner/Lessee</th>
<th>Beds</th>
<th>Baths</th>
<th>Land area</th>
<th>Living area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-2-8-3-49</td>
<td>Peahi</td>
<td>F</td>
<td>ULOMALU</td>
<td>PEAHI FARMS I LLC</td>
<td></td>
<td></td>
<td>260.10 ac</td>
<td></td>
</tr>
</tbody>
</table>

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

Sold and not yet recorded on Hawaii Info Serv's TMK report to Ron Sorel and Jeffrey Kaffulin (esq.)
June 30, 2004

Mr. Ron Serle
Opana Point Partners
1879 Olinda Road
Makawao, HI 96768

Dear Mr. Serle:

Well Completion Report for Well No. 5617-03

We received your Well Completion Report Part II for the Opana Point #2 (Well No. 5617-03) on June 3, 2004 and acknowledge that it is complete. Other than the continuing water use reporting requirement, the permitting requirements for this well are complete.

If you have any questions, please contact Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

YVONNE Y. IZU
Deputy Director

Cc: Wailani Drilling, Inc.
MEMO and ROUTE SLIP

WCR 2 Check for Well No. 5617-03 (survey to regulation memo)

1. **Pump Tests Check** (special condition of PIP? Yes/No) Glenn Bauer (initial if yes)
   - Yes
   - No
   - If no, describe deficiency

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

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

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

   Stream Surface Water Impacted:
   - Yes
   - No
   - If yes, identify most probable stream

   Geology Code for Well Index: __________

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

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

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

4. Roy (initial) check

5. Subia (initial) finalize

6. Ernie (initial) signature

7. Charley Lenore/Ryan File
Return Receipt Fax Memo

For: Charley Ice
Re: WCR’s and PIP’s

Charley. Enclosed are the following items:

- Signed Well Construction Permit and start work notice for Waihee Equestrian Well # 5731-06
- Signed Well Construction Permit and start work notice for Sprecklesville - Ross Well # 5424-11
- WCR I For Kaupakalua Upcountry LLC Well 5417-03
- WCR II and signed PIP for Nahiku-Harlow Well 4904-01
- WCR II and signed PIP for Opana Point 2 Well 5617-03
- WCR I For Kealii-Naish Well 5615-07

I apologize for the delay on 2 of these reports. The surveyor had the wells mixed up and had to go back out and re-survey.

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at [redacted]

Thank you:
Michael Robertson
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 521, 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.hawaii.gov/dlnr/cwrm/

1. State Well No.: 5617-03  Well Name: OPANA Point 2  Island: Maui
2. Address: Lower Ulumalu Rd. Opuna  Tax Map Key: 2-8-3-49
4. Date Pump Installed: 7/4/03

5. PERMANENT PUMP INFORMATION (Attach pump specifications and rating curve)
   - Pump Type, Make, Serial No.: Grundfos 40550-15 A11990015
   - Rated Capacity: 40 gpm at head of: 304 ft.
   - Motor Type, H.P., Voltage, rpm: 5 hp 230 V 3450 RPM
   - Type of flow meter: Badger  which measures in gal
     Model Number: recordal  Serial Number: 63961 - 052
   - Pump type (check one):
     - Deep Well Turbine
     - Submersible  ☑
     - Centrifugal
   - Method of flow measurement:
     - Flowmeter  ☑
     - Manufacturer: Badger  Make: recordal  Size: 2"
     - Weir
     - Open Pipe
     - Orifice*
     - Other*: explain below

6. Method of flow measurement:
   *attach schematic

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

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

9. Other remarks/comments:

Pump Installation Contractor (print)  Michael Robertson C-57/C-57a/L  Lic. No. 20115
Signature  Michael Robertson  Date  5/20/04

Permittee (print)  Bumb Serle
Signature  Real  Date  May 10/04
Performance Curves 40 GPM Model 40S

FLOW RANGE: 24 - 55 GPM
OUTLET SIZE: 2" NPT
NOMINAL DIA. 4"

OPERATING RANGE: 24 to 55 GPM
CAPACITIES BELOW 24 GPM
SEE MODEL 25S

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
4" MOTOR STANDARD. 1-10 HP/3450 RPM.
6" MOTOR STANDARD.15-20 HP/3450 RPM.
* Also available with 6" motor.

Performance conforms to ISO 9906 Annex A
@ 5 ft. min. submergence.
May 14, 2004

Ref: 5617-03.pip

Mr. Ron Serle
Opana Point Partners
1879 Olinda Road
Makawao, HI 96768

Dear Mr. Serle:

Pump Installation Permit
Opana Point 2 (Well No. 5617-03)

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

Special Conditions

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

2. Please enclose the pump specification and rating curve for the installed pump with the Well Completion Report.

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

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

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

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

If you have any questions, please call Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

Peter T. Young
Chairperson

Enclosure
c: Wailani Drilling, Inc.
PUMP INSTALLATION PERMIT
Opana Point 2, Well No. 5617-03

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Opana Point 2 (Well No. 5617-03) at Lower Ulamalu Road, Opana Point, Makawao, Maui, TMK 2-8-3:49, subject to the Hawaii Well Construction & Pump Installation Standards (February 2004) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 40 gpm rated capacity at 304 ft. of head, or less, pump in the well.

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

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

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

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (February 2004). If the HWPCIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

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

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

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

Date of Approval: May 5, 2004
Expiration Date: May 5, 2004

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

Permittee's Signature: ___________________________ Date: 5/7/14
Printed Name: W. Roy Handy
Firm or Title: Opana Point Permit

Installer's Signature: ___________________________ Date: 5/28/04
Printed Name: Michael Robertson
Firm or Title: Wailani Drilling Inc.

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.
PUMP INSTALLATION PERMIT
Opana Point 2, Well No. 5617-03

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Opana Point 2 (Well No. 5617-03) at Lower Ullumalu Road, Opana Point, Makawao, Maui, TMK 2-8-3:49 subject to the Hawaii Well Construction & Pump Installation Standards (February 2004) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 40 gpm rated capacity at 304 ft. of head, or less, pump in the well.

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

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

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

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

7. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the Hawaii Well Construction & Pump Installation Standards (February 2004). If the HWCRS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

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

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

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

W. Roy Handy

Date of Approval: May 5, 2004
Expiration Date: May 5, 2004

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

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

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

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

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

Attachments

USGS
Department of Health/ Safe Drinking Water & Wastewater Branch
Maui Department of Water Supply
Walters Drilling, Inc.
Our apologies for a typo on your permit.
Transmitted herewith is a corrected copy for your signature. Please replace your original page.
MEMO and ROUTE SLIP

WCR 1 Check for Well No. 5617-03 (survey to regulation memo)

1. **Pump Tests Check** Glenn Bauer (initial)
   - Yes
   - No
   If no, describe deficiency
   - Step-Drawdown Test:
     - followed WCPI Stds
     - analysis attached
     - proposed pump cap o.k.
   - Aquifer Pump Test:
     - followed WCPI Stds
     - T & S analysis attached
   - Well Interference:
     - estimated Steady-State
     - drawdown at 1-mile radius is __________ ft
     - analysis attached
   - Stream Surface Water Impacted:
     - Geology Code for Well Index: TK

2. **Construction Check** Mitch Ohye (initial)
   - Yes
   - No
   If no, describe deficiency
   - data complete
   - followed Special Cond & elevations
   - well database updated
   - Latitude
   - Longitude
   - NAD27
   - NAD83

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

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
- 1 COVER LETTER
- 2 PERMIT (2x)
- 3 DOH COMMENTS
- 4 LAND DIV. COMMENTS
- 5 WCR 2 FORM
- 6 WUR FORM
- 7 USGS MAP
- 8 PARCEL CHECK
- 9 DATABASE PRINTOUT
- 10 GLENN'S WORKSHEET
- 11 WELL As-Built CHECK PRINT

- not necessary – only WCP.

To be sent to applicant

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

(Handwritten note: Did we actually do any analysis? - Use this one)

(Handwritten note: if yes, identify most probable stream)

(Handwritten note: handcopy rec'd May 3)
## Well Check Program

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

### Data Input

<table>
<thead>
<tr>
<th>Well Number</th>
<th>5617-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Name</td>
<td>Opana Point 2</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>198</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>185</td>
</tr>
<tr>
<td>Grouting Method</td>
<td>other</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>12.5</td>
</tr>
<tr>
<td>Total Depth</td>
<td>220</td>
</tr>
<tr>
<td>Estimated Head</td>
<td>5.6</td>
</tr>
<tr>
<td>Public Water Supply Well?</td>
<td>No</td>
</tr>
<tr>
<td>Solid Casing Material</td>
<td>Steel</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
<td>ASTM A53</td>
</tr>
<tr>
<td>Solid Casing Length</td>
<td>200</td>
</tr>
<tr>
<td>Solid Casing Diameter</td>
<td>6</td>
</tr>
<tr>
<td>Solid Casing Wall Thickness</td>
<td>0.25</td>
</tr>
<tr>
<td>Open Casing Length</td>
<td>20</td>
</tr>
</tbody>
</table>

### Results

#### Well Depth

| Theoretical Thickness of Aquifer | 229.6 |
| 1/4 Aquifer Thickness           | 57.4  |

#### Depth of Well below Sea Level

-22 okay Section 2.2

#### Well Casing

| Minimum Wall Thickness Material | Steel |
| Minimum Thickness per standards | N/A   |
| Wall Thickness Provided       | 0.25  |
| 90% of ground to top of aquifer | 173.16 |
| Length of solid casing Provided | 200 okay |
| Casing Material                | ASTM A53 in compliance |
| (for pvc only - check for 200' limit) | okay |

#### Annular Space

| Depth of Grouting Calculated Depth of Grouting | 134.68 |
| Depth of Grouting provided              | 185 okay |
| Minimum Annular Space required        | 2      |
| Thickness of Annular Space            | 3.25 okay |
**WCR 1 Check for Well No. 5817-03**

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

   - **Step-Drawdown Test:**
     - followed WCPI Stds ☐ ☐
     - analysis attached ☐ ☐
     - proposed pump cap o.k. ☐ ☐
   - **Aquifer Pump Test:**
     - followed WCPI Stds ☐ ☐
     - T & S analysis attached ☐ ☐
   - **Well Interference:**
     - estimated Steady-State drawdown at 1-mile radius is ☐ ft.
     - analysis attached ☐ ☐
   - **Stream Surface Water Impacted:**
     - If yes, identify most probable stream
   - **Geology Code for Well Index:** ☐

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

   - data complete ☐ ☐
   - followed Special Cond & elevations ☐ ☐
   - well database updated ☐ ☐

   - **Latitude** NAD27 ☐ NAD83 ☐
   - **Longitude** 2.72 18.17

### 3. Charles/Lenora/Ryan _AP_(initial)
- **take action based on above**

   **ATTACHMENTS FOR PUMP INSTALLATION PERMIT:**
   - 1COVER LETTER
   - 2PERMIT (2x)
   - 3DOH COMMENTS
   - 4LAND DIV. COMMENTS
   - 5WCR 2 FORM
   - 6WUR FORM
   - 7USGS MAP
   - 8PARCEL CHECK
   - 9DATABASE PRINTOUT
   - 10GLENN'S WORKSHEET
   - 11WELL As-Built CHECK PRINT

### 4. Roy _AP_(initial)
- check

### 5. Subia _AP_(initial)
- finalize

### 6. Ernie _AP_(initial)
- signature

### 7. Charles/Lenora/Ryan
- File

---

**Notes:**

- The entry for step-drawdown test is marked as SUPERCEDED.
- The construction check notes indicate that initial WCR 2 is now VOID and replaced by May 5, 20x?
- Survey data was corrected as were construction attributes, even T.
- To be sent to applicant.
Return Receipt Fax Memo

For: Charley Ice
Re: WCR’s and PIP’s

Charley. Enclosed are the following items:

- √ WCR II and signed PIP for Stream Resources Well 5617-04
- √ WCR II and signed PIP for Stream Resources Well 5617-02
- √ WCR I and data for Stream Resources Well 5617-03

I apologize for the delay on these reports. The surveyor had the wells mixed up and had to go back out and resurvey.

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at [Contact Information]

Thank you,
Michael Robertson
## WELL COMPLETION REPORT - PART I

### 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 legible type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96829. The Commission will not accept incomplete reports. This form shall be submitted within 30 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-4226. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/wrm/

### 1. State Well No.: **6617-03**

**Well Name:** Opuna Point #2

**Island:** Maui

### 2. Address: Lower Ulumalu Road, Opuna, Makawao

**Tax Map Key:** 2-9-3-49

### 3. Drilling Company: Wailea Drilling Inc.

### 4. Drilling method used during construction: **Rotary**

### 5. Date Well Construction (drilled, cased, grouted) completed: **7/4/03**

*Fill out attached Driller's Log

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

### 6. Was the subject well cored? **Yes**

### 7. Initial water-level encountered **198** ft below ground

**Date and time of measurement:** **6/28/03**

### 8. Step-Drawdown Test completed? **Yes**

**Attach Step-Drawdown Test form (12/17/97 SDPTD Form)**

### 9. Constant Rate Aquifer Test completed? **Yes**

**Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)**

**Parameters prior to pump test:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Date of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-level</td>
<td>5.60 ft above msl</td>
<td><strong>7/4/03</strong></td>
</tr>
<tr>
<td>Chloride</td>
<td>60 ppm</td>
<td><strong>7/4/03</strong></td>
</tr>
<tr>
<td>Temperature</td>
<td>69°F</td>
<td><strong>7/4/03</strong></td>
</tr>
</tbody>
</table>

### 10. Water-level: **5.60** ft. above msl

**Date and time of measurement:** **7/4/03**

### 11. Chloride: **60** ppm

**Date and time of sampling:** **7/4/03**

### 12. Temperature: **69** °F

**Date and time of measurement:** **7/4/03**

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

### 14. Fill in attached surveyor's report.

### 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. The proposed manufacturer's rated pump capacity is **40** gpm at a head of **304** ft.

(Attach pump specifications and rating curve)

### 17. Remarks:

---

**Licensed Driller (print):** Michael Robertson

**C-57 Lic. No.** 2015

**Signature:** Michael Robertson

**Date:** 5/3/04

**Permittee (print):** Ronda Savage

**Signature:** Ronda Savage

**Date:** 7/27/03

---
13. AS-BUILT WELL SECTION (Please attach as-built if different from diagram provided below)

Benchmark elevation: 13.25 ft., msl
(Survey to nearest 0.01 ft.)

Ground Elevation: 19.45 ft., msl

Minimum of 2' Radius & 4' Thick Concrete Pad

Hole Diameter: 2.5 ft.

Elevation at top of casing (to nearest 0.01 ft.)

Total Depth 220 ft.

Solid Casing: (2.90% x (Ground Elev.-Water Level Elev.))
- Length: 200 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 2.80 in.
- Bottom Elevation: -2.15 ft., msl

Open Casing: □ Perforated □ Screen
- Length: 20 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 2.25 in.
- Bottom Elevation: -32.15 ft., msl

Open Hole
- Length: 2A in.
- Diameter: 2A in.
- Bottom Elevation: 2A 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 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one):
  □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one) □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
- Thermoset Plastic: (check one)
  □ Filament Wound Resin Pipe conforming to ASTM D2996
  □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  □ FEP Fluorocarbon Tubing conforming to ASTM D3296

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

WCR1 Form 9/12/01 Page 2 of 4
<table>
<thead>
<tr>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
<th>Depths (ft.)</th>
<th>Rock Description, Water Level, etc.</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 15</td>
<td>Topsoil Clay</td>
<td>6/27/03</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>15 to 61</td>
<td>Red Clay</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>61 to 75</td>
<td>Hard Tan Rock</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>75 to 82</td>
<td>Red Clay</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>82 to 135</td>
<td>Hard Tan Rock</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>135 to 170</td>
<td>Blue rock</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>170 to 180</td>
<td>Tan rock</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>180 to 198</td>
<td>Blue rock</td>
<td>6/28</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
<tr>
<td>198 to 220</td>
<td>Soft Cinder-Water</td>
<td>___</td>
<td>___ to ___</td>
<td>___ to ___</td>
<td>___ to ___</td>
</tr>
</tbody>
</table>

Remarks:
WELL GEOGRAPHIC LOCATION:
LATITUDE: 20° 56' 36"
LONGITUDE: 156° 17' 18"

DATE: MARCH 19, 2004
PROJECT No. 00-4808

PLOT PLAN
(Provide Latitude and Longitude of well referenced to NAD27 to nearest second)
# CONSTANT-RATE PUMP TEST DATA

Pumped Well No. 567-0  
Observation well no. \( \_ \_ \_ \_ \_ \)

Pumped Well Name  
Distance between Obs. & Pumped Well \( \_ \_ \_ \_ \_ \) ft

Target Q \( 5.0 \) gpm  
Reference pt. for depth to water 197.35 ft. msl

Water level measurements by:  
- Steel tape  
- Pressure transducer  
- Airline

**START TEST**  
Date: 7/4/03  
Time of day: 10:30 AM

Flow Meter Reading Start: \( 0.5 \) gals

<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (measured + 0.1 ft.)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft.)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (microhos)</th>
<th>Cl (mg/l)</th>
<th>Temp (F)</th>
<th>Data in this table is for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>-45</td>
<td></td>
<td>19.225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>192.55</td>
<td>38</td>
<td>60</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td>192.57</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>192.58</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>192.60</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td>192.54</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested elapsed time (min)</td>
<td>Actual elapsed time (min)</td>
<td>Depth to water (nearest 0.1 ft)</td>
<td>Drawdown s (unadjusted to nearest 0.1 ft)</td>
<td>Pumping rate Q (gpm)</td>
<td>EC (µhos)</td>
<td>CI⁻ (mg/l)</td>
<td>Temp. °F or °C</td>
<td>Data in this table is for:</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>------------------------------------------</td>
<td>---------------------</td>
<td>----------</td>
<td>-----------</td>
<td>-------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>460</td>
<td>192.88</td>
<td></td>
<td></td>
<td></td>
<td>60.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery

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

Begin recovery data next page
Flow meter reading at end of pumped period: 24009.4 gallons
<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate (gpm)</th>
<th>EC (µmhos)</th>
<th>Chloride (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>192.58</td>
<td>192.24</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

END TEST Date: 7/4/62 Time of day: 6:40 PM

ADDITIONAL REMARKS:

Person in charge of pump test (print): Michael Robertson

Signature: Michael Robertson

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
The file for 5617-04 now gives 3 names for this well:

"Stream Resources 1",
"Stream Resources 3" and
"Opana Point 3".

Ron Serle's name is on the Opana Pt. wells (1 & 2) and on this 5617-04. Stream Resources is the landowner for Summit Trade Wells 1 & 2 as well as this 5617-04.

Eric Bryant signed for Summit Trade, but is nowhere else to be found. Let me put what we know together in a table:

<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Well Owner</th>
<th>Landowner</th>
<th>TMK</th>
</tr>
</thead>
<tbody>
<tr>
<td>5517-03</td>
<td>Summit Trade 1</td>
<td>Summit Trade/ Ron Lowell</td>
<td>Stream Resources/ Eric Bryant</td>
<td>2-8-3: 6</td>
</tr>
<tr>
<td>5617-01</td>
<td>Summit Trade 2</td>
<td>Summit Trade/ Ron Lowell</td>
<td>Stream Resources/ Eric Bryant</td>
<td>2-8-3: 6</td>
</tr>
<tr>
<td>5617-02</td>
<td>Opana Pt 1</td>
<td>Opana Pt Partners/ Ron Serle</td>
<td>Opana Pt Partners/ Ron Serle</td>
<td>2-8-3:49</td>
</tr>
<tr>
<td>5617-03</td>
<td>Opana Pt 2</td>
<td>Opana Pt Partners/ Ron Serle</td>
<td>Opana Pt Partners/ Ron Serle</td>
<td>2-8-3:49</td>
</tr>
<tr>
<td>5617-04</td>
<td>Stream Resources 3</td>
<td>Naftulin-Serle/</td>
<td>Naftulin-Serle/ MLS formerly listed as Stream Resources</td>
<td>2-8-3: 6</td>
</tr>
</tbody>
</table>

I can see the logic in any of the 3 names, but rather than continue to change the database, let's stick to what they're called in this table, or just refer to their well #.
To: Charley Ice  
For: Water Resource Commission  
Re: Start Work Notice

Date 6/30/2003

Dear Charley:

This is to provide written notice for starting work on the following well:

Opana Point Well #2, Well No. 5617-03

Owners also want to take advantage of the declaratory ruling #DEC-ADM98-G5 because proposed pumps are rated less than 70 g.p.m.

Please fax receipt form to me to confirm.

Thank You,

Mike Robertson

Certified By The National Groundwater Association
WELL CONSTRUCTION PERMIT

Opaeka‘a Point #2, Well No. 5517-03

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Opaeka‘a Point #2 (Well No. 5517-03) at Lower Ulumau Road, Opaeka‘a, Kula, Maui, TMK 2-B-3-46, subject to the Hawaii Well Construction & Pump Installation Standards (133237) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management, P.O. Box 251, Honolulu, HI 96820, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1.0-inch diameter monitor tube shall be permanently installed, in a manner accessible to the Chairperson, to record water levels. The permittee, well operator, and/or well owner shall also follow the standards in accordance with the Standards (133237) to prevent contamination at the site.

3. The depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 feet) of the basal ground water unless otherwise authorized by the Chairperson.

4. The permittee, well operator, and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to prevent any cleared areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall not work and contact the Department's Historic Preservation immediately.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established stream flow standards. The permittee or the authorized person capable of constructing the well shall not constitute a determination of water rights.

7. The following shall be submitted to the Chairperson within sixty (60) days after completion of work:
   b. Elevation report of the final water level, measured by a licensed surveyor.
   c. Well plan and map showing the exact location of the well.
   d. Water test results, including rate, pumping rate, drawdown, chloride content, and other data.

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (133237). If the HWCRS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit shall be revoked by the Commission if it is not completed within sixty (60) days after the date of approval and application is not submitted within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, well operator, and/or well owner notice of the proposed action and an opportunity to be heard.

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

12. The permittee, well operator, and/or well owner shall be answerable and responsible, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assignee, operator, or any employee, contractor, or agent under this permit or relating to or in connection with the granting of this permit.

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

Date of Approval: January 27, 2003
Expiration Date: January 27, 2008

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the driller have signed, dated, and returned the permit to the Commission. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $1,000 per day starting from the permit date of approval.

Permittee's Signature: [Signature]
Printed Name: [Name]
Firm or Title: Wailea Drilling, Inc.

Driller's Signature: [Signature]
Printed Name: Michael Robertson
Firm or Title: Wailea Drilling, Inc.

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

Abatement Use:
Department of Healthy Saftey Drinking Water, Wastewater, and Clean Water Branch
Mail Department of Water Supply
Tom Nally Water Resource Engineering
February 20, 2003

Ref: 5617-03.wcp

Mr. Ron Serle
Opana Point Partners, LLC
1879 Olinda Road
Makawao, HI 96768

Dear Mr. Serle:

Well Construction Permit
Opana Point #2 (Well No. 5617-03)

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

**Special Conditions**

1. Attached for your information is a copy of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.
2. Well depth shall not exceed one-fourth the theoretical aquifer thickness.

This permit **does not** authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon completed application and information provided to and accepted by Commission staff as required in the Well Construction & Pump Installation Standards (1/23/97) and any special conditions performed under this permit. However, a permanent pump may be installed prior to the permanent pump installation permit issuance in accordance with the Commission's April 15, 1998 Declaratory Ruling No. DEC-ADM98-G5, which states that:

"Permanent pump installation for capacities between 0-70 gpm and where the proposed use is for private individual needs in non-ground-water management areas may be allowed prior to the final pump installation permit issuance. When required as a condition of the well construction permit, subsequent pumping tests shall validate the acceptability of the permanent pump. The permanent pump installed prior to final pump installation permit issuance is subject to removal if the testing shows that a smaller pump is required to reduce the potential of affecting neighboring wells and localized upconing at the applicant's well."


If you qualify and wish to take advantage of this ruling, please include a written request to install the permanent pump prior to final pump installation permit issuance when you return to us your signed well construction permit.

Please sign and have the contractor sign both permit originals and return one for our files. Also, copies of the aquifer pump test worksheet and the well completion report form are enclosed for your use.

**IMPORTANT** - Drilling work shall not commence until a fully signed permit is returned to the Commission. Please provide all the information in this packet to your well drilling contractor. The permittee, well operator, and/or well owner are responsible for all conditions of the permit. This includes ensuring that the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report form (enclosed) within sixty (60) days after the well construction work is completed. Be advised that you may be subject to fines of up to $1000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] extension 70251.

Sincerely,

Peter T. Young
Chairperson

Enclosures

c: Tom Nance Water Resource Engineering
WELL CONSTRUCTION PERMIT
Opana Point #2, Well No. 5617-03

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Opana Point #2 (Well No. 5617-03) at Lower Ulumalu Road, Opana, Makawao, Maui, TMK 2-8-3:49, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The well construction permit shall be for construction and testing of the well only. A minimum 1½-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels. The permittee, well operator, and/or well owner shall coordinate with the Chairperson and conduct a pumping test in accordance with the Standards (a pump testing worksheet is attached). The permittee, well operator, and/or well owner shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson.

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

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

5. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee, well operator, and/or well owner shall stop work and contact the Department's Historic Preservation immediately.

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

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

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

9. The well construction permit application is incorporated into this permit by reference and is subject to the Hawaii Well Construction & Pump Installation Standards (January 23, 1997. HWCPIS). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

11. If the well is not to be used it must be properly capped. If the well is to be abandoned then the permittee, well operator, and/or well owner must apply for a well abandonment permit in accordance with §13-166-12(f) prior to any well sealing or plugging work.

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

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

Date of Approval: January 27, 2003
Expiry Date: January 27, 2005

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

Permittee's Signature: __________________________ Date: ____________

Printed Name: ___________________________ Firm or Title: __________________________

Driller's Signature: ___________________________ C-57 License #: ____________ Date: ____________

Printed Name: ___________________________ Firm or Title: __________________________

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

Attachment

USGS
Department of Health, Safe Drinking Water, Wastewater, and Clean Water Branches
Maui Department of Water Supply
Tom Nance Water Resource Engineering
February 13, 2003

MEMORANDUM

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

FROM: P. Holly McEldowney, Acting Administrator
State Historic Preservation Division

SUBJECT: Chapter 6E-42 Historic Preservation Review – Well Construction/Pump Installation Permit Application ‘Opana Point Wells 1 & 2 (Well No. 5617-02 & 03) ‘Opana Ahupua’a, Makawao District, Island of Maui

TMK: (2) 2-8-003:049

Thank you for the opportunity to review and comment on the Well Construction/Pump Installation Permit Application ‘Opana Point Wells 1 & 2 (Well No. 5617-02 & 03), which was received by our staff January 15, 2003.

In 1997, GANDA conducted an archaeological inventory survey which included the subject property. During this survey 18 historic properties were identified. Subsequently, Haun and Associates conducted a field inspection of the same area, in order to relocate the previously identified sites. We have reviewed the addendum report (Haun and Henry 2001), which documents the findings of the field inspection, and found it acceptable, attached to the original work by Eble et al. 1997 (SHPD DOC NO.: 0108MK05/LOG NO.: 28135). Subsequently fourteen of these historic properties were recommended for preservation. We have reviewed and accepted a Preservation Plan (Buffum and Spear 2002) for these sites (SHPD DOC NO.: 0204MK03/LOG NO.: 29635).

Therefore we believe the proposed undertaking will have “no adverse effect” on significant historic sites provided the following conditions are attached to the Building Permit Application, should it be approved.

1) The conditions specified in the accepted Preservation Plan shall be followed.
2) The State Historic Preservation Division (Dr. Melissa Kirkendall, at [redacted]) shall be notified that interim protection measures are in place, and that Division shall then verify in writing to the County that these measures are in place. This must be done prior to the commencement of any ground altering activities.

If you have any questions, please call Cathleen Dagher at [redacted]

CD:jen
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE

FROM: CHARLEY BAUER, G.
CHING, F.
DANBARA, S.
FUJII, N.
GOODING, K.
HARDY, R.
HIGA, D.
HIRANO, E.
ICE, C.
IMATA, R.
JINNAI, R.

DATE: 14 Feb 3

TO: KUNIMURA, I.
MATHIAS, T.
NAKAMA, L.
NAKANO, D.
NISHIOKA, L.
OHYE, M.
SAKODA, E.
SUBIA, S.
SWANSON, S.
UYENO, D.
YODA, K.

FOR: Approval
Signature
Information

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

WELL NUMBER 5617-03 WELL NAME Opera Pt. 2

☐ WELL CONSTRUCTION

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
COMMENTS:
3 SDWB
4 WWB
5 CBW
6 HEER
7 LD
8 HP
9 PUMP TEST
10 WCR I FORM
11 WELL CHECK PRINTOUT

☑ TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

☒ PUMP INSTALLATION

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
COMMENTS:
3 SDWB
4 WWB
5 CBW
6 HEER
7 LD
8 HP
9 WCR II FORM
10 WUR FORM
11 GLENN'S WORKSHEET

☑ TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

County has issued reserved 5617 already granted. The Wells could change, but don't see how it can hold up.
TO: Honorable Chiyome L. Fukino, M.D., Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch  
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response  
Alec Wong, Clean Water Branch  

FROM: Eric T. Hirano, Acting Chairperson  
Commission on Water Resource Management  

SUBJECT: Well Construction/Pump Installation Permit Application  
Oahu Point Wells 1 & 2 (Well No. 5617-02 & 03)  

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 January 22, 2003. 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 [redacted].  

CF:ss  
Attachment(s)  

RESPONSE:  

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to it's use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-28.  

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 installing such use and routinely monitor the water quality therefrom. However, if future planned use from this source increases to meet the public water system definition than Director of Health approval is required prior to implementation.  

If the well is 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 sources 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 (fall 1) is not located near the proposed well site (information attached).  

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

No comments/objections.  

Contact Person: Alec Wong  
Phone: 586-10309  
Signed: Alec Wong  
Data: 1/29/03  

[Signature]  

[Redacted]  

[Redacted]
The Department of Health, Clean Water Branch has the following comments:

1. For Well-Drilling Activities

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

2. For Well Pump Testing

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

JS/cr
January 9, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
Alec Wong, Clean Water Branch

FROM: Eric T. Hirano, Acting Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Opana Point Wells 1 & 2 (Well No. 5617-02 & 03)

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 January 22, 2003.** 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 [phone number]

CF:ssl
Attachment(s)

RESPONSE:

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

[ ] This well does not qualify as a source serving a public water system (serves less than 25 people 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 [ ] 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.

[ ] No comments/objections

Contact Person: Bill Wong
Signed: Bill Wong
January 9, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Dr. Keith Kawanka, Hazardous Evaluation and Emergency Response
   Alec Wong, Clean Water Branch

FROM: Eric T. Hirano, Acting Chairperson
   Commission on Water Resources

SUBJECT: Well Construction/Pump Installation Permit Application
   Opana Point Wells 1 & 2 (Well No. 5617-02 & 03)

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 January 22, 2003. 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 Ico of the Commission staff at 587-0251.

C/Res
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 less 15 or more service connections) and must receive Director of Health approval prior to its use to comply with health administrative rules (HAR), 154-11, Chapter 26, Rules Relating to Potable Water Systems, §11-05-20.

[1] This well does not qualify as a source serving a public water system (serves as less than 25 people or less 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 plans for use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

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

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

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

[1] An NPDES permit is required.

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

[ ] No comments/objections

Contact Person: Dr. Keith Kawanka Phone: 586-4249

Signed: [Signature] Date: 1/19/03

Fax to: Commission on Water Resources Mgt.
January 15, 2003

Mr. Ronald Serle
1879 Olinda Road
Makawao, Hawaii 96768

Dear Mr. Serle:

RE: Project Name: Serle Partners Well
    TMK: 2-8-003:006
    I. D. No.: SMX 2002/0648

Please be advised that we are currently unable to review the above-referenced application at this time or any current or future applications on TMK: 2-8-003:006 and adjacent parcels. Due to the multiple permit reviews being done on this and adjacent parcels of which Serle Partners are involved with, we ask that the applicant provide a full build out proposal so that we may assess the cumulative impacts of this and related projects as a whole and not piecemeal. In addition, the project is located within the Agriculturally zoned land which requires Agriculture as a primary use prior to permitting any accessory uses. Please provide substantiation of agricultural use/activity on the land.

Thank you for your cooperation. If additional clarification is required, please contact Ms. Maria N. Isotov at [redacted]

Sincerely,

M. le F. O

Michael W. Foley
Planning Director
STATE OF HAWAI'I
DEPARTMENT OF HEALTH
P.O. BOX 3375
HONOLULU, HAWAII 96801
COMMISSION ON WATER
RESOURCE MANAGEMENT

Wastewater Branch
919 Ala Moana Blvd. Room 309
Honolulu, Hawaii 96814-4920

Phone [number] Fax [number]

STATE MESSENGER DELIVERY

Date: Jan 17, 2003

To: Commission on Water Resource Management
Department of Land & Natural Resources
State of Hawaii

Attn: Charlie Ice

From: Lori Kajiwara
Planning & Design Section
Email: lkajiwara@eha.health.state.hi.us

Subject: Well Construction/Pump Installation Permit/Water Use Permit for
Well No. 5617-02 403
Opena Point Wells

Please find enclosed the application of the above subject project.
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. BOX 621  
HONOLULU, HAWAII 96809

January 9, 2003

TO:        Honorable Chiyome L. Fukino, M.D., Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch  
Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response  
Alec Wong, Clean Water Branch

FROM:        Eric T. Hirano, Acting Chairperson  
Commission on Water Resource Management

SUBJECT:    Well Construction/Pump Installation Permit Application  
Opana Point Wells 1 & 2 (Well No. 5617-02 & 03)

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 January 22, 2003. 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 [xxx].

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.

No comments/objections  

Contact Person:  Lori N Kajiwara  
Signed:  Ahn N Kajiwara  
Phone:  566-4294  
Date:  1-17-2003
Facsimile Request and Cover Sheet
Wastewater Branch
919 Ala Moana Blvd. Room 309
Honolulu, Hawaii 96814-4920

Date: JAN 15, 2003 Total Pages 1

From: Roland Tejano, Maui District Health Office
       Loni Kajiwara, Planning/Design Section
       Email: lkiwiara@heh.health.state.hi.us

Subject: Request for Information

Do you have any IWS files or records on or nearby for the following well site:

(2) 2.0.3.49 opaua point Well No. 1
     [ ] sewered [ ] no record [ ] cesspool [ ] septic tank [ ] aerobic unit

File # if applicable: ____________ # of Bedrooms _______

Record Date: ________________________________
Submit Date: ________________________________
Plan Approval Date: _________________________
Inspection Data: ____________________________
System "Approval for Use" Date: ______________

Other: ______________________________________

Please fax site/plot plan if available. Thank you.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

January 9, 2003

TO: Dede Mamiya, Administrator
Land Division

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

SUBJECT: Well Construction/Pump Installation Permit Application
Opana Point Wells 1 & 2 (Well No. 5617-02 & 03)

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 January 22, 2003. 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

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. ____________.

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

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

[ ] No objections

[ ] Other comments: Original source of private title is Grant 2974 issued prior to Statehood in 1959.

Contact Person: Gary Martin
Phone: 587-0421

Date: Jan 16 2003
January 9, 2003

Mr. Ron Serle
Opana Point Partners, LLC
1879 Olinda Road
Makawao, HI 96768

Dear Mr. Serle:

Well Construction/Pump Installation Permit Application
Opana Point Wells 1 & 2 (Well Nos. 5617-02 & 03)

We acknowledge receipt, on December 17, 2002, of your completed Well Construction/Pump Installation permit application and filing fee for the Opana Point Wells 1 & 2 (Well No. 5617-02 & 03). You can expect your application to be processed within ninety (90) days from this date.

For your information, the process of constructing a well is normally regulated and permitted in two (2) steps. First, a well construction permit is issued for drilling and testing purposes only. Based upon information provided by you through a Well Completion Report Part 1 (Well Construction), a pump installation permit (upon completed application) may then be issued to authorize pump work. If a pump is installed then a Well Completion Report Part 2 (Pump Installation) is required.

If you have any questions about your permit application, please contact Charley Ice of the Commission staff at [redacted] or toll-free at [redacted] (Maui), extension 70251.

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

CFI:ss

c: Tom Nance Water Resource Engineering
January 9, 2003

TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
              William Wong, Safe Drinking Water Branch
              Dr. Keith Kawaoka, Hazardous Evaluation and Emergency Response
              Alec Wong, Clean Water Branch

FROM: Eric T. Hirano, Acting Chairperson

SUBJECT: Well Construction/Pump Installation Permit Application
          Opana Point Wells 1 & 2 (Well No. 5617-02 & 03)

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 January 22, 2003. 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

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 or more 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.

[ ] No comments/objections

Contact Person: ____________________________ Phone: ______________________

Signed: ____________________________ Date: ______________________
January 9, 2003

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 January 22, 2003. 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 [contact information].

CFI: 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. ____________________________.

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________________ Phone: ________________

Signed: ____________________________ Date: __________________
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 January 22, 2003. 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 [redacted].

RESPONSE:

[ ] There may be areas in the vicinity of the well site that contain subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal.

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

[ ] No objections

[ ] Other comments:

Contact Person: ____________________ Phone: ____________________

Signed: ____________________ Date: ____________________
### Department of Land and Natural Resources

**UAC or Attached Worksheet**

<table>
<thead>
<tr>
<th>F</th>
<th>YR</th>
<th>APP</th>
<th>D</th>
<th>OBJ</th>
<th>SRC/CTR</th>
<th>COST</th>
<th>PROJECT</th>
<th>PH/ACT</th>
<th>AMOUNT</th>
<th>NAME/DESCRIPTION (WANG INPUT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>03</td>
<td>326</td>
<td>C</td>
<td>1026</td>
<td>0752</td>
<td></td>
<td></td>
<td></td>
<td>(1) 50.00</td>
<td>Ronald &amp; Sherry Serle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL 50.00</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:**
LINE (1) Well Nos. 5617-02 & 03
LINE (2)
LINE (3)
LINE (4)

---

**PAY TO THE ORDER OF:**

**Department of Land and Natural Resources**

**$50.00**

**Dollars**

**First Hawaiian Bank**

**For:**

---

**First Hawaiian Bank**

**For:**

---

**Ronald F. Serle**

**Sherry Serle**

**1879 Olinda Rd**

**Makawao, Hawaii 96768**

**DATE:** 11/23/82

**59-101/1213**
Ms. Linnel T. Nishioka - Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Well Construction and Pump Installation Permit  
Applications for Opana Point Well Nos. 1 and 2  
Hamakualoa, Makawao, Maui, Hawaii

On behalf of Opana Point Partners, LLC, I am pleased to submit the attached Well Construction and Pump Installation Permit Application and filing fee for Opana Point Well Nos. 1 and 2 located in Hamakualoa, Makawao, Maui on TMK 2-8-003:049.

If you have any questions or need additional information, please call Ron Serle or me. Thank you for your attention to this matter.

Sincerely,

Tom Nance

Attachments

cc: Ron Serle
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR PERMIT

11-21-02
02-40

Well Construction and/or Pump Installation

INSTRUCTIONS: Please print in ink or typewriter 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 6 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

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

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

1. (a) WELL OWNER: Opana Point Partners, LLC
   Contact Person: Ron Serle
   Mailing Address: 1879 Olinda Road Makawao, Maui, Hawaii 96768
   Phone: 808-573-8500
   Fax: __________ E-mail: serle@maui.net

(b) LAND OWNER: Opana Point Partners, LLC
   Contact Person: Ron Serle
   Mailing Address: 1879 Olinda Road Makawao, Maui, Hawaii 96768
   Phone: 808-573-8500
   Fax: __________ E-mail: serle@maui.net

(c) CONTRACTOR: To Be Competitively Bid
   Contact Person: __________
   Mailing Address: __________
   Phone: __________

WELL & PUMP INFORMATION:

(1) Please fill in the diagram on the back of this form.

2. WELL NAME: Opana Point Well No. 2
   Island: Maui
   Address: Hamakuaola, Makawao
   Tax Map Key: Zone: 2 Sec: 8 Plat: 003 Parcel: 049

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

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

   *State Well No.: Not Yet Assigned
   (if unknown, please call Commission at ___-___-___)

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

5. PROPOSED PUMPING RATE: 40 gallons per minute

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

   Other (explain):
   - No.

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: 10,000 gallons per day

(b) METHOD OF FLOW MEASUREMENT:
   - Flowmeter
   - Open-pipe
   - Weir
   - Orifice
   - Other (explain):

   Other (explain):
   - No.

OTHER IMPORTANT INFORMATION:

8. LEGAL REQUIREMENTS: If required, these permits must be obtained before the Commission can legally issue a permit.
   - Conservation District Use Permit (CDUP) To find out if a CDUP is necessary, call DLNR Land Division at ___-___-___
   - Not Required if required, approved
   - Environmental Impact Statement (EIS) or Environmental Assessment (EA) To determine if an EIS or EA is necessary, call OEQC at ___-___-___
   - Not Required if required, published in OEQC bulletin
   - Special Management Area Permit (SMAP) To determine if a SMAP is necessary: on Oahu, call ___-___-___ on Hawaii, call ___-___-___; for Maui county, call ___-___-___
   - Not Required if required, approved September 16, 2002 (See Attached)

9. REMARKS, EXPLANATIONS:

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

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

   Well Owner: Opana Point Partners, LLC
   Landowner: Opana Point Partners, LLC

   Signature: ____________________________ Date: __________
   Signature: ____________________________ Date: __________
   Signature: ____________________________ Date: __________

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

   VCHRPA Form 8/21/01
10. PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

**Solid Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2341): (check one): □ Schedule 40 □ Schedule 60 □ Schedule 120
- Thermoset Plastic: (check one):
  - □ Filament Wound Resin Pipe conforming to ASTM D2995
  - □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - □ FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**
- Carbon Steel: compliant with (check one or more): □ ANSI/AWWA C200 □ API Spec. 5L □ ASTM A53 □ ASTM A139
- And compliant with (check one or more): □ ASTM A242 □ Type E □ Type S □ Grade B □ Other
- Stainless Steel: (check one): □ ASTM A409 (production wells) □ ASTM A312 (monitor wells)
- ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one): □ Schedule 40 □ Schedule 80
- PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2341): (check one): □ Schedule 40 □ Schedule 60 □ Schedule 120
- Thermoset Plastic: (check one):
  - □ Filament Wound Resin Pipe conforming to ASTM D2995
  - □ Centrifugally Cast Resin Pipe conforming to ASTM D2997
  - □ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - □ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - □ PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - □ FEP Fluorocarbon Tubing conforming to ASTM D3296

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = \( \frac{1}{4} \times \) Aquifer Thickness.

Example: Estimated +2 ft. Water Level Elev.  \( \rightarrow \) Bottom Elevation of Well Limit = \( 2 \times \frac{1}{4} \times (2 + 2) = 18.5 \) ft.

---

**Solid Casing:**
- Total Length: 200 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 0.25 in.
- Bottom Elevation: +5 ft., msl*

**Open Casing:**
- Perforated □ Screen
- Total Length: 25 ft.
- Nominal Diameter: 6 in.
- Wall Thickness: 0.25 in.
- Bottom Elevation: -20 ft., msl*

*Note: Neither bentonite nor mud should be used in saturated zones during drilling.

---

**HOLE DIMENSIONS:**
- Hole Diameter: __ in.
- Bottom Elevation: __ ft., msl*
- Total Length: ______ ft.
- Nominal Diameter: ______ in.
- Wall Thickness: ______ in.
- Bottom Elevation: ______ ft., msl*

**ELEVATION AT TOP OF CASING:** 207 ft., msl*

**Ground Elevation:** 205 ft., msl*

**Minimum of 2' Radius & 4' Thick Concrete Pad:**
- To contain benchmark surveyed to nearest 0.01 ft.

---

**ROCK OR GRAVEL PACKING:**
- Material: 
  - □ Crushed Basalt
  - □ Rounded Gravel
  - □ None

**APPROXIMATE WATER LEVEL:**
- Elevation: 1.5 ft., msl*

---

**STAINLESS STEEL:**
- □ ASTM A409 (production wells)
- □ ASTM A312 (monitor wells)

---

**Cement Grout:**
- Minimum of 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 (min. 3")
- Total Depth 225 ft.

---

**OPEN SECTION:**
- Hole Diameter: __ in.
- Bottom Elevation: __ ft., msl*
- Total Length: ______ ft.
- Nominal Diameter: ______ in.
- Wall Thickness: ______ in.
- Bottom Elevation: ______ ft., msl*

---

**SCHEDULE 120:**
- Diameter: ______ in.
- Thickness: ______ in.
- Length: ______ ft.

---

**SCHEDULE 80:**
- Diameter: ______ in.
- Thickness: ______ in.
- Length: ______ ft.

---

**Schedule 40:**
- Diameter: ______ in.
- Thickness: ______ in.
- Length: ______ ft.

---

**Thermoset Plastic:**
- Conforming to ASTM A242 □ Type E □ Type S □ Grade B □ Other

---

**Type E:**
- Schedule 40 □ Schedule 80 □ Schedule 120

---

**Schedule 40:**
- Diameter: ______ in.
- Thickness: ______ in.
- Length: ______ ft.

---

**Schedule 80:**
- Diameter: ______ in.
- Thickness: ______ in.
- Length: ______ ft.

---

**Thick Concrete Pad:**
- To contain benchmark surveyed to nearest 0.01 ft.

---

**Example:**
- Estimated +2 ft. Water Level Elev.  \( \rightarrow \) Bottom Elevation of Well Limit = \( 2 \times \frac{1}{4} \times (2 + 2) = 18.5 \) ft.
Mr. Ronald Serle  
1829 Olinda Road  
Makawao, Hawaii 96768

Dear Mr. Serle:

RE: Special Management Area (SMA) Minor Permit -- Drilling and Construction of Two Potable Water Wells Near Opana Point at Maui  
Tax Map Key No. 2-8-003:049, Hamakualoa, Makawao, Island of Maui, Hawaii (SMX 2002/0450) (SM2 2002/0139)

In response to your application received on August 30, 2002, and in accordance with the Special Management Area Rules for the Maui Planning Commission, Sections, 12-202-12 and 12-202-14, a determination has been made relative to the above project that:

1. The project is a development;
2. The project has a valuation not in excess of $125,000.00  
   (Valuation: $114,000.00)
3. The project has no significant adverse environmental or ecological effect, taking into account potential cumulative effects; and
4. The project is consistent with the objectives, policies, and Special Management Area guidelines set forth in the Hawaii Revised Statutes (HRS), Chapter 205A, and is consistent with the County General Plan and Zoning.

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

1. That construction shall be in accordance with plans submitted on August 30, 2002.
2. That a well construction permit and a pump installation permit be
obtained by the State Commission on Water Resource Management, if required, prior to the initiation of construction.

3. That a building permit be obtained prior to the initiation of construction, if required.

4. That appropriate measures shall be taken to mitigate the short-term impact of the project relative to soil erosion from wind, rain, and noise levels.

5. That construction improvements shall be initiated by March 31, 2003, and shall be completed within one (1) year of said initiation.

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

Thank you for your cooperation. If additional clarification is required, please contact Ms. Robyn L. Loudermilk, Staff Planner, of this office at...

Very truly yours,

JOHN E. MIN
Planning Director

JEM:RLL:tlm
c: Clayton I. Yoshida, AICP, Deputy Planning Director
Aaron Shinmoto, Planning Program Administrator (2)
John D. Nakagawa, Office of Planning
LUCA (2)
Robyn L. Loudermilk, Staff Planner
02/CZM File
02/SM2 Minor Permit File
General File
K:\WPDOCSPLANNING\smx\2002\smx\20020450\OpahPointWells\approval.wpd