Mr. Mike Newbro

Dear Mr. Newbro:

Well Completion Report for Well No. 5522-03

We received your Well Completion Report Part II for the Kuau-Newbro Well (Well No. 5522-03) on September 18, 2001 and acknowledge that it is complete. This completes the permitting requirements for this well.

If you have any questions, please contact Charley Ice of the Commission staff at (808) 587-0251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Cl: ky
cc: Wailani Drilling Company
Return Receipt Fax Memo

For: Charlie Ice

Charlie. Enclosed are the following items:

- [ ] PIP, WCR II for Well # 5522-03 Kuau-Newbro
- [x] PIP, for Well # 5523-01 Paia-Ulmer

Please confirm receipt by checking off the enclosed items and faxing a copy to 808-572-0925.

From: Bill Steele
MEMO and ROUTE SLIP

WCR 2 Check for Well No. 5522-03

1. **Pump Tests Check** (special condition of PIP? Yes/No)
   - Glenn Bauer, (initial if yes)
   - Yes No
   - If no, describe deficiency
   - Glenn Bauer, (initial if yes)
   - Step-Drawdown Test:
     - followed WCPI Stds
     - analysis attached
     - proposed pump cap o.k.
     - No
     - Data attached
   - 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:

2. **Pump Installation Check**
   - Mitch Ohye, (initial)
   - Yes No
   - If no, describe deficiency
   - data complete
   - followed WCPI Stds
   - well database updated
   - Mitch Ohye, (initial)

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

4. Roy, (initial) check

5. Susan Subia, (initial) finalize

6. Linnel, (initial) signature

7. Charley/Lenore/Ryan File
1. State Well No.: 5522-03  
2. Address: Hana Highway near Lower Paia, Kuau  
3. Pump Installation Company: WAILANI DRILLING  
4. Date Pump Installed: 3/04/01  
5. PERMANENT PUMP INFORMATION  
   - Pump Type, Make, Serial No.: **Submersible**  
   - Motor Type, H.P., Voltage, rpm: **Grundfos, 5HP, 230V, 3450 RPM**  
   - Type of flow meter: TURBINE which measures in G.P.M  
6. Method of flow measurement:  
   - Flowmeter Manufacturer Micrometer Make M-2 Size 2"  
   - **Weir**  
   - **Open Pipe**  
   - **Orifice**  
   - **Other**, explain below  
   *attach schematic  
7. Fill in the as-built section on the other side of this sheet.  
8. Other remarks/comments:  
   - **Model: 60550-4**  
   - **Rated @ 60 GPM @ 210' HEAD**  
   - **Pump test @ 65 GPM max @ 54 FT OPEN PIPE**  

**Pump Installation Contractor (print)** MIKE ROBERTSON C-57/C-57a/A Lic. No. 20115  
Signature MIKE ROBERTSON Date 7/26/01  
**Permittee (print)** MICHAEL NEWBRO  
Signature  
Date 7/26/01
9. AS-BUILT PUMP SECTION  (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 47.29 ft. mean sea level

Top of casing

elevation of top of chase tube 47.29 ft. mean sea level

Pump intake depth = 5.4 ft. (referenced to bench mark)

Chase tube depth = 5.3 ft. (referenced to bench mark)

if airline installed, bottom of airline elevation = 5.1 ft. mean sea level
Mr. Mike Newbro

Dear Mr. Newbro:

Pump Installation Permit
Kuau-Newbro Well (Well No. 5522-03)

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.

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 587-0251 or toll-free at 984-2400 extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN  
Chairperson

Enclosure
c. Wailani Drilling Company
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 Kuau-Newbro Well (Well No. 5522-03) at Hana Highway near Lower Paia, Kuau, Maui, TMK 2-6-9:2, subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97) which include but are not limited to the following conditions:

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

2. The pump installation permit shall be for installation of a 65 gpm capacity, 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 - (Temporary) 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 (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, 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, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

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

Date of Approval: May 3, 2001
Expiration Date: May 3, 2003
GILBERT S. COLOMA-AGARAN, 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: [Signature] Date: 7/26/01
Printed Name: MICHAEL NEWISCO Firm or Title: OWNER

Installer’s Signature: [Signature] Date: 7/26/01
Printed Name: MIKE ROBERTSON C-57, C-57a, or A License #: 20115

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
Wailani Drilling Company
Mr. Mike Newbro

Dear Mr. Newbro:

Pump Installation Permit
Kuau-Newbro Well (Well No. 5522-03)

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.

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 587-0251 or toll-free at 984-2400 extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosure
c. Wailani Drilling Company
PUMP INSTALLATION PERMIT
Kuau-Newbro Well, Well No. 5522-0.

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2. The pump installation permit shall be for installation of a 65 gpm capacity, or less, pump in the well.

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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. The this permit is also subject to the Hawaii Well Construction & Pump Installation Standards (1/23/97). If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

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

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GILBERT S. COLOMA-AGARAN, 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
Wailani Drilling Company
MEMO and ROUTE SLIP

WCR 1 Check for: Well No. 5522-03 (survey to regulation memo)

1. **Pump Tests Check**  Glenn Bauer (initial)

<table>
<thead>
<tr>
<th>Step-Drawdown Test:</th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>followed WCPI Stds analysis attached</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>proposed pump cap o.k.</td>
<td>☑</td>
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</tbody>
</table>

   **Aquifer Pump Test:**
   | followed WCPI Stds T & S analysis attached               | ☐   | ☐  |                             |

   **Well Interference:**
   | estimated Steady-State drawdown at 1-mile radius is     | ☐   | ☐  |                             |
   | analysis attached                                       | ☐   | ☐  |                             |

   **Stream Surface Water Impacted:**
   | Yes No                                                   |     |

2. **Construction Check**  Mitch Ohye (initial)

<table>
<thead>
<tr>
<th>Yes No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>data complete</td>
<td>☑</td>
</tr>
<tr>
<td>followed WCPI Stds</td>
<td>☐</td>
</tr>
<tr>
<td>well database updated</td>
<td>☐</td>
</tr>
</tbody>
</table>

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

   ___ not necessary – only WCP.

   To be sent to applicant

4. Roy (initial) check
5. Kathy (initial) finalize
6. Linnel (initial) signature
7. Charley/Lenore/Ryan File
For: Charlie Ice

Charlie. Enclosed are the following items:

- WCR I for Manawai-Vandeveld #5616-05 with Drillers Log ✓
- Stepdraw down test ✓
- Constant rate test ✓
- Well elevation survey ✓
- Colored well drawing ✓
- WCR I for Kauhale-Makai #4527-14 with Drillers Log ✓
- Stepdraw down test ✓
- Constant rate test ✓
- Well elevation survey ✓
- Colored well drawing ✓
- WCR I for Kuau-Newbro #5527-03 with Drillers Log ✓
- Constant rate test ✓
- Well elevation survey ✓
- Colored well drawing ✓
- Signed Well Construction Permit Manawai-Steele #5616.06

Please confirm receipt by checking off the enclosed items and faxing a copy of this memo to me at 808-572-0925.

From: Bill Steele

Re:
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART I  
Well Completion

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96813. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of completion of work. For assistance, please contact the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-681-6326. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/water.

<p>| | | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. State Well No.:</td>
<td>5822-03</td>
<td>Well Name:</td>
<td>Kusu-Newpro</td>
</tr>
<tr>
<td>2. Address:</td>
<td>Hana Highway, Lower Paia</td>
<td>Tax Map Key:</td>
<td>2-6-9-2</td>
</tr>
<tr>
<td>3. Drilling Company:</td>
<td>WAIANI DRILLING</td>
<td></td>
<td></td>
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<tr>
<td>4. Drilling method used during construction:</td>
<td></td>
<td></td>
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<tr>
<td>5. Date Well Construction (drilled, cased, grouted) completed:</td>
<td>3/29/01</td>
<td>Attach Driller's Log (2/2000 DL Form)</td>
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<td></td>
<td></td>
<td>in addition to this drillers log, if a geologic log was prepared, please submit with this form.</td>
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<tr>
<td>6. Was the subject well cored?</td>
<td></td>
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<tr>
<td>7. Initial water level encountered:</td>
<td></td>
<td>Date and time of measurement:</td>
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<td>8. Step-Drawdown Test completed?</td>
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<td>9. Constant Rate Aquifer Test completed?</td>
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<tr>
<td>Parameters prior to pump test:</td>
<td></td>
<td></td>
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<tr>
<td>10. Water level:</td>
<td></td>
<td>Date and time of measurement:</td>
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<td>11. Chloride:</td>
<td></td>
<td>Date and time of sampling:</td>
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<tr>
<td>12. Temperature:</td>
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<td>Date and time of measurement:</td>
<td></td>
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</tbody>
</table>

13. Fill in the as-built section on the other side of this sheet.  
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 (examples: lockable cover, threaded coupling, etc.).  
16. Remarks: | 18) NOTE: REPORT TO JOIN INVESTIGATION SEE SURVEY |

Licensed Driller (print) | MIKE ROBERTS | C-57 Lic. No. | 26115 |
Signature |   | Date | 4/24/01 |

Surveyor (print) | KEN T. NORMAN | L.P.I.S. Lic. No. | 15-2633 |
Signature |   | Date | 4/24/01 |

Permittee (print) | MIKE NEWBERRY |   |   |
Signature |   | Date | 4/24/01 |
13. AS-BUILT SECTION (Please attach as-built if different from die, provided below)

Bench mark elevation:
46.79 ft., msl
(Survey to nearest 0.01 ft.)

Hole Diameter: 10.25 in.

Minimum of 2' Radius & 4" Thick Concrete Pad

Cement Grout: 37 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"):
3.125 in.

Rock or Gravel Packing:
N/A ft.
Material:
 Crushed Basalt
 Crushed Gravel

Water Level Elevation:
16.09 ft., msl

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

Solid Casing: (≥ 90% x (Ground Elev-Water Level Elev))
Length: 47.5 ft.
Nominal Diameter: 6" in.
Wall Thickness: .250 in.
Bottom Elevation: -2.90 ft., msl

Open Casing: 0 Perforated 0 Screen
Length: 14.5 ft.
Nominal Diameter: 6" in.
Wall Thickness: .250 in.
Bottom Elevation: -17.40 ft., msl

Open Hole
Length: N/A ft.
Diameter: 4" in.
Bottom Elevation: N/A ft., msl

Solid Casing Material:
0-9922-03 KUAI-NEBRO
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 D1795 or ASTM D2241): (check one) □ Schedule 40 □ Schedule 80 □ Schedule 120
Thermoset Plastic: (check one)
□ Filament Wound Resin Pipe conforming to ASTM D2696
□ Centrifugally Cast Resin Pipe conforming to ASTM D2697
□ Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
□ Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C960
□ 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)
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□ FEP Fluorocarbon Tubing conforming to ASTM D3296
<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>0 to 10</td>
<td>Sand : Clay</td>
<td>3/26/01</td>
<td></td>
<td></td>
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<tr>
<td>10 to 25</td>
<td>Dense Blue Rock</td>
<td>2/26/01</td>
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<tr>
<td>25 to 36</td>
<td>Med. Blue Rock</td>
<td>2/27/01</td>
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<td>36 to 45</td>
<td>Brown Soft Rock</td>
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<td>45 to 60</td>
<td>Med. Blue Rock</td>
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<td>60 to 63</td>
<td>Soft Porous Gray Rock</td>
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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: 31,315 gals

AVE. Q = 62.63 cpm

1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
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END TEST  Date: 3/5/01   Time of day: 4:30

ADDITIONAL REMARKS:

Person in charge of pump test (print): [Signature]

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this pump test.
SURVEYOR'S CERTIFICATION

To Whom It May Concern:

I hereby certify, to the best of my knowledge and ability, that on April 25, 2001, under the direction of the undersigned, a bench level survey was performed from an established point based on a U.S.G.S. vertical reference Bench Mark to the top of well casing located on Lot 1 of the Kuaau Beach Subdivision (Tax Map Key: (2) 2-6-09;2). Based on said bench level survey, the top of well casing is 47.29 feet above Mean Sea Level.

A&B PROPERTIES, INC.

This work was prepared by me or under my supervision.

[Signature]

Kem T. Nomura
Licensed Professional Land Surveyor
Certificate No. LS-7633
Kuau-Newbro Well- #5522-03
Date 4/20/01
Elevation 47.29 ft @ wellhead, m.s.l.
Reference Pt. Top of casing

Total Well Depth 70 ft.
initial chlorides 360 ppm

Pump tested at 65 gpm for 24 hours with maximum drawdown of 2.1 ft.

*Note: not drawn to scale
To: Charlie Ice  
For: Water Resource Commission  

Dear Charlie: Notice to start work on:  
Well Name: Kuau-Newbro  
Well #:  5522-03  

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

Thank You;  

Mike Robertson  
dba Wailani Drilling Inc.
Dear Mr. Newbro:

Well Construction Permit

Kuau-Newbro Well (Well No. 8822-03)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but exclude 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 (123/67) 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 19, 1999 Declaratory Ruling No. DEC-ADM68-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-groundwater 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 of 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 file. 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 well owner are responsible for all conditions of the permit. This includes ensuring the well construction contractor, or other party who constructs the well(s), submits a completed Part I of the Well Completion Report Form (enhanced) 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 Ito of the Commission staff at 587-0251 or toll-free at 994-3400 extension 70251.

Ala

GILBERT C. COLOMA-AGARAN
Chairperson

Enclosures

c. Wailani Drilling Company
WELL CONSTRUCTION PERMIT
Kuu-Nawbu Well, Well No. 5522-03

In accordance with the Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-166, entitled "Water Use, Wells, and Stream Diversion Works," the document permits the construction and testing of Kuu-Nawbu Well (Well No. 5522-03) at Hana Highway, Lower Paia, Maui, TMK 2-6-9-2, subject to the Hawaii Well Construction & Pump Installation Standards (12/3/97) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Chairperson), P.O. Box 821, Honolulu, HI 96803, 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 installations in accordance with §13-166-16, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum 1/2-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairperson, in accurately recorded 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 (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 any 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 basin ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial depth) of the basin ground water unless otherwise approved 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. Schedule work to avoid periods of high rainfall, and to hydraulically control any areas as soon as possible.

5. In the event that subsurface cultural remains such as artifacts, ruins, 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 stream flow standards. This permit or the authorization to construct this well shall not constitute a determination of water rights.

7. The following shall be submitted to the Chairperson within thirty (30) days after completion of work:
   b. Elevation (reference to mean sea level, sql survey) by a licensed surveyor.
   c. Rebuilt 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, chart, and other data, and comments.

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, HWCP-8). If the HWCP-8 are not followed and as a consequence water is wasted or contaminated, it then on the property is the permit.

10. The permit may be revoked by the Chairperson 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 this well construction permit application shall be completed within twenty (20) 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 fifteen (15) months prior to the date the permit expires. If no request for extension is made, the permit shall expire. If the revocation date is not met, the Chairperson 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 the Well Abandonment Permit in accordance with the rules governing plugging of wells.

12. The permittee, his successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or damage for property damage, personal injury, or death resulting 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: December 27, 2000
Expiry Date: December 27, 2002

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to 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. You also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5000 per day starting from the permit date of approval.

Permittee's Signature: [Signature]
Printed Name: Enid Newbold
Firm or Title: Wailani Drilling Inc.
Date: 2/26/01

Driller's Signature: [Signature]
C-57 License #: 2015
Date: 2/26/01

Printed Name: Mike Robertson
Firm or Title: Wailani Drilling Inc.
Date: 2/26/01

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

Attachment:

- Water Use, Wells, and Stream Diversion Works
- Hawaii Well Construction & Pump Installation Standards
- Permit Application
- Monitoring Plan
- Water Quality
- wells
- water levels
- water wells
- well construction
- pump installations
- Hawaii Department of Natural Resources
- Commission on Water Resource Management
- Department of Health
- State of Hawaii
FEB 6 2001

Mr. Michael Newbro

Dear Mr. Newbro:

Well Construction Permit
Kuau-Newbro Well (Well No. 5522-03)

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 587-0251 or toll-free at 984-2400 extension 70251.

Aloha,

GILBERT S. COLOMA-AGARAN
Chairperson

Enclosures

Wallani Drilling Company
WELL CONSTRUCTION PERMIT

Kuau-Newbro Well, Well No. 5522-03

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 Kuau-Newbro Well (Well No. 5522-03) at Hana Highway, Lower Paia, Maui, TMK 2-6-9:2, 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 1/4-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 pumping test 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, HWCPFIS). If the HWCPFIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

10. The permit may be revoked by the Commission if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than three (3) months prior to the date the permit expires. If the commencement date is not met, the Commission may revoke the permit after giving the permittee, 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(1) 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: December 27, 2000
Expiration Date: December 27, 2002

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.

GILBERT S. COLOMA-AGARAN, Chairperson
Commission on Water Resource Management

Attachment
c. USGS
   Department of Health Safe Drinking Water, Wastewater, and Clean Water Branches
   Maui Department of Water Supply
   Wailani Drilling Company
IMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR PERMIT ISSUANCE

FROM: CHARLEY BAUER, G.
CHING, F.
FUJII, N.
HARDY, R.
HIGA, D.
HIRANO, E.
ICE, C.
IMATA, R.
JINNAI, R.
KUNIMURA, I.

DATE: ___________ SUSPENSE DATE: ___________

TO: INIT. TO: INIT. FOR: PLEASE:
BAUER, G. LUM, A. 3 Approval See Me
CHING, F. NAKAMA, L. 3 Signature Take Action
FUJII, N. NAKANO, D. 4 Information Type Draft
HARDY, R. NISHIOKA, L. 1 Review & Comment Type Final
HIGA, D. OHYE, M. 2 Take Action File
HIRANO, E. SAKODA, E. 5 Xerox ______ copies
ICE, C. SUBIA, S. YODA, K. ______
IMATA, R. SWANSON, S. ______
JINNAI, R. UYENO, D. ______
KUNIMURA, I. ______

WELL NUMBER 552203. WELL NAME: Kuan Newbro

☐ WELL CONSTRUCTION

ATTACHMENTS FOR WELL CONSTRUCTION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 PUMP TEST
4 DOH COMMENTS
5 LAND DIV. COMMENTS
6 WCR FORM
7 GIS MAP
8 DATABASE PRINTOUT
10 WELL CHECK PRINT

TO BE SENT TO APPLICANT

☐ PUMP INSTALLATION

ATTACHMENTS FOR PUMP INSTALLATION PERMIT:
1 COVER LETTER
2 PERMIT (2x)
3 DOH COMMENTS
4 LAND DIV. COMMENTS
5 WCR FORM
6 WCR FORM
7 GIS MAP
8 PARCEL CHECK
9 DATABASE PRINTOUT
10 GLENN WORKSHEET

FOR OFFICE USE ONLY

Yikes! a month late!

Craft please hide off lounge on fixing check boxes on WCR template... see more.

2/20/01 CHARLEY → check w/ Charles on permit condition back to you on permit. Right!
**SECTION 1: WELL LOCATION INFORMATION**

<table>
<thead>
<tr>
<th>Island</th>
<th>MAUI</th>
<th>Proposed Use</th>
<th>Irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>CENTRAL</td>
<td>Proposed Withdrawal</td>
<td>10000</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>PAIA</td>
<td>System Sustainable Yield</td>
<td>8</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>65 ft., m.s.l.</th>
<th>Solid Casing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>50 ft., m.s.l.</td>
<td>Material</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>38 ft.</td>
<td>Designation</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>8 ft.</td>
<td>Length</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>0.25 in.</td>
<td>Diameter</td>
</tr>
<tr>
<td>Total Depth</td>
<td>100 ft.</td>
<td>Wall Thickness</td>
</tr>
</tbody>
</table>

| Estimated Head             | 123 ft.       | Casing |
| Calculated Aquifer Thickness | 30.75 ft. | Material |
| County Water Supply (Y/N ?) | NO     | Designation |

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

Well Depth
- Theoretical Thickness of Aquifer: 123 ft.
- 1/4 Aquifer Thickness: 30.75 ft.
- Depth of Well below Sea Level: 40 ft. too deep *(refer to HWCPIS Section 2.2)*

Well Casing
- Minimum Wall Thickness
  - Material: PVC
  - County or Non-County: non-county
- Minimum Thickness per standards: 0.237 in.
- Wall Thickness Provided: 0.250 in. okay *(refer to HWCPIS Section 2.4 c)*

<table>
<thead>
<tr>
<th>Minimum Length of Solid Casing</th>
<th>51.3 ft.</th>
<th>okay <em>(refer to HWCPIS Section 2.4 d)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>90% of ground to top of aquifer</td>
<td>80 ft.</td>
<td>okay <em>(refer to HWCPIS Section 2.4 e)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Casing Material</th>
<th>Sch 40</th>
</tr>
</thead>
</table>

Annular Space
- Depth of Grouting: 39.9 ft.
- Depth of Grouting provided: 55 ft. okay *(refer to HWCPIS Section 2.6 c)*
- Thickness of Annular Space: 3.25 in. okay *(refer to HWCPIS Section 2.6 d)*

*Note: The handwritten note at the bottom of the page reads: "got to be seen where initial water found"*
TO:  Honorable Bruce S. Anderson, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch  

FROM:  Timothy E. Johns, Chairperson  
Commission on Water Resource Management  

SUBJECT:  Well Construction/Pump Installation Permit Application  
Kuau-Newbro (Well No. 5522-03) 03  

Transmitted for your review and comment is a copy of the captioned well application.  

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. **Please respond by returning this cover memo form by December 26, 2000.**  

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-70251.  

Cl:ky  
Attachment(s)  

RESPONSE:  

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

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

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

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

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

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

X  
No comments/objections  

Contact Person:  Leh N. Kajiwara  
Phone:  984-294  
Signed:  Leh N. Kajiwara  
Date:  12/26/2000  

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kuau-Newbro (Well No. 5522-96)

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by December 26, 2000.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-7028.

C:ky
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 30 days per year or two 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, §11-2108.

[ ] 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 plans exist from this source increment 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 shall be routinely inspected and tested.

[ ] It does not appear that this well will be used for consumption upon request and is not subject to Safe Drinking Water Regulations. However, STEAM SHOULDN'T BE SPREAD TO PREVENT BOTH CONSUMPTION OF ITS WATER AND CAUSE RIPPLION WITH PUBLIC WATER SUPPLY.

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

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

[ ] No comments/objections

Contact Person: Melvin J. Hamano Phone: 586-4268

Signed: Melvin J. Hamano Date: 12/21/00
TO:        Dean Y. Uchida, Administrator  
           Land Division
FROM:      Linnel T. Nishioka, Deputy Director  
           Commission on Water Resource Management
SUBJECT:   Well Construction/Pump Installation Permit Application  
           Kuau-Newbro (Well No. 5522-82) 03

Transmitted for your review and comment is a copy of the captioned well application which includes a request for a pump installation permit.

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 December 26, 2000.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-70251.

Cl:ky  
Attachment(s)
RESPONSE:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.
XX A water lease/permit is not required of this applicant.
[ ] A water lease/permit has been obtained by the applicant through lease no. ____________________.
[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.
[ ] No objections
XX Other comments: Original source of private title was by deed from the Department of Education to Oahu College dated 1/31/1860.

Contact Person: Gary Martin  
Phone: 587-0421

Signed: Gary Martin  
Date: DEC 14 2000
Mr. Michael Newbro

Dear Mr. Newbro:

Well Construction/Pump Installation Permit Application for Well No. 5522-02

We acknowledge receipt, on December 4, 2000, of your completed Well Construction/Pump Installation permit application and filing fee for the Kuau-Newbro (Well No. 5522-02). 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 587-70251 or toll-free at 984-2400, extension 70251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

Cl:ky

c. Wailani Drilling Company
TO: Honorable Bruce S. Anderson, Director
Department of Health
Attention: Dennis Tulang, Wastewater Branch
William Wong, Safe Drinking Water Branch

FROM: Timothy E. Johns, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kuau-Newbro (Well No. 5522-02).

Transmitted for your review and comment is a copy of the captioned well application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by December 26, 2000.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-7025.

CI:ky
Attachment(s)

RESPONSE:

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

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

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

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

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

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

[ ] No comments/objections

Contact Person: ___________________________ Phone: ______________

Signed: ___________________________ Date: ______________
Transmitted for your review and comment is a copy of the captioned well application which includes a request for a pump installation permit.

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 December 26, 2000.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Charley Ice of the Commission staff at 587-70251.

RESPONSE:

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: ________________

Signed: ___________________________ Date: ________________
### DEPARTMENT OF LAND AND NATURAL RESOURCES

**ADDRESS:**

**PAY TO THE ORDER OF:**

**AMOUNT:**

**NAME/DESCRIPTION:**

**DATE:** DEC 12 2000

<table>
<thead>
<tr>
<th>OCUMENT NO.</th>
<th>UAC OR ATTACHED WORKSHEET</th>
<th>NAME/DESCRIPTION (WANG INPUT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 326 0 C 0752</td>
<td>(1) $25.00</td>
<td>Michael D. Newbro (Makai Properties)</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td></td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$25.00</strong></td>
</tr>
</tbody>
</table>

**EMARKS:**

LINE (1) WC/PIP Appl. for Well No. 5522-92

LINE (2) (Kuuau-Newbro)

LINE (3)  

LINE (4)  

---

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**DATE:** DEC 12 2000
PLAT SHOWING
LOTS 1, 2 AND 3 OF THE KUAU BEACH SUBDIVISION NO. 3
PAIA, HAMAKUAPOKO, MAKAWAO, MAUI, HAWAII
**SECTION 1: WELL LOCATION INFORMATION**

<table>
<thead>
<tr>
<th>Island</th>
<th>MAUI</th>
<th>Proposed Use</th>
<th>Irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer System</td>
<td>CENTRAL</td>
<td>Proposed Withdrawal</td>
<td>10000</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>PAIA</td>
<td>System Sustainable Yield</td>
<td>8</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>51 ft., m.s.l.</th>
<th>Solid Casing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>60 ft., m.s.l.</td>
<td>Material</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>55 ft.</td>
<td>Designation</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>0 ft.</td>
<td>Length</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>10.5 in.</td>
<td>Diameter</td>
</tr>
<tr>
<td>Total Depth</td>
<td>100 ft.</td>
<td>Wall Thickness</td>
</tr>
</tbody>
</table>

| Estimated Head | 1.5 ft., m.s.l. |
| Calculated Aquifer Thickness | 61.5 ft. |

| County Water Supply (Y/N ?) | NO |

<table>
<thead>
<tr>
<th>Solid Casing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
</tr>
<tr>
<td>Designation</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Diameter</td>
</tr>
<tr>
<td>Wall Thickness</td>
</tr>
<tr>
<td>Openings</td>
</tr>
<tr>
<td>Casing</td>
</tr>
<tr>
<td>Material</td>
</tr>
<tr>
<td>Designation</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Diameter</td>
</tr>
<tr>
<td>Wall Thickness</td>
</tr>
<tr>
<td>Openings</td>
</tr>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Diameter</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Well Casing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Wall Thickness</td>
</tr>
<tr>
<td>Material</td>
</tr>
<tr>
<td>County or Non-County</td>
</tr>
<tr>
<td>Minimum Thickness per standards</td>
</tr>
<tr>
<td>Wall Thickness Provided</td>
</tr>
</tbody>
</table>

| Minimum Length of Solid Casing |
| 90% of ground to top of aquifer | 52.65 ft. |
| Length of solid casing Provided | 80 ft. |

| Casing Material |
| Sch 40 |

<table>
<thead>
<tr>
<th>Annular Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated Depth of Grouting</td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
</tr>
</tbody>
</table>

---

*Note: Review is marked on the form, and the reviewer is RRI.*

---

*Comment: The calculated depth of grouting is too deep (refer to HWCPIS Section 2.2) and may be related to the caprock layer.*
**PUBLIC RECORD DATA**

**TMK # 2-2-6-9-2**

<table>
<thead>
<tr>
<th>Owner: NEWBRO, MICHAEL DAVID</th>
<th>Tenure: Fee Simple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Payer: NEWBRO, MICHAEL DAVID</td>
<td>Semi-Annual Tax: $926.35</td>
</tr>
<tr>
<td>Tax Bill: P O BOX 373, CRYSTAL BAY, NV89402 USA</td>
<td>Buildings: 0</td>
</tr>
<tr>
<td></td>
<td>Dwellings: 0</td>
</tr>
<tr>
<td>Assessed Value</td>
<td>PITT Code: 500</td>
</tr>
<tr>
<td>Exemption</td>
<td>Zoning: INTERIM</td>
</tr>
<tr>
<td>Size</td>
<td>Land Use: 0</td>
</tr>
<tr>
<td>Buildings:</td>
<td>Nbhood Code: 2541</td>
</tr>
<tr>
<td></td>
<td>Subdivision: Paia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessed Value</th>
<th>Size</th>
<th>PITT Code</th>
<th>Zoning</th>
<th>Land Use</th>
<th>Nbhood Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land: $367,600</td>
<td>$0</td>
<td>2.21 ac</td>
<td>500</td>
<td>0</td>
<td>2541</td>
</tr>
<tr>
<td>Buildings: $0</td>
<td>$0</td>
<td>0 sq ft</td>
<td>INTERIM</td>
<td>0</td>
<td>2541</td>
</tr>
<tr>
<td>Total: $367,600</td>
<td>$0</td>
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</tbody>
</table>

**SALES**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
<th>Doc</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/23/1997 DEED -M</td>
<td>A AND B PROPERTIES INC, A Company or Corporation</td>
<td>$164,000</td>
<td>97-144891</td>
</tr>
<tr>
<td>9/17/1998 DEED</td>
<td>NEWBRO, MICHAEL DAVID, Married Man</td>
<td>$383,150</td>
<td>98-138340</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.
C. COMMISSION ON WATER RESOURCE MANAGEMENT,
ROUTE SLIP FOR NEW APPLICATIONS

FROM: CHARLEY  
DATE: 6-Dec-00  
SUSPENSE DATE: ____________________________

<table>
<thead>
<tr>
<th>TO</th>
<th>INIT.</th>
<th>TO</th>
<th>INIT.</th>
<th>FOR</th>
<th>PLEASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAUER, G.</td>
<td></td>
<td>LUM, A.</td>
<td></td>
<td>3 Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>CHING, F.</td>
<td></td>
<td>NAKAMOTO, L.</td>
<td></td>
<td>3 Signature</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>FUJII, N.</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>4 Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>HARDY, R.</td>
<td></td>
<td>NISHIOKA, L.</td>
<td>3</td>
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<tr>
<td>HIGA, D.</td>
<td>3</td>
<td>OHYE, M.</td>
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<td>HIRANO, E.</td>
<td>4</td>
<td>SAKODA, E.</td>
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</tr>
<tr>
<td>ICE, C.</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td>Type Final,</td>
<td>Type Final, label new file</td>
</tr>
<tr>
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<td></td>
<td>folder</td>
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<tr>
<td>IMATA, R.</td>
<td></td>
<td>SWANSON, S.</td>
<td>2</td>
<td></td>
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<tr>
<td>JINNAI, R.</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>KUNIMURA, I.</td>
<td></td>
<td>YODA, K.</td>
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</tr>
</tbody>
</table>

WELL NUMBER 5522  
WELL NAME Kuau-Newbro

WELL CONSTRUCTION  
PUMP INSTALLATION  
(BOOTH)

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated

1 TRANS. LETTER  
2 CWRM MAP  
3 APPL. FORM (3X)  
4 USGS MAPS (3X)  
5 TAX MAPS (3X)  
6 PARCEL OWNER VERIF.  
7 CONTRACTOR VERIF.  
8 ALL INFO FILLED IN  
9 BACKGOUND CHECK  

FOLDER:  
1 MADE NEW FILE FOLDER, ATTACHED  
2 FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
**APPLICATION FOR PERMIT**

**WELL & PUMP INFORMATION:**

<table>
<thead>
<tr>
<th>PROPOSED WORK</th>
<th>A) Construct New Well</th>
<th>B) Install New Pump*</th>
</tr>
</thead>
</table>

**CONSTRUCTION:**

- Drilled
- Dug
- Shaft
- Tunnel

**PREVIOUS USE:**

- Municipal (including hotels, stores, etc.)
- Domestic (individual, noncommercial water system)
- Irrigation (crop)
- Industrial
- Military
- Other (explain)

**PROPOSED AMOUNT OF WITHDRAWAL:**

10,000 gallons per day

**METHOD OF FLOW MEASUREMENT:**

- Flowmeter
- Open-pipe
- Weir
- Orifice

**LEGAL REQUIREMENTS:**

- CDUP
- SMAP
- EIS
- EA

**REMARKS, EXPLANATIONS:**

---

I understand that approval of this application attaches the following 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 of future use up to the permitted pump capacity.

---

For official use only:

<table>
<thead>
<tr>
<th>Date:</th>
<th>October 6, 2000</th>
</tr>
</thead>
</table>

For official use only:

<table>
<thead>
<tr>
<th>Well Owner</th>
<th>Landowner</th>
<th>Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Newbro</td>
<td>Nathan Couch</td>
<td>Mike Robertson</td>
</tr>
</tbody>
</table>

For official use only:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>State Well No.</th>
</tr>
</thead>
</table>

For official use only:

<table>
<thead>
<tr>
<th>Longitude</th>
<th>State Well No.</th>
</tr>
</thead>
</table>

---

---
10. PROPOSED WELL SECTION

(Please attach schematic if different from diagram provided below)

Solid Casing (≥ 90% x (Ground Level - Water Level Elev))
- Total Length: 80 ft.
- Nominal Diameter: 4 in.
- Wall Thickness: 2.25 in.
- Bottom Elevation: -60 ft., msl

Open Casing
- Total Length: 20 ft.
- Nominal Diameter: 4 in.
- Wall Thickness: 2.25 in.
- Bottom Elevation: -60 ft., msl

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

Bottom Elevation of Well Limit = (Water Elevation - 41 x Water Level Elevation)

Example: Estimated + 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2 - 41 x 2 ft.) = -18.5 ft.

**Solid casing Material:**
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200, API Spec 5L, ASTM A53, ASTM A139
- Stainless Steel: compliant with (check one or more): ASTM A242, Type E, Type S, Grade B, Other
- ABS Plastic: complying with ASTM F480 and ASTM D1527 (check one): Schedule 40, Schedule 80
- PVC Plastic: complying with ASTM F480 and (ASTM D1785 or ASTM D2241): 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 D2987
- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open casing Material:**
- Carbon Steel: compliant with (check one or more): ANSI/AWWA C200, API Spec 5L, ASTM A53, ASTM A139
- Stainless Steel: compliant with (check one or more): ASTM A242, Type E, Type S, Grade B, Other
- ABS Plastic: complying with ASTM F480 and ASTM D1527 (check one): Schedule 40, Schedule 80
- PVC Plastic: complying with ASTM F480 and (ASTM D1785 or ASTM D2241): Schedule 40, Schedule 80, Schedule 120
- Thermoset Plastic: (check one):
  - Centrifugally Cast Resin Pipe conforming to ASTM D2987
  - Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
  - Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
  - PTFE Fluorocarbon Tubing conforming to ASTM D3296
  - FEP Fluorocarbon Tubing conforming to ASTM D3296

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