NEW – in January 2000

Kula-Smith Well (6518-01) 5418-02

Haiku School

Kauhikoa

EXHIBIT 1

Hil

Member Service Center
1-888-443-4472
2-7-08, 27, 22, 29
Well No. 5518-04  
Well Name Kuiaha-Smith  
Applicant Smith Development  
Date of Review 6/6/00  
Reviewer RRI  

SECTION 1: WELL LOCATION INFORMATION  
Island MAUl  
Aquifer System Koolau  
Aquifer Sector #44  
Proposed Use Municipal  
Proposed Withdrawal 30000  
System Sustainable Yield 11  

SECTION 2: WELL SECTION DATA  
Elevation at top of casing #4 ft., m.s.l.  
Ground Elevation #4 ft., m.s.l.  
Cement Grout #4 ft.  
Rock Packing #4 ft.  
Hole Diameter 205 in.  
Total Depth #4 ft.  
Estimated Head #4 ft., m.s.l.  
Calculated Aquifer Thickness 205 ft.  
County Water Supply (Y/N ?) #4  
Solid Casing Material #4 #4-53  
Designation #4 #4 #4 #4  
Length #4 ft.  
Diameter #4 in.  
Wall Thickness #4 in.  
Casing Material #4 #4-53  
Designation #4 #4 #4 #4  
Length #4 ft.  
Diameter #4 in.  
Wall Thickness #4 in.  
Openings #4 sq.in./f.t.  
Open Hole Length #4 ft.  
Diameter #4 in.  

SECTION 3: CHECKLIST  
(Values to check are shaded)  
Well Depth  
Theoretical Thickness of Aquifer 205 ft.  
1/4 Aquifer Thickness 51.25 ft.  
Depth of Well below Sea Level 50 ft. okay (refer to HWCPIS Section 2.2)  
Well Casing  
Minimum Wall Thickness  
Material Steel  
County or Non-County non-county  
Minimum Thickness per standards 0.250 in.  
Wall Thickness Provided 0.250 in. okay (refer to HWCPIS Section 2.4 c)  
Minimum Length of Solid Casing 90% of ground to top of aquifer 670.5 ft.  
Length of solid casing Provided 780 ft. okay (refer to HWCPIS Section 2.4 d)  
Casing Material ASTM A53 okay (refer to HWCPIS Section 2.4 e)  
Annular Space  
If the cell above reads #N/A, reference HWCPIS  
Depth of Grouting  
Calculated Depth of Grouting 500 ft.  
Depth of Grouting provided 500 ft. okay (refer to HWCPIS Section 2.6 c)  
Thickness of Annular Space 3.25 in. okay (refer to HWCPIS Section 2.6 d)
Robertson states that assertion #2 is incorrect—that slab is 10' above grade, can be verified by Mitch & Glenn who were there. I guess this is where photo will come in handy!
August 27, 2001

Mr. Carl Takumi, P.E.
C. Takumi Engineering, Inc.
18 Central Avenue
Wailuku, HI 96793

Dear Mr. Takumi:

SUBJECT: UNSATISFACTORY LETTER OF CERTIFICATION THAT WEST KUIAHA MEADOWS WATER SYSTEM IS BUILT PER PLAN

We received your certification that the West Kuiaha Meadows Subdivision water system was built in accordance with the approved construction plans and specifications.

My staff visited the West Kuiaha Meadows Subdivision water system on August 24, 2001, and contrary to your certification, we were very disappointed to find that the water system is not built in accordance with the approved construction plans. Our conclusion is based on the following deviations to the construction plans:

1. The plan requires a 10 feet by 10 feet concrete slab around the well head. The actual as-built concrete slab is approximately 3 feet by three feet.

2. The concrete slab or base does not meet the HAWAII Well Construction & Pump Installation STANDARDS issued by the Department of Land and Natural Resources, Commission on Water Resource Management. The STANDARD requires that the top of the well casing should terminate above ground surface and known levels of flooding. The concrete base is to be at least four inches thick and slope slightly to drain away from the well casing. The top of the well casing is not high enough to prevent water runoff from adjacent higher ground from flowing over the well head concrete base, the concrete base is not four inches above ground level, and the top of the casing does not slope away from the well casing.
3. The plan requires the installation of a water tight sanitary well plate over the well head. The sanitary well plate does not have a gasket between the well plate and the well head concrete slab. The well plate is also missing the bolts to hold the sanitary well plate down to the well head concrete slab.

4. The plans require screens to be installed on the tank vent to prevent insects from entering. The screen installed has ½ inch spacings which will not keep insects out of the tank.

5. The plans require the tank manway lid to have a gasket installed to provide a tight seal to keep insects out. The lid gasket is not installed.

6. The tank vent assembly has six ½ inch holes on the vertical riser section which allow insects to enter the tank. The holes are not shown on the plans.

7. The plans require a six feet high fence around the perimeter of the water system well head, tank booster pumps and chlorinator. The installed fence is approximate five feet and is too low to keep vandals out. The gate is approximate four feet high and children can easily enter the fenced off area. A sign was posted on the gate, however, signs are also needed on all sides of the fenced off area.

8. The specifications for the tank and equipment states that the slab shall be sloped away from the storage tank and well site such that no ponding occurs on the slab or well site. The existing grading will not prevent runoff water from higher elevations from flowing over the tank slab and well site.

9. The ten captive air pressure tanks are installed over two 2x6 wooden boards which in time, will deteriorate and change the pressure tank orientation. The weight of the water in an unsupported pressure tank could damage the tank or the piping.

10. The sample taps installed are not per the plan requirements. The plan requires a 3/8 inch brass reducing tee, a 3/8 inch brass needle valve and 3/8 inch tubing for the sampling spout. The actual installation uses a 1/8 inch tubing and a 1/8 petcock valve.
11. The specifications requires all above ground exposed piping to be painted with a rust preventive paint. Numerous sections of piping were not painted.

12. An section of PVC piping not shown on the plans was installed between the storage tank drain valve and the captive air pressure tanks.

13. The as-built plans, sheet E-7, shows a 3000 gallon pressure tank installed. The 3000 gallon tank is not installed. There are ten individual air pressure tanks are installed instead of the one 3000 gallon tank.

14. The as-built plans do not include the installation of a large electrical motor into the electrical circuit. The purpose of the motor should also be specified.

The following additional problems were also noted:

1. The water system emergency plan states that water will be hauled to the site to refill the storage tank in an emergency when the well pump fails or an extended electrical power outage occurs. The access road to the water storage tank will not allow the tank trailer to reach the storage tank.

2. A booster pump was noted to start up and run for several minutes at approximately 15 minute intervals, indicating that water is being used, water is leaking out of the system or a booster pump check valve is leaking water back into the storage tank. There was no activity in the subdivision except for construction work on one house.

The Safe Drinking Water Branch considers the as-built certification you provided as a registered professional engineer to be unsatisfactory. Please inform my office of the actions you will take to correct the deviations to the construction plans.
identified above. We will also need a copy of the microbiological testing results from the approved laboratory stated in your certification.

Sincerely,

WILLIAM WONG
WILLIAM WONG, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

DY:la

c:  Mr. John Stubbart
    Island Utility Services, Inc.
    P.O. Box 665
    Kamuela, HI 96743

    Mr. Ian D. Smith, Project Manager
    Smith Development
    1043 Makawao Avenue, Suite 208
    Makawao, HI 96768

    Mr. Gordon Muraoka, SDWB Maui Sanitarian

    Mr. Charlie Ice, DLNR,CWRM
August 27, 2001

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Mr. Carl Takumi, P.E.
August 27, 2001
Page 4

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Sincerely,

William Wong
WILLIAM WONG, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

DY:la

cc: Mr. John Stubbart
Island Utility Services, Inc.
P.O. Box 665
Kamuela, HI 96743

Mr. Ian D. Smith, Project Manager
Smith Development
1043 Makawao Avenue, Suite 208
Makawao, HI 96768

Mr. Gordon Muraoka, SDWB Maui Sanitarian

Mr. Charlie Ice, DLNR,CWRM
TO:   Tom Arizumi       Date:    15 Nov 00
FROM:  Charley Ice

Proposed Source of Potable Water
West Kuiaha Meadows Water System
Kuiaha-Smith Well (Well No. 5518-04)

While we do not file official comments, please note the official well name and the following clarification:

Our understanding is that water was initially encountered at about 730 feet below grade, or about 50 feet below sea level, beneath a massive impermeable layer of lava. The water arose within the wellbore under artesian pressure to a static equilibrium at 674.98 feet below grade reference point, or about 5 feet above sea level. A second, or backup, well is currently being completed.

Return Fax: 587-0219
Return Post: P.O. Box 621, Honolulu 96809
Mr. Kent R. Smith  
Smith Development  
1048 Makawao Avenue, #208  
Makawao, HI 96768

Dear Mr. Smith:

Completion of Permitting  
Kuiaha-Smith Well (Well No. 5518-04)  

Thank you for transmitting the fully signed Pump Installation Permit and Well Completion Report Part 2 (with as-built drawing) for the captioned well. This completes the permitting requirements for this well.

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

Sincerely,

Linnel T. Nishiooka  
Deputy Director

Cl:ss

C: Wailani Drilling Company
# MONTHLY GROUND WATER USE REPORT

**Pural Water Specialty Company**  
1955 Vineyard  
Wailuku HI 96793

**Report Month** __________ **Year**

**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 62, Honolulu HI 96805. For assistance, please call (808) 587-0284.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/yy)</th>
<th>Period End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method* of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (*F)</th>
<th>Non-Pumping Water Level (ft. above msl)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>5832-02</td>
<td>Wailena Well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5832-03</td>
<td>Kahakulua Acres</td>
<td></td>
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<tr>
<td>5138-01</td>
<td>Launiupoko 1</td>
<td></td>
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<tr>
<td>5137-01</td>
<td>Launiupoko 2</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5418-02</td>
<td>Kuiaha-Smith</td>
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<tr>
<td>5320-02</td>
<td>Maunaolu 1</td>
<td></td>
<td></td>
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</tbody>
</table>

* - Flow meter, electrical consumption, weir or flume, not metered (estimated).

** - Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g. - date and method of chloride measurement; how pumpage amounts are estimated; etc...):

Submitted by (print) ____________________________  Title ____________________________

Signature ____________________________  Date __________  Telephone No. __________
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:**
   - if yes, identify most probable stream

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

   data complete
   - followed WCPI Stds
   - well database updated

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
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 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 887-0225. For updates to this form or additional information, please visit our website at http://www.state.hi.us/dlnr/cwrm/ 

<table>
<thead>
<tr>
<th>1. State Well No.: 5548-04</th>
<th>Well Name: Kuiaha-Smith</th>
<th>Island: Maui</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address: West Kuiaha, Makawao</td>
<td>Tax Map Key: 2-7-8:21</td>
<td></td>
</tr>
<tr>
<td>4. Date Pump Installed: 7/8/00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. PERMANENT PUMP INFORMATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Type, Make, Serial No.: Grundfos A12B60018-P10008 0528</td>
<td>Rated Capacity: 60 gpm</td>
<td></td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm: Franklin 20HP 460V 3450 RPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of flow meter: Turbine which measures in gallons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Method of flow measurement:</td>
<td></td>
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</tr>
<tr>
<td>□ Flowmeter Manufacturer Master Make MM 7T Size 2 inch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Weir* □ Open Pipe* □ Orifice* □ Other*, explain below</td>
<td></td>
<td></td>
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<tr>
<td>*attach schematic</td>
<td></td>
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<tr>
<td>7. Fill in the as-built section on the other side of this sheet.</td>
<td></td>
<td></td>
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<tr>
<td>8. Other remarks/comments:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Pump Installation Contractor (print) Mike Robertson C-57/C-57a/A Lic. No. 20115

Signature

Date 8/28/00

Permittee (print) Kent B. Smith

Signature

Date 9-29-00
LETTER OF TRANSMITTAL

SMITH DEVELOPMENT INC.
Real Estate Development & Consulting
1043 Makawao Ave., Suite 208
Makawao, Hawaii 96768
Phone: (808) 572-3011
Fax: (808) 572-8378
email: idscon@maui.net
bestofmaui.com/mauireal.html

TO: Charlie Ice
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809

DATE: August 30, 2000
RE: Kuiaha-Smith Well
(No. 5518-04)
TMK# (2) 2-7-8: 21

We are sending you: X Attached Under separate cover via

DESCRIPTION:
1. Executed Pump Installation Report – 1 original
2. Executed Well Completion Report – Part 2 – 1 original

IS/ARE TRANSMITTED HEREWITH:

X For review
X For your request
X For your information
X See remarks below

METHOD OF DELIVERY: US Mail

REMARKS:

If you have any questions or need additional information please call me at 572-3011.

Ian D. Smith – Project Manager

cc. Kent R. Smith
Mark Walker
Mr. Kent R. Smith  
Smith Development Company  
1048 Makawao St., Ste. 208  
Makawao, Hawaii 96768  

Dear Mr. Smith:

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. This includes ensuring that the pump installation contractor submits a completed Part II of the Well Completion Report form (enclosed) within sixty (60) days after the pump installation 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.

Please sign and have the contractor sign both permit originals and return one for our files. A copy of the Well Completion Report (Part II) and a copy of your water use report form are enclosed for your use.

**IMPORTANT** - Pump installation shall not commence until a fully signed permit is returned to the Commission. 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 the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Aloha,

TIMOTHY E. JOHNS  
Chairperson

Enclosure
PUMP INSTALLATION PERMIT
Kuiaha-Smith Well, Well No. 5518-04

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 Kuiaha-Smith Well (Well No. 5518-04) at West Kuiaha, Makawao, Maui, TMK 2-7-8-21 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 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 is incorporated into this permit by reference and is 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: August 9, 2000
Expiration Date: August 9, 2002

TIMOTHY E. JOHNS, 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
C: USGS
Department of Health / Safe Drinking Water & Wastewater Branch
Maul Department of Water Supply
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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, Hawaiian 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 in-stream 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 is incorporated into this permit by reference and is 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: August 9, 2000
Expiration Date: August 9, 2002

TIMOTHY E. JOHNS, 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]
Printed Name: Kent R. Smith Firm or Title: Owner
Date: 8-29-00

Installer's Signature: [Signature]
Printed Name: Mike Robertson or C-57, or A License #: 2015 Firm or Title: President
Date: 8-30-00

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

Attachments:
C: USGS
Department of Health Safe Drinking Water & Wastewater Branch
Maul Department of Water Supply
FAX MEMO

For: Charlie Ica
From: Mike Robertson

Re: Casing Length Correction.

Charlie please correct the WCR 1 as built as per this corrected copy and complete processing.
The sections on solid and perforated casing.
I will send you hard copies in the mail.

Signed

Mike Robertson

cc: Dan Smith
Total Well Depth = 760 ft.

*Note: not drawn to scale
<table>
<thead>
<tr>
<th>FROM: Charley</th>
<th>DATE:</th>
<th>SUSPENSE DATE: 8/15/00</th>
</tr>
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<tr>
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<td>TO: FUJII, N.</td>
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<td>OHYE, M.</td>
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<td>INIT:</td>
<td>SAKODA, E.</td>
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<tr>
<td>TO: IMATA, R.</td>
<td>INIT:</td>
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<tr>
<td>TO: JINNAI, R.</td>
<td>INIT:</td>
<td>YODA, K.</td>
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<table>
<thead>
<tr>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
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<tbody>
<tr>
<td>1 Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>3 Signature</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>3 Information</td>
<td>Take Action</td>
</tr>
</tbody>
</table>

Type Draft
Type Final
File
Xerox ____ copies
WCR 1 Check for Well No. 5518-04 (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:**
   - If yes, identify most probable stream

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

   - data complete
   - followed WCPI Stds
   - well database updated

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

---

...Additional notes and corrections...

---

[Signature]

---

[Additional comments and calculations on the page]
Well Name: Kuiaha-Smith
Well No.: 0-04
Date of Test: July 7, 2000
Date of Analysis: 07-Aug-00

Alternative way for determining T from step-drawdown data (Mink, per. comm)

\[ Q = \frac{A}{t^3/d} \]

\[ Q_1 \text{ (gpm)} = 65 \text{ ft}^3/d \]
\[ Q_2 \text{ (gpm)} = 30 \text{ ft}^3/d \]

Set up two equations:

\[ s_1 = jQ_1 + nQ_1^2 \]
\[ s_2 = jQ_2 + nQ_2^2 \]

\[ s_1 = 0.25 \]
\[ s_2 = 0.1 \]

\[ Q_1 = 12513 \text{ ft}^3/d \]
\[ Q_2 = 5775 \text{ ft}^3/d \]

Well Depth below sea level = 80 ft
Radius of well (ft) = 0.5 = r

\[ n = s_1 - \frac{(Q_1/Q_2)s_2}{Q_1(Q_1-Q_2)} = 4E-10 \]
\[ j = s/Q - nQ = 1.5E-05 \]

Laminar flow equation:

\[ s = jQ = 0.188095 \]
75.24% Head loss due to laminar flow

Thiem Eq.

\[ T = \frac{1}{2\pi j} \ln \left( \frac{r}{r_e} \right) \]

\[ r_e = \text{Well Depth BSL} \times 1.6 = 128 \]

Therefore:

\[ T = \frac{1}{2\pi j} \ln \left( \frac{r}{r_e} \right) = 58709 \text{ ft}^2/d \]
UPCONING EQUATION GIVEN BY BEAR AND DAGAN (1968) FROM HERMAN BOUWER "GROUNDWATER HYDROLOGY"

Predicted rise of the saltwater interface

\[ Z_t = \frac{pQ}{2\pi(ps-pf)KxL}\left(1 - \frac{2pfnL}{ps-pf}K_zt\right) \]

Where:

- \( Z_t \): rise of cone center at time \( t \)
- \( Q \): well discharge (ft^3/d)
- \( L \): Depth of mid-pt. below bottom of well before pumping
- \( K_x \): Horizontal K
- \( K_z \): Vertical K
- \( n \): porosity of aquifer
- \( p_s \): density of salt water
- \( p_f \): density of freshwater

\[ t \text{ (days)} \quad t \text{ (years)} \quad Z_t \]
\[ 100 \quad 0.27 \quad 0.1011337 \]
\[ 500 \quad 1.37 \quad 0.3405595 \]
\[ 1000 \quad 2.74 \quad 0.4836994 \]
\[ 2500 \quad 6.85 \quad 0.6468168 \]
\[ 5000 \quad 13.70 \quad 0.7287335 \]
\[ 10000 \quad 27.40 \quad 0.7779987 \]
\[ 25000 \quad 68.49 \quad 0.8108902 \]
\[ 50000 \quad 136.99 \quad 0.8224809 \]
\[ 100000 \quad 273.97 \quad 0.8284014 \]
\[ 500000 \quad 1369.86 \quad 0.8331996 \]

Well Name: Kuiaha-Smith Well 5518.04
Kx analysis by: Glenn Bauer

Assume \( K_x/K_z = 200 \)
Predicted rise of the saltwater interface

\[ Z_t = \frac{pfQ}{2\pi(ps-pf)K_xL^2} \left( 1 - \frac{2pfnL}{(ps-pf)K_zt} \right) \]

Where:

- \( Z_t \) = rise of cone center at time \( t \)
- \( Q \) (ft³/d) = well discharge
- \( L \) = Depth of mid-pt. below bottom of well before pumping
- \( K_x \) = Horizontal K
- \( K_z \) = Vertical K
- \( n \) = porosity of aquifer
- \( ps \) = density of salt water
- \( pf \) = density of freshwater

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Well Name: West Kuiaha Well 2 (5518-05)
Kx analysis by: Glenn Bauer

66845 = \( .5 \times \sqrt{L} \)
(Assume \( K_x = \) Kuiaha-Smith Well; Mid-Pt. = 208')
& Pumpage = 0.5 mgd

Assume \( K_x/K_z = 200 \)

Predicted Rise in Transition Zone

![Predicted Rise in Transition Zone graph]
UPCONING EQUATION GIVEN BY BEAR AND DAGAN (1968) FROM HERMAN BOUWER "GROUNDWATER HYDROLOGY"

Predicted rise of the saltwater interface

\[ Z_t = \frac{pfQ}{2\pi(ps-pf)KxL^2}(1-2pfnL/(2pfnL + (ps - pf)Kzt) \]

Where:

- \( Z_t \) = rise of cone center at time \( t \)
- \( Q \) (ft^3/d) = well discharge
- \( L \) = Depth of mid-pt. below bottom of well before pumping
- \( Kx \) = Horizontal \( K \)
- \( Kz \) = Vertical \( K \)
- \( n \) = porosity of aquifer
- \( ps \) = density of salt water
- \( pf \) = density of freshwater

Well Name: Kuiaha-Smith Well 5518-04
Kx analysis by: Glenn Bauer

Assume \( Kx/Kz = 200 \)

\begin{align*}
\text{t (days)} & \quad \text{t (years)} & \quad Z_t \\
100 & \quad 0.27 & \quad 0.1011337 \\
500 & \quad 1.37 & \quad 0.3405595 \\
1000 & \quad 2.74 & \quad 0.4836994 \\
2500 & \quad 6.85 & \quad 0.6468168 \\
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50000 & \quad 136.99 & \quad 0.824809 \\
100000 & \quad 273.97 & \quad 0.8284014 \\
500000 & \quad 1369.86 & \quad 0.8331996
\end{align*}

Predicted Rise in Transition Zone

\[
[100 \quad 200 \quad 300 \quad 400 \quad 500 \quad 600 \quad 700 \quad 800 \quad 900 \quad 1000 \quad 1100 \quad 1200 \quad 1300 \quad 1400 \quad 1500
\]

Time (years)
UPCONING EQUATION GIVEN BY BEAR AND DAGAN (1968) FROM HERMAN BOUWER "GROUNDWATER HYDROLOGY"

Predicted rise of the saltwater interface

\[ Z_t = \frac{pfQ}{2\pi(ps-pf)KxL^*(1-2pfnL/(2pfL + (ps - pf)Kzt)} \]

Where:

- \( Z_t \): rise of cone center at time \( t \)
- \( Q \) (ft\(^3\)/d): well discharge
- \( L \): Depth of mid-pt. below bottom of well before pumping
- \( Kx \): Horizontal \( K \)
- \( Kz \): Vertical \( K \)
- \( n \): porosity of aquifer
- \( ps \): density of salt water
- \( pf \): density of freshwater

Well Name: West Kuiaha Well 2 (5518-05)
Kx analysis by: Glenn Bauer

\( Q = 66845 \quad \text{ft}^3/d \)
\( L = 208 \quad \text{ft} \)
\( Kx = 459 \quad \text{ft}^2/\text{d} \)
\( Kz = 2.295 \quad \text{ft}^2/\text{d} \)
\( n = 0.1 \)
\( ps = 1.025 \quad \text{g/cm}^3 \)
\( pf = 1 \quad \text{g/cm}^3 \)

Assume \( Kx/Kz = 200 \)

<table>
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<th>( Z_t )</th>
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<td>1369.86</td>
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</tr>
</tbody>
</table>

Predicted Rise in Transition Zone
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 679.41 ft. mean sea level

Elevation of top of chase tube 680.0 ft. mean sea level

Pump intake depth = 689.5 ft. (referenced to bench mark)

Chase tube depth = 689.5 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = NA ft. mean sea level
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT - PART I
Well Construction

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

1. State Well No.: 547864 Well Name: West Kuiaha - Smith Island: Maui
2. Address: West Kuiaha Rd. Tax Map Key: (2)2-7-008.021
3. Drilling Company: Wai'alei Drilling Inc
4. If drilled, type of Rig: ☐ Rotary ☐ Percussion
5. Date Well Construction (drilled,cased,grouted) completed: 6/30/00 Attach Driller's Log (7/28/99 DL Form)

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

6. Initial water-level encountered 674.98 ft. below ground Date and time of measurement: 6/30/00 4:00 pm
7. Step-Drawdown Test completed? ☐ No ☑ Yes Attach Step-Drawdown Test form (12/17/97 SDPTD Form)
8. Constant Rate Aquifer Test completed? ☐ No ☑ Yes Attach Constant Rate Aquifer Test form (12/17/97 CRPTD Form)

Parameters prior to pump test:
9. Water-level: 54.98 ft. above msl Date and time of measurement: 7/7/00
10. Chloride: 40 ppm Date and time of sampling: 7/7/00
11. Temperature: 69°F Date and time of measurement: 7/7/00

12. Fill in the as-built section on the other side of this sheet.
13. Attach plot plan and surveyor's stamped elevation report.
14. 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.)
15. Remarks: combination well construction, pump installed approved. well to supply 14 lot agricultural subdivision.

Licensed Driller (print) Mike Robertson C-57 Lic. No. 20115
Signature Mike Robertson Date 7/19/00

Surveyor (print) Bruce R. Lee L.P.L.S. Lic. No. 5983-L3
please attach stamped report
Signature Bruce R. Lee Date 7/20/00

Permittee (print) Kent K. Smith
Signature Kent K. Smith Date 7-20-00
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
SMITH DEVELOPMENT
Real Estate Development & Consulting
1043 Makawao Ave., #208
Makawao, Hawaii 96768
Phone: (808) 572-3011
Fax: (808) 572-8378
email: idscon@maui.net
bestofmaui.com/mauireal.html

TO: Charlie Ice
State of Hawaii
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809

DATE: July 21, 2000

RE: Kuiaha-Smith Well No. 5518-04
Well Completion Report

We are sending you:

1. Well Completion Report – 1 original
2. Surveyor’s Stamped Elevation report – 1 original
3. Site Plan – 1 copy
4. Step-Drawdown Pump Test Data – 1 copy
5. Constant-Rate Pump Test Data – 1 copy
6. As-built Section sheet – 1 copy

IS/ARE TRANSMITTED HEREWITH:

X For review

METHOD OF DELIVERY: US Mail

REMARKS:

Dear Charlie,

Please contact me if you have any question or need additional information.

Ian D. Smith – Project Manager

cc. Kent R. Smith
Mike Robertson – Wailani Drilling
David Jorgensen, Esq – w/o attachments
Another quality Maui project from the Smith Development team.

All information described herein is subject to change at any time without notice, at the sole discretion of the seller.

West Kuiaha Meadows Subdivision
Preliminary Lot Layout
T.M.K. 2-7-08:21, 22, 129 DATE 6/1/00
July 20, 2000

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

On June 15, 2000, the West Kuiaha-Smith Well, State Well No. 5518-04, was surveyed by surveyors under my instructions and the elevation at the top of the casing is 680.01 Feet, Mean Sea Level.

BRUCE R. LEE
LICENSED PROFESSIONAL LAND SURVEYOR
No. 5983-LS
HAWAII, U.S.A.

NEWCOMER-LEE
LAND SURVEYORS, INC.
a Hawaii corporation

BRUCE R. LEE, President
Licensed Professional Land Surveyor Certificate No. 5983-LS
MAUI HANKU FIELD TRIP 7/19/00

Parity: JFH, Glenn Bauer & Mitch Okye [CWRM]

1. 0822 HANKU School well (5519-01)
   Water 36.9 Chl. 778 Feet. 90 meters
   NAP21
   \[ \text{GPS N 20° 55' 45" = N 20° 55' 50.7"} \]
   \[ \text{W 156° 19.500' = W 156° 19' 30"} \]

2. 0835 WAIATU MANA (Mike Robertson well, S. Kent Smith)
   (5518-04) - will need changes from 5518-04
   M.P. 681.01 (top of chase tube) to 5418-02
   DTW 674.79 (CWRM tape)
   \[ \text{A 6° 22'} 5.22' \]
   DTW 675.01 (Robertson tape)
   A CURVE - Robertson = -122 ft (to be corrected)
   \[ \text{Modified by Robertson before pump} \text{ and 503 (maybe 504) pumped) \]
   Fitted with 20 HP pump @ 80 gpm 6" casing Fine Sediment
   NAP21
   \[ \text{GPS N 20° 54.967' = N 20° 54' 58.02"} \]
   \[ \text{W 156° 18.493' = W 156° 18' 29.58"} \]
   M.P. + 0.050"
   Adjusted on 1-29-04.

3. HIMALI (Robertson) Eddington (5417-01)
   0109 chase tube too small for CWRM pump
   \[ \text{Use Robertson tape: MP 731.53 Etape chase tube; milked} \text{ MP/DTW 729.79} \]
   DTW 723.63
   \[ \text{7.70} \text{ original depth head} \]
   \[ \text{CVR. + 22} \text{ by Robertson: 7.68 ft} \]
   \[ h = 7.98 \]
depth-ft.

- 460 ft: 490-520 hard blue rock
- 500 ft: 520-535 pink pehoehoe
- 560 ft: 560-585 hard blue rock
- 660 ft: 660-730 hard blue rock

Total Well Depth = 760 ft

*Note: not drawn to scale
### CONSTANT-RATE PUMP TEST DATA

<table>
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<tr>
<th>Pumped Well No.</th>
<th>Observation well no.</th>
<th>Target Q</th>
<th>Distance between Obs. &amp; Pumped Well</th>
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</thead>
<tbody>
<tr>
<td>55+8-04</td>
<td>N/A</td>
<td>gpm</td>
<td>ft.</td>
</tr>
<tr>
<td>West Knight-Smith</td>
<td>N/A</td>
<td>ft.</td>
<td>msl</td>
</tr>
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</table>

Reference pt. for depth to water: **680.01 ft.** 5.03 ft. msl

Static Water Level @ start of test: **680.01 ft.** 5.03 ft. msl

Water level measurements by:  
- ✔ steel tape  
- ❌ pressure transducer  
- ❌ airline

**START TEST**  
Date: **7/10/00**  
Time of day: **9:45 AM**

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Data in this table is for:  
- ✔ Pumped Well  
- ❌ Observation Well

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1 Chloride sampling required
2 Use same ending drawdown figure as start for recovery
Table 2 (CRPTD Form 12/17/97)

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END TEST Date: 7/10/00 Time of day: 12:50 PM

ADDITIONAL REMARKS:

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

Signature: Mike 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.
West Kuiaha-Smith
Constant Rate Test
### STEP-DRAWDOWN PUMP TEST DATA

*Table 1 (SDPTD Form 12/17/97)*

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<th>Pumped Well No.</th>
<th>Pumped Well Name</th>
<th>Target Q</th>
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<th>Static Water Level @ start of test</th>
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Not required for wells producing < 100,000 gpd or 70 gpm.

**START TEST**

- **Date:** 7/11/00
- **Time of day:** 11:45 AM

- **Flow Meter Reading Start:** 2500 gals

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<th>Actual Elapsed Time (min)</th>
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<th>Drawdown S (unadjusted for nearest 0.1 ft)</th>
<th>Pumping rate Q (all data in gpm)</th>
<th>EC</th>
<th>Cl⁻</th>
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**Chloride sample taken**

**Step 2 begin?**
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<tr>
<th>Suggested Elapsed Time (min)</th>
<th>Actual: Elapsed Time (min)</th>
<th>Depth to water (nearest 0.1 ft)</th>
<th>Drawdown S (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (at least 3 steps) (gpm)</th>
<th>EC (umhos)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp °F or °C</th>
<th>Remarks</th>
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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: 7,300 gals

1 starting pumping rate Q
2 minimum length of step period of constant pumping rate
3 minimum mandatory Chloride (Cl⁻) measurement/sampling at end of every step
4 Use same ending drawdown figure as start for recovery
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<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth To Water (nearest 0.1 ft)</th>
<th>Recovery Drawdown (unadjusted to nearest 0.1 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (microhms)</th>
<th>Cl⁻ (mg/l)</th>
<th>Temp. °F or °C</th>
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END TEST  Date: 7/7/80  Time of day: 2:32 PM

ADDITIONAL REMARKS:

Person in charge of pump test (print): Mike Robertson
Signature: Mike 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.
To: Charlie Ice  
For: Water Resource Commission

Dear Charlie:

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

**West Kuiaha- Smith**

We would like to proceed immediately.

This letter also serves to provide written notice of our wish to take advantage of Commission Ruling No.DEC-ADM98-G5 since the permanent pump will be less than 70 g.p.m. capacity.

Please fax a response to me to confirm.

Thank You;

Mike Robertson

dba Wailani Drilling Inc.
WELL CONSTRUCTION PERMIT
Kulahe-Smith Well, Well No. 5518-04

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-166, entitled “Well Use, Wells, and Stream Diversion Works,” this document permits the construction and testing of Kulahe-Smith Well (Well No. 5518-04) at West Kulahe, Makawao, Maui, TMK 2-74-52, subject to the Hawaii Well Construction & Pump Installation Standards (1/22/07) which include but are not limited to the following conditions:

1. The Chairman of the Commission on Water Resource Management (Commission), P.O. Box 261, Honolulu, HI 96808, shall be notified, in writing, at least 14 days before any work authorized by this permit commences and shall be allowed to inspect installation activities in accordance with § 13-184-75, Hawaii Administrative Rules.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Chairman, to adequately record water levels. The permittee, well operator; and/or well owner shall coordinate with the Chairman 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 Chairman the test results as a means of 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 Chairman.

3. In basalt ground water, the depth of the well may not exceed twenty-fourths (1/44) of the theoretical thickness (41 feet initial head) of the basalt ground water unless otherwise authorized by the Chairman.

4. The permittee, well operator; and/or well owner shall incorporate mitigation measures to prevent construction debris from entering the aquifer 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 of Land and Natural Resources, Archaeology Program 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 conduct the well shall not constitute a determination of preferential water rights.

7. The following shall be submitted to the Chairman within 30 days after completion of work:
   b. Elevation (referenced to mean sea level), map 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 25, 1997, HWCI). If the HWCI is 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 Chairman 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 approved 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 Chairman upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairman 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 § 13-146-16 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 damage for property damage, personal injury, or death arising out of any act or omission of the applicant, assignee, successor, employees, contractor, 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: May 26, 2000
Expiration Date: May 26, 2002

TIMOTHY E. JOHNSTON, Chairman
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 comply with these conditions. I shall not commence work until I get the driller and 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]
Printed Name: Kent R. Smith
Firm or Title: Smith Development Company
Driller’s Signature: [Signature]
Printed Name: Mike Robertson
Firm or Title: Waialae Drilling Inc

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

Attachment

USGS
Department of Health & Safety Drinking Water, Wailea, and Clean Water Branches
Maui Department of Water Supply
Thank you for transmitting the signed Well Construction Permit for Kauika-Smith Well (5518-04); your request to install the permanent pump at the time of construction, pending approval based on pump test results, is approved.

Another way to handle that is to request it on line 9 of the application form, and it can be confirmed in our acknowledgement letter.

We still do not have the Well Completion Report Part 2 (WCR 2) from Maui Beach Hotel — everything else for Well 5328-52 is complete.

We’re also watching for WCR2s from the Edington, Bock, Young, and Hale Kamaole Wells, and understand that they are held up for lack of survey. If it gets close to 60 days after permit expiration, please send what you have and get the surveyor’s work later.

Roy emphasized that the more serious “loose end” in permitting is getting applicant signatures on the permits. We have some old one that never got validated the way they should.
Thank you for transmitting the signed Well Construction Permit for Kualu-Smith Well (5328-52); your request to install the permanent pump at the time of construction, pending approval based on pump test results, is approved.

Another way to handle that is to request it on line 9 of the application form, and it can be confirmed in our acknowledgement letter.

We still do not have the Well Completion Report Part 2 (wcr 2) from Maui Beach Hotel—everything else for Well 5328-52 is complete.

We're also watching for WCR 2s from the Edmondson, Back, Young, and Hale Kamaole Wells, and understand that they are held up for lack of survey. If it gets close to 60 days after permit expiration, please send what you have and get the surveyor's work later.

Roy emphasized that the more serious "loose end" in permitting is getting applicant signatures on the permits. We have some old ones that never got validated the way they should.
To: Charlie Ice  
For: Water Resource Commission  

6/16/00  

Dear Charlie:  

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

West Kuiaha- Smith  

We would like to proceed immediately.  
This letter also serves to provide written notice of our wish to take advantage of Commission Ruling No.DEC-ADM98-G5 since the permanent pump will be less than 70 g.p.m. capacity.  

Please fax a response to me to confirm.  

Thank You;  

Mike Robertson  
dba Wailani Drilling Inc.  

Certified By The National Groundwater Association
WELL CONSTRUCTION PERMIT

Kuahua-Smith Well, Well No. 5519-99

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-1-6, entitled "Water Use, Wells, and Stream Diversion Works," this document permits the construction and testing of Kuahua-Smith Well (Well No. 5519-99) at West Kuahua, Wailuku, Maui, TMK 2-7-4-2H, subject to the Hawaii Well Construction & Pump Installation Standards (172-16) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Chairperson), P.O. Box 21, Honolulu, HI 96813, shall be notified in writing at least thirty (30) days before any work is started and of any work performed under this permit. The Chairperson shall be notified of the date of completion of any work performed under this permit.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed in a manner acceptable to the Chairperson, to adequately record water levels. The monitor tube shall be secured to the casing and extended above the ground level. The permittee shall report any disturbance of the monitor tube to the Chairperson. The Chairperson will provide instructions for reporting such disturbances.

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

4. The permittee, well operator, and/or well owner shall implement an inspection program to prevent contamination of the water, including routine inspections of the well, equipment, and associated facilities. The Chairperson shall be notified of any disturbance or problem with the well and associated equipment.

5. In the event that surface water contamination remains after treatment, the Chairperson may issue additional permits and require additional measures to ensure that the water is not contaminated. The Chairperson will provide instructions for reporting such disturbances.

6. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or associated navigation stream flows. This permit is subject to the condition that the well will not be considered a determination of constricted water rights.

7. The following shall be submitted to the Chairperson within thirty (30) days of commencement of work:
   b. Site plan and map showing the layout of the well.
   c. Complete turning test records, including flow, 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 the 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 (172-16). If the standards are not followed or the permit is not properly completed, a permit 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, and such approval is subject to the conditions set forth in these rules and regulations. If work is not started within six (6) months of the date of approval, the permit may be revoked by the Commission.

11. If the permit is not to be used, it must be properly sealed. If the permit is to be abandoned, it must be sealed and returned to the Chairperson within thirty (30) days from the date of approval.

12. The permittee, by acceptance, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or expense for property damage, personal injury, or death arising out of any act or omission of the permittee, assignee, employee, or contractor.

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

Date of Approval: May 26, 2000
Expiration Date: May 26, 2002

TIMOTHY E. JOHN, Chairperson
Commission on Water Resource Management

Permittee's Signature: [Signature]
Printed Name: Harvey R. Smith
Firm or Title: Smith Development Company

Driller's Signature: Mila Robertson
C-57 License #: BRML Date: 6/15/06
Printed Name: Mila Robertson
Firm or Title: Wailuku Drilling Inc.

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

Agnostic USGS
Department of Health State Drilling Water, West Maui, and Molokai Branches
Vlew Department of Water Supply
FROM: Charley

TO: BAUER, G.
    FUJII, N.
    HARDY, R.
    HIGA, D.
    HIRANO, E.
    IMATA, R.
    JINNAI, R.
    NAKAMA, L.
    NAKANO, D.
    NISHIOKA, L
    OHYE, M.
    SAKODA, E.
    SUBIA, S.
    YODA, K.

DATE: 3Feb00

SUSPENSE D.: 

FOR: Approval
     Signature
     Information

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

G1115518  04. wnp

Write what is required date for app? Pls let me know. thx.
Mr. Kent R. Smith  
Smith Development Company  
1048 Makawao Avenue, Ste. 208  
Makawao, HI 96768  

Dear Mr. Smith:  

Well Construction Permit  
Kuaiaha-Smith Well (Well No. 5518-64)  

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorizes 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.

This permit **does not** authorize work for your permanent pump installation. Approval and issuance of your pump installation permit is contingent upon 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:

"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 validated 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. Please be aware that your driller has some unfinished business with the Water Commission that must be resolved in order for us to accept his signature on a permit, and no work shall commence unless a copy of the permit has been returned fully signed by both permittee and driller.

IMPORTANT - Drilling work may not proceed without a fully signed permit 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 date of this permit approval.

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

Aloha,

TIMOTHY E. JOHNS
Chairperson

Enclosures

c: Wailani Drilling, Inc.
WELL CONSTRUCTION PERMIT
Kuiaha-Smith Well, Well No. 5518-04

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 Kuiaha-Smith Well (Well No. 5518-04) at West Kuiaha, Makawao, Maui, TMK 2-7-8:21, 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, 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 one-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 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(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: May 26, 2000
Expiration Date: May 26, 2002

TIMOTHY E. JOHNS, 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 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 c:
USGS
Department of Health/ Safe Drinking Water, Wastewater, and Clean Water Branches
Maul Department of Water Supply
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 521
HONOLULU, HAWAII 96812

MAY 26, 2000

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

FROM: Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kuiaha-Smith Well (Well No. 5518-04)

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 June 2, 2000.

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

Class: Attachment(s)

RESPONSE:

☑️ This well qualifies as a source which will serve as a source of potable water in a public water system 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 (app) to be used 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 plans are to increase the public water system division, then Director of Health approval is required prior to implementation.

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

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

☑️ For the applicant's information, a source of possible wastewater contamination [ ] is [ ] located near the proposed well site (information attached).

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

☒ No comments/objections.

Contact Person: William Wong
Phone: 586-4258

Signed: William Wong
Date: 6/6/2000
TO: Honorable Bruce Anderson, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Kuilaha-Smith Well (Well No. 5518-04)

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 June 2, 2000.

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

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (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 [tile] 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: Meein J. Hamano  
Phone: 586-4268

Signed: Linnel T. Nishioka  
Date: 5/31/00
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 421
HONOLULU, HAWAII 96809

MAY 26, 2000

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

FROM: Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kulahe-Smith Well (Well No. 5818-94)

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 June 2, 2000.

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

Class: Attachment(s)

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (serving 25 or more people at least 50 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, §11-30-39.

This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 50 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 drained 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 install cross-connections and backflow preventers by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable supplies with warnings 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 [3a (1)] is located near the proposed well site (information attached).

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

No comments/objections

Contact Person: Melanie J. Hamano Phone: 587-0268
Signed: Melanie J. Hamano Date: 5/31/00
TO: Honorable Bruce Anderson, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch

FROM: Linnel T. Nishioka, Deputy Director
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kuiaha-Smith Well (Well No. 5548-04)

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 June 2, 2000.

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

RESPONSE:

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

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

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

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

[ ] For the applicant's information, a source of possible wastewater contamination [ ] is located near the proposed well site (information attached).

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

No comments/objections

Contact Person: Loni N. Kajiwara
Phone: 808-429-1400

Signed: Loni N. Kajiwara
Date: 6-5-2000
Facsimile Request & Cover Sheet
Wastewater Branch
919 Ala Moana Blvd. Room 309
Honolulu, Hawaii 96814-4920

Date: 6-9-2000

Total Pages:

From: Lori Kajiwara, Planning Design Section
Phone 586-4290 Fax 586-4300
Email: LKAIWADA@aha.health.state.hi.us

To: Roland Tejano, Maui District Health Office
Phone 984-6232 Fax 984-9222

Subject: Request for Information

Do you have any IWS files or records for the following:

(2) 2-3-B: 811 West Kauaha (waste parcel West Kauaha place)

Please indicate if [ ] sewered or [X] not sewered.

If not sewered, is it on [ ] cesspool or [ ] septic tank or [ ] aerobic unit or other.

[ ]

Please indicate:

Record Date: NO CP RECORD ON FILE

Submit Date: ______________________

Plan Approval Date: ______________________

Inspection Date: ______________________

System Approval for Use Date: ______________________

# of Bedrooms: ______________________

* 5 DWELLINGS ON PROPERTY *
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 27
HONOLULU, HAWAII 96816

MAY 26 2000

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

FROM: Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kulaha-Smith Well (Well No. 5618-04)

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 June 2, 2000.

Please find a map, attached, 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 Hee of the Commission staff at 587-0251.

Class
Attachment(s)

RESPONSE:

1. This well qualifies as a source which will serve as a source of potable water to a public water system serving 25 or more people at least 50
   days per year or less than 26 people at least 60 days per year or 15 service connections and if the well water is used for drinking, the
   public supply should be tested for bacteriological and chemical presence before installing such use and routinely monitor the water quality
   thereafter. However, if future planned use from the source increases to exceed the public water system definition then Director of
   Health approval is required prior to implementation.

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

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

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

5. Other relevant DHS regulations, information, or recommendations are attached.

X No comments/observations

Contact Person: Lois Kajiwara Phone: 586-4294
Signed: Linnel T. Nishioka Date: 5-31-2000
hope we didn't lose the check

arrived 29 Mar 00 from Smith

Please check if Mike forgot. Also - I think he meant "domestic" rather than "public system" for municipal use. Also check his well water level - his going deep not elevation - he should know this by now.

faxed NCPI p2 with note
Mr. Kent R. Smith  
Smith Development  
1048 Makawao Avenue, #208  
Makawao, Hawaii 96768  

Dear Mr. Smith:

Well Construction / Pump Installation Permit Application for Well No. 5548-04

We accept your well construction/pump installation permit application for the Kuiaha-Smith Well (Well No. 5548-04) as complete for processing as of May 1, 2000, upon fax receipt on that day of a copy of a letter dated April 25, 2000 signed by landowner First Hawaiian Bank authorizing your application as their agent. You can expect your application to be processed within ninety (90) days from this date, but are expediting the processing in view of your request to meet the needs of completing development negotiations.

For your information, the process of constructing a well is normally processed within ninety (90) days 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 may then be issued to authorize pump work. If a pump is installed then a Well Completion Report Part 2 (Pump Installation) is required.

Please be aware that your driller has some unfinished business with the Water Commission that must be resolved in order for us to accept his signature on a permit, and no work shall commence unless a copy of the permit has been returned fully signed by both permittee and driller.

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

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

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

FROM: Linnel T. Nishioka, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Kuiaha-Smith Well (Well No. 5518-04)

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 June 2, 2000.

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

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of potable water to a public water system (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).

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

[ ] No comments/objections

Contact Person: __________________________ Phone: __________________________

Signed: __________________________ Date: __________________________
TO:        Dean Uchida, Administrator  
Land Division

FROM:      Linnel Nishioka, Deputy Director  
Commission on Water Resource Management

SUBJECT:   Well Construction/Pump Installation Permit Application  
Kuiaha-Smith Well (Well No. 5518-04)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Specifically, Item 9 on the application has been added per your request concerning water lease/permits administered by your division. Please respond by returning this cover memo form by June 2, 2000.

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

CLASS
Attachment(s)

RESPONSE:
[ ] 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: ___________________________
### Wailani Drilling Inc.

**Date:** 5/25/00

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**REMARKS:**
- LINE (1) Well No. 5518-04 (WCPA/PIPA)
- LINE (2)
- LINE (3)
- LINE (4)

---

**Wailani Drilling Inc.**

233-25-6887 Ph: (808) 572-2573
655 Kulike Road
Hakalau, Maui, HI 96708

**Bank of Hawaii**

Pay to the Order of [Cursive handwriting]

For Smith Well Permit

[Signature]

**Date:** 3/21/00

[Bank of Hawaii logo]

Print Name: [Handwritten signature]

[Handwritten numbers]

---

**Address:** 655 Kulike Road, Hakalau, Maui, HI 96708

**Phone:** 233-25-6887

**Website:** www.wailanidrilling.com

**Email:** info@wailanidrilling.com
Mr. Kent R. Smith  
Smith Development  
1048 Makawao Avenue, #208  
Makawao, Hawaii 96768  

Dear Mr. Smith:

Well Construction/Pump Installation Permit Application for Well No. 5518-04

We have received your letter of April 25, 2000 clarifying the ownership of the parcel named in your well construction application, and acknowledge the well construction/pump installation application with filing fee for the Kuiaha-Smith Well (Well No. 5518-04).

However, for your information, the driller you have selected has some unfinished business with the Commission which must be completed before we can process your application using this driller. These include filing well completion reports.

For your information, the process of constructing a well is normally processed within ninety (90) days 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 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 587-0251, or toll free at 984-2400, extension 70251.

Sincerely,

LINNEL T. NISHIOKA  
Deputy Director

CI:ss

c: Wailani Drilling Company
TO: Charlie Ice  
State Water Commission  
State of Hawaii  

FROM: Ian D. Smith  

DATE: May 1, 2000  

FAX No.: 808-587-0219  

RE: West Kuiaha Property – Water Well Drilling Permit Authorization Letter

Dear Charlie,

Please find attached the authorization letter from the property owners supporting our well drilling permit.

Thank you in advance for your cooperation in this matter. Please contact me at 808-572-3011, if you have any questions of need further information.

Sincerely,

Ian D. Smith – Project Manager

cc. Kent R. Smith  
Mark Walker
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**FROM:** Charley  
**TO:** BAUER, G.  
**DATE:** 12Apr00  
**SUSPENSE DATE:**  

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Any thoughts? (for current application) # FHD signature would be nice. Otherwise still not complete app.
FAX COVER SHEET

TO: Charlie Ice
State Water Resources Commission

DATE: April 11, 2000

FROM: Ian Smith

NO. OF PAGES INCLUDING THIS COVER SHEET: 2

If any part of this fax transmission is missing or not clearly received, call (808) 572-3011.

Re: TMK: (2) 2-7-08:21 Well Drilling Permit Authorization Letter

Dear Charlie:

As a follow up to our earlier discussions, following please find a copy of the revised letter from the current property owners authorizing us to submit for a well drilling application and authorizing you to process said application. Please review this revised draft and let me know if it meets your needs as to form. If it does, please acknowledge your approval by signing below and faxing it back to me. Should you have any questions or comments please feel free to contact me at 572-3011, ext. 15. Thank you in advance for your assistance.

Sincerely,

[Signature]
Ian Smith – Project Manager

Approved As To Form:

Charlie Ice – State Water Commission
Mr. Charlie Ice  
State Water Resources Commission  
PO Box 621  
Honolulu, Hi 96809  

Re: Application for Permit for Well Construction and Pump Installation for a  
development by KRS Development, Inc. at West Kuiaha Road, Haiku, Maui, Hawaii  
(TMK: (2) 2-7-08:21  

Dear Mr. Ice:  

This letter authorizes Smith Development to submit an application for well drilling and pump installation  
to the State of Hawaii Commission on Water Resources Management, Department of Land and Natural  
Resources (DLNR). This letter further authorizes DLNR to issue said permit on behalf of Smith  
Development for its immediate use. The location of the proposed well is referenced above. The subject  
property was purchased by KRS Development, Inc. (Smith Development) and is currently in escrow with  
an estimated closing date of May 24, 2000.  

Smith Development may not bind the trustee and legal owner of the property, First Hawaiian Bank, to any  
restrictions, limitations, conditions, or any other requirements or encumbrances affecting the subject  
property without the review and written approval of the owner, First Hawaiian Bank.  

Sincerely,  

First Hawaiian Bank
April 23, 2000

Mr. Charlie Ice
State Water Resources Commission
PO Box: 621
Honolulu, Hi 96809

Re: Application for Permit for Well Construction and Pump Installation for a development by KRS Development, Inc. at West Kuisha Road, Haiku, Maui, Hawaii (TMK: 2) 2-7-08:21

Dear Mr. Ice:

This letter authorizes Smith Development to submit an application for well drilling and pump installation to the State of Hawaii Commission on Water Resources Management, Department of Land and Natural Resources (DLNR). This letter further authorizes DLNR to issue said permit on behalf of Smith Development for its immediate use. The location of the proposed well is referenced above. The subject property was purchased by KRS Development, Inc. (Smith Development) and is currently in escrow with an estimated closing date of June 7, 2000.

Smith Development may not bind the trustees and legal owner of the property, First Hawaiian Bank, to any restrictions, limitations, conditions, or any other requirements or encumbrances affecting the subject property without the review and written approval of the owner, First Hawaiian Bank.

Notwithstanding any language herein to the contrary, it is understood that First Hawaiian Bank as Trustee described below, is signing this letter only as titleholder of the property described and nothing contained in this authorization shall create or involve any claim against or personal liability on the part of First Hawaiian Bank or any of its officers or shareholders.

Dated: April 27, 2000

First Hawaiian Bank
Trustee, Fujitani Family Land Trust #42-4852-010 dtd 11/29/79
and the Kaya Family Land Trust #42-4853-018 dtd 11/29/79
TO: Mike Robertson

FROM: Charley Ice

Date: 05 Apr 00

Please note that water levels are measured with reference to mean sea level (msl).

See page 2 of WCPI application for Kuasha-Smith Well (5518-04) (well section). You seem to be expecting 5' head?
To: Charlie Ice  
For: Water Resource Commission

Dear Charlie:

Enclosed is the well application for Smith Development.

They plan at this point to install a 15 h.p. pump which will provide 45 g.p.m.

Since this is below the 70 g.p.m. category we are requesting the combination well and pump installation permit procedure.

Thank You for your cooperation

Sincerely,

Mike Robertson
State of Hawaii

COMMISSION ON WATER RESOURCE MANAGEMENT

Department of Land and Natural Resources
APPLICATION FOR PERMIT

For Official Use Only:

[Form fields]

APPLICATION INFORMATION:

1. (a) WELL OWNER: Smith Development
   Contact Person: Kent Smith
   Phone: 572-3301
   Mailing Address: 1044 Makeawa Rd, Suite 208, Makeawa HI 96768
   Fax: 572-3374
   E-mail:

   (b) LAND OWNER: Same As Above
   Contact Person: 
   Phone: 
   Mailing Address: 
   Fax: 
   E-mail:

   (c) CONTRACTOR: Wai'anae Drilling Inc
   Contact Person: Mike Robertson
   Phone: 572-2673
   Mailing Address: 655 Kulike St, Haluki HI 96728
   Fax: 572-2675
   E-mail:

2. WELL INFORMATION:
   (Please fill in the diagram on the back of this form.)
   Island: Maui
   Address: 40 Acre Parcel - West Maui Rd.
   Tax Map Key: (20) 2-7-008: 1

3. PROPOSED WORK:
   (Check all that apply)
   • Drill New Well
   • Deepen
   • Modify Existing Well
   • Racial
   • Abandon/Seal

   * Well No.: Be sure to complete and submit well abandonment report upon completion of work.

4. CONSTRUCTION:
   • Dug
   • Bored
   • Driven
   • Drilled
   • Racial

5. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: ___ gallons per minute
   (Check all that apply)
   • Deep Well Turbine
   • Submersible
   • Centrifugal
   • Rotary
   • Rotary-Displacement
   • Reciprocating
   • Rotary-Gear
   • Impulse
   • Electric, rated horsepower: ___

6. PROPOSED USE:
   (Check all that apply)
   • Municipal (including hotels, stores, etc.)
   • Domestic (individual, noncommercial water system)
   • Irrigation (crop)
   • Military
   • Industrial

7. (a) PROPOSED AMOUNT OF WITHDRAWAL: ___ gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
      • Plurometer
      • Open-pipe
      • War
      • Office
      • Other (explain)

8. PENDING ACTIONS:
   • CDUA
   • SRA
   • EIS
   • EA
   • NONE
   • Other (explain)

9. REMARKS, EXPLANATIONS:

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

I 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 30 days after the completion date of the permitted work; 3) monthly filing fee shall be submitted to the Commission; 4) such approval shall not constitute a determination of compliance with existing water rights and shall not guarantee the pump capacity or future use up to the completed pump capacity.

Well Owner: Smith Development
Signature: Kent R. Smith
Date: 2-29-00

Landowner: Same As Above
Signature: Kent R. Smith
Date: 2-29-00

Contractor: Wai'anae Drilling Inc
Signature: Mike Robertson
Date: 2-38-00

Field Checked By: 
Longitude: 
Aquifer System Name: 5518-04

Date: 
Latitude: 
State Well No. 5518-04

WCP003 (8/1/96)
11. PROPOSED WELL SECTION

Elevation at top of casing 7.51 ft., max
(Survey to nearest 0.01 ft.)

Hole Diameter: 14.5 in.

Minimum of 2' Radius & 4" Thick Concrete Pad

Ground Elevation: 7.521 ft., max

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

Minimum annular space
between hole and casing ≥ 3"

Rock or Gravel Padding: 
Material: 

Water Level Elevation: 74.3 ft., max

Total Depth: 500 ft.

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 - 61 ft. - Water Level Elevation)
Example: Estimated = 2 ft. Water Level Elev. → Bottom Elevation of Well Limit = (2.61 ft.) = -16.5 ft.

Solid Casing Material:
Best: compliant with (check one or more): 
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139

Stainless Steel: (check one) 
- ASTM A409
- ASTM A512

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

PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) 
- Schedule 40
- Schedule 80

Thermoset Plastic: (check one) 
- Filament Wound Resin Pipe conforming to ASTM D2996
- Centrifugally Cast Resin Pipe conforming to ASTM D2997
- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C960
- PTFE Fluorocarbon Tubing conforming to ASTM D3236
- FEP Fluorocarbon Tubing conforming to ASTM D3236

Open Casing Material:
Best: compliant with (check one or more): 
- ANSI/AWWA C200
- API Spec. 5L
- ASTM A53
- ASTM A139

Stainless Steel: (check one) 
- ASTM A409
- ASTM A512

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

PVC Plastic conforming to ASTM F490 and (ASTM D1785 or ASTM D2241): (check one) 
- Schedule 40
- Schedule 80

Thermoset Plastic: (check one) 
- Filament Wound Resin Pipe conforming to ASTM D2996
- Centrifugally Cast Resin Pipe conforming to ASTM D2997
- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C960
- PTFE Fluorocarbon Tubing conforming to ASTM D3236
- FEP Fluorocarbon Tubing conforming to ASTM D3236

Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS
to assure that your construction plans are in
compliance with all existing regulations.

Solid Casing: (≥ 90% x (Ground Elev. - Water Level Elev.))
Material: Schedule 40 Steel
Material Standard: ASTM A53
Length: 360 ft.
Diameter: 4 in.
Wall Thickness: 0.255 in.
Bottom Elevation: -50 ft., max

Open Casing: 
Perforated □ Screen □
Material: 
Material Standard: ASTM A409
Length: 360 ft.
Diameter: 4 in.
Wall Thickness: 0.255 in.
Opening: 
Bottom Elevation: -50 ft., max

Note: 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.
February 29, 2000

Mike Robertson  
Wailani Drilling Company  
655 Kulike Road  
Haiku, Hawaii 96708

Re: West Kula Property, TMK: (2) 2-7-008:21, 129, 177

Mike:

This letter is to let you know that the subject property is currently under purchase contract. The estimated closing date is May 24, 2000. The Buyer is KRS Development, Inc.

If you need additional information, please call me or my assistant Valerie at 572-3011.

Sincerely,

Kent R. Smith  
President