FROM: RYAN
DATE: ___________ SUSPENSE DATE: ___________


WELL NUMBER: 3087-01
WELL NAME: Moxley

☐ WELL CONSTRUCTION / PUMP INSTALLATION

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

TO BE SENT TO APPLICANT

FOR OFFICE USE ONLY

11/18/05 license doc.
December 15, 2005

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HC#3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction Permit
Moxley Well (Well No. 3087-01)

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

Special Conditions

1. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

Please refer to the Permit Processes Worksheet (transmitted with your acknowledgement letter) for further information regarding the process of drilling a well and installing a pump.

No withdrawal of water shall be made other than for testing purposes until a certificate of pump installation completion has been issued by the Commission.

Please sign both permit originals and return one for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrm/forms.htm.

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

Finally, with the resolution of the driller's licensing requirement, we officially accepted your application as complete on November 8, 2005.
If you have any questions, please call Ryan Imata of the Commission staff at 587-0255 or toll-free at 974-4000 (Hawaii), 274-3141 (Kauai), 984-2400 (Maui), or 1-800-468-4644 (Lanai & Molokai), extension 70255.

Sincerely,

Peter T. Young
Chairperson

Enclosures

c: Jan Moxley (with applicable comments – DOH SDWB, WWB, CWB)
   USGS
   Hawaii DWS
WELL CONSTRUCTION PERMIT

Moxley Well, Well No. 3087-01

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Moxley Well (Well No. 3087-01) at TMK 1-5-007: 080, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrmlforms.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

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

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

6. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources’ Division of Historic Preservation.

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

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

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

11. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

12. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

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

14. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with Hawaii Administrative Rules §13-168-12(f).

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

Date of Approval: December 3, 2005
Expiration Date: December 3, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller’s Signature: ___________________________  C-57 License #: C-23379  Date: ___________________________
Printed Name: Rod Diamond  Firm or Title: Diamond Construction and Water Well Drilling

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

Attachment
December 15, 2005

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HC#3 Box 14073
Keeau, HI 96739

Dear Mr. Diamond:

Pump Installation Permit
Moxley Well (Well No. 3087-01)

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

Special Conditions

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

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities.

The permittee is responsible for all conditions of the permit. This includes ensuring the submission of a completed Well Completion Report Part II form within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign both permit originals and return one for our files.

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

Finally, with the resolution of the driller's licensing requirement, we officially accepted your application as complete on November 8, 2005.

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

Sincerely,

Peter T. Young
Chairperson

Enclosure
c: Jan Moxley (with applicable comments – DOH SDWB, WWB, CWB)
USGS
Hawaii DWS
PUMP INSTALLATION PERMIT
Moxley Well, Well No. 3087-01

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

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Moxley Well (Well No. 3087-01) at TMK 1-5-007: 080, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

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

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

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

4. The pump installation permit shall be for installation of a 29 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

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

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

7. Well Completion Report Part II shall be submitted to the Chairperson within 60 days after completion of work. This form can be obtained by contacting staff or on the internet at www.hawaii.gov/dlnr/cwrn.

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

9. The pump installation permit application and any related staff submittal approved by the Commission are incorporated into this permit by reference. This permit is also subject to the HWCPIS. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

10. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

11. 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.

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

Date of Approval: December 3, 2005
Expiration Date: December 3, 2007

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Installer’s Signature: [Signature]
Printed Name: Rod Diamond
C-57, C-57a, or A License #: C-23379
Firm or Title: Diamond Construction and Water Well Drilling

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

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

Data Input

<table>
<thead>
<tr>
<th>Well Number</th>
<th>3087-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Name</td>
<td>Moxley</td>
</tr>
<tr>
<td>Ground Elevation</td>
<td>600</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>400</td>
</tr>
<tr>
<td>Grouting Method</td>
<td>other</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>12</td>
</tr>
<tr>
<td>Total Depth</td>
<td>630</td>
</tr>
<tr>
<td>Estimated Head</td>
<td>1</td>
</tr>
<tr>
<td>Public Water Supply Well?</td>
<td>no</td>
</tr>
<tr>
<td>Solid Casing Material</td>
<td>not plastic</td>
</tr>
<tr>
<td>Solid Casing Specification</td>
<td></td>
</tr>
<tr>
<td>Solid Casing Length</td>
<td>600</td>
</tr>
<tr>
<td>Solid Casing Diameter</td>
<td>6</td>
</tr>
<tr>
<td>Solid Casing Wall Thickness</td>
<td>0.188</td>
</tr>
<tr>
<td>Open Casing Length</td>
<td>30</td>
</tr>
</tbody>
</table>

Results

<table>
<thead>
<tr>
<th>Well Depth</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Thickness of Aquifer</td>
<td>41</td>
</tr>
<tr>
<td>1/4 Aquifer Thickness</td>
<td>10.25</td>
</tr>
<tr>
<td>Depth of Well below Sea Level</td>
<td>-30 too deep</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Well Casing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Wall Thickness</td>
<td>0</td>
</tr>
<tr>
<td>Material</td>
<td>no requirement</td>
</tr>
</tbody>
</table>

| Wall Thickness Provided | 0.188 okay | Section 2.4(b) |
| Minimum Length of Solid Casing | 539.1 | |
| 90% of ground to top of aquifer | |
| Length of solid casing Provided | 600 okay | Section 2.4(c) |
| Casing Material | 0 okay | Section 2.4(d) |
| (for pvc only - check for 200' limit) | okay | Section 2.4(d) |

<table>
<thead>
<tr>
<th>Annular Space</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth of Grouting</td>
<td>419.3</td>
</tr>
<tr>
<td>Calculated Depth of Grouting</td>
<td></td>
</tr>
<tr>
<td>Depth of Grouting provided</td>
<td>400 not enough</td>
</tr>
<tr>
<td>Minimum Annular Space required</td>
<td>2</td>
</tr>
<tr>
<td>Thickness of Annular Space</td>
<td>3 okay</td>
</tr>
</tbody>
</table>
November 8, 2005

TO: Honorable Chiyome L. Fukino, M.D., Director
   Department of Health
   Attention: Director's Office
   Harold Yee, Wastewater Branch
   William Wong, Safe Drinking Water Branch
   Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
   Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
   Moxley Well (Well No. 3087-01)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by December 3, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RISS
Attachment(s)

RESPONSE:

[ ] This well qualifies as a source which will serve as a source of possible water to a public water system (defined as serving 50 or more people at least 60 days per year or 15 or more seven-consecutive-day connections) and must receive Director of Health approval prior to use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, 11-20-20-25.

[ ] 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 parameters 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 possible and non-potable purposes in a single system, the user shall eliminate cross-connections and back-flow connections by physically separating possible and non-potable systems by an air gap or an approved back-flow 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 regularly inspected and tested.

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

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

[ ] An NPDES permit is required.

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

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

[ ] No comments/objections

Contact Person: William Wong
Signed: William Wong
Phone: 586-4258
Date: NOV 3 0 2005
November 8, 2005

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director’s Office
Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Moxley Well (Well No. 3087-01)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by December 3, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RI:ss
Attachment(s)

RESPONSE:

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

[1] This well does not qualify as a source serving a public water system under this rule and therefore shall not be subject to any rules or requirements of any state or federal agency.

[1] If the well is used to supply both public and non-potable purposes, the user shall eliminate cross-connections and backflow connections by physically separating the non-potable systems by an air gap or an approved backflow prevention device. Please make all necessary connections with a proper device to ensure that the water supply is protected.

[1] If the well is used to supply both public and non-potable purposes, the user shall eliminate cross-connections and backflow connections by physically separating the non-potable systems by an air gap or an approved backflow prevention device. Please make all necessary connections with a proper device to ensure that the water supply is protected.

[1] If the well is used to supply both public and non-potable purposes, the user shall eliminate cross-connections and backflow connections by physically separating the non-potable systems by an air gap or an approved backflow prevention device. Please make all necessary connections with a proper device to ensure that the water supply is protected.

[1] No comments/objections

Contact Person: Alec Wong
Phone: 586-6309

Signed: Alec Wong
Date: 11/4/05
The Department of Health, Clean Water Branch has the following comments:

1. For Well-Drilling Activities

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules, Title 11, Chapter 55, Appendix I, effective September 22, 1997. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewaters, and well purge wastewaters. This general permit does not cover well pump testing. The applicable Notice of Intent Forms and filing fee shall be submitted at least thirty (30) days before the start of discharge to the Department of Health, Clean Water Branch at 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814-4920 or P.O. Box 3378, Honolulu, Hawaii 96801-3378. Inquiries may be directed to the Clean Water Branch at (808) 586-4309 or by fax at (808) 586-4352.

2. For Well Pump Testing

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

JS/cr
November 8, 2005

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director's Office
Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Moxley Well (Well No. 3087-01)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by December 3, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

RESPONSE:

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

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

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

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

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

An NPDES permit is required.

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

In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

No comments/objections.

Contact Person: Lori Monikami
Phone: 586-4294
Date: 11-14-05

Signed: Lori Monikami
A septic tank file has been found and the following information is provided. In general, the Department of Health has reviewed and approved of the plans based on the information submitted as verification that a treatment individual wastewater system (IWS) such as a septic tank was constructed and authorized to be used for wastewater disposal from a building/dwelling.

Tax Map Key number 31-5-007-080
Address pahoa
Septic Tank File # 5030
Applicant Name Stephen Chase
Submit Plan Date 03/31/2003
Plan Approval Date 06/03/2003
Inspection Date /
System Approved for Use Date 09/30/2004
BPA Date /

System / Disposal Via Septic Tank Bed
Use For Retail Store 1025 gpd
Designed By Engineering Partners
Percolation Rate / Capacity 1250 gallons

For further information, you may call the Wastewater Branch engineer as listed:
[ ] Mr. Johnny Ong at the Wastewater Branch office on Oahu at (808) 586-4294
[ ] Mr. Dane Hiromasa at the Kealakekua Health Center in Kona at (808)322-1507
[ ] Mr. Jerry Nunogawa at the Hawaii District Health Office in Hilo at (808)933-0401
[ ] Mr. Joe Tateyama at the Kauai District Health Office at (808)241-3323
[ ] Mr. Roland Tejano at the Maui District Health Office at (808)984-8232

cesspool faxes.wpd sam revised February 24, 2005
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**ROUTE SLIP FOR NEW APPLICATIONS**

**FROM:** RYAN BAUER, G. - CHING, F. - FUJII, N. - CQISSION ON WATER RESOURCE MANAGEMENT

**DATE:** 11-Jul-05

**SUSPENSE DATE:** 18-Jul-05

**TO:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Initials</th>
<th>To:</th>
<th>Initials</th>
<th>For:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>NAKAMA, L.</td>
<td></td>
<td>Approval</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>NAKANO, D.</td>
<td></td>
<td>Signature</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>OHYE, M.</td>
<td></td>
<td>Information</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>SAKODA, E.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>SUBIA, S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>SWANSON, S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>UYENO, D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>YOSHINAGA, M.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>ICE, C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>IMATA, R.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>KUNIMURA, I.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE:**

- See Me
- Review & Comment
- Take Action
- Type Draft acknow letter
- Type Final w/t/elec.signat., label file folder
- File
- Xerox copies

---

**WELL NUMBER:** 3087-01

**WELL NAME:** Moxley

- [ ] WELL CONSTRUCTION
- [ ] PUMP INSTALLATION
- [ ] BOTH

**ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated**

1. TRANS. LETTER
2. PERMIT PROCESS TABLE
3. CWRM MAP
4. APPL. FORM (11 COPIES)
5. USGS MAPS (11 COPIES)
6. TAX MAPS (11 COPIES)
7. PARCEL OWNER VERIF. / MLS PRINTOUT
8. CONTRACTOR VERIF. / DCCA LICENSE SCREEN PRINTOUT
9. ALL INFO FILLED IN
10. BACKGROUND CHECK
11. $25 FEE DEPOSIT SLIP
12. DHP/CDUP/SMA pre-screen (SMA map printout [http://gis.hicentral.com/website/parcelzoning/viewer.htm.])

**FOLDER:**

- [ ] MADE NEW FILE FOLDER, ATTACHED
- [ ] FILE FOLDER ALREADY MADE, IN FILE CABINET

**INCOMPLETE ACTION DATES:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lacking documentation from OCCL and SMA - need to use new WCPIPA form.</td>
</tr>
</tbody>
</table>

**Aquafer System Area?**

---

**Jan Moxley**
November 8, 2005

Mr. Rod Diamond  
Rod Diamond Drilling  
HCR #3 Box 14073  
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction/Pump Installation Permit Application for Well No. 3087-01

Through a background search we have discovered that the status of your contractor’s license is “automatically forfeited due to insurance loss”. We understand that this was a mistake on the part of your insurance company, and it was not your fault. However, we cannot issue a permit until this situation is resolved, and we understand you have taken the appropriate steps towards the resolution. Until then we will continue processing your permit application. Please notify us when the insurance status is resolved.

For your information, the attached table describes the process, responsible parties, and deadline requirements for drilling or modifying a well and installing, modifying, or replacing a pump.

By this acceptance letter, we are also notifying the well operator/landowner that water may not be pumped for purposes other than testing until the certificate of well construction/pump installation completion letter is issued to the well operator and landowner. Additionally, the permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity. No certificate of pump installation will be issued until the Commission has determined that the pump capacity will not have adverse effects on the aquifer, other nearby wells, or streams. In other words, you may need to remove the pump and install a smaller pump at the Commission’s discretion before you can withdraw water for purposes other than testing.

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

Sincerely,

DEAN A. NAKANO  
Acting Deputy Director

RI:ss  
Attachment  
c: Jan Moxley
November 8, 2005

TO: Honorable Chiyome L. Fukino, M.D., Director
Department of Health
Attention: Director’s Office
Harold Yee, Wastewater Branch
William Wong, Safe Drinking Water Branch
Alec Wong, Clean Water Branch

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Moxley Well (Well No. 3087-01)

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

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by December 3, 2005. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

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

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

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

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

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

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

[ ] An NPDES permit is required.

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

[ ] In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

[ ] No comments/objections

Contact Person: ___________________________ Phone: ___________________
Signed: ___________________________ Date: ___________________
November 8, 2005

TO: Russell Tsuji, Administrator
   Land Division

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

SUBJECT: Well Construction/Pump Installation Permit Application
          Moxley Well (Well No. 3087-01)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by December 3, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

RI: ss
Attachment(s)________________________

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

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

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

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

[ ] No objections

[ ] Other comments:

Contact Person: _____________________________ Phone: _____________________________

Signed: _____________________________ Date: _____________________________
November 8, 2005

TO: Melanie Chinen, Administrator
Historic Preservation

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

SUBJECT: Well Construction/Pump Installation Permit Application
Moxley Well (Well No. 3087-01)

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

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by December 3, 2005. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

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

RESPONSE:

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

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

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

Contact Person: ___________________________ Phone: ______________

Signed: ________________________________ Date: ______________
## PUBLIC RECORD DATA

<table>
<thead>
<tr>
<th>Taxkey</th>
<th>Subdiv/Condo</th>
<th>Tnr Address</th>
<th>Owner/Lessee</th>
<th>Bds</th>
<th>Bths</th>
<th>Land area</th>
<th>Liv area</th>
<th>Last Sale</th>
<th>Instr</th>
<th>Pr</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1-5-7-80</td>
<td>Keonepoko</td>
<td>PAHOA</td>
<td></td>
<td></td>
<td></td>
<td>8.40 ac</td>
<td>0</td>
<td>10/15/1999</td>
<td>COMMD $90,1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Homesteads</td>
<td>MARKETPLACE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Approved</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Applicant</th>
<th>Driller</th>
<th>Pump Inst.</th>
<th>Type</th>
<th>Well Construction</th>
<th>Pump Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved</td>
<td>Well No.</td>
<td>Well Name</td>
<td>Applicant</td>
<td>Driller</td>
<td>Pump Inst.</td>
<td>Type</td>
<td>Issued</td>
<td>Signed</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>-----------</td>
<td>--------------------------------</td>
<td>---------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>F YR APP D SRC/ OBJ</td>
<td>COST</td>
<td>PROJECT PH ACT</td>
<td>AMOUNT</td>
<td>NAME/DESCRIPTION (WANG INPUT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td>---------------</td>
<td>--------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S 06 326 C 1026 0752</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td>$25.00 Jan Moxley</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2)</td>
<td>$25.00 Conscious Insights, Inc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3)</td>
<td>$25.00 Rodney Diamond</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4)</td>
<td>$25.00 Rodney Diamond</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(5)</td>
<td>$25.00 Clifford Schommer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(6)</td>
<td>$25.00 Scott Suncloud</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7)</td>
<td>$25.00 Klaus Schneider</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL** $175.00

**REMARKS:**

LINE (1) Moxley Well, tmk: 1-5-7:80
LINE (2) Zaulocki Well, tmk: 1-5-057:058
LINE (3) Tour Well, tmk: 1-5-061:042
LINE (4) Jennings Well, tmk: 1-5-54:69
LINE (5) Wishing Well, tmk: 1-5-057:075
LINE (6) Suncloud Well, tmk: 1-5-054:1481
LINE (7) Schneider Well, tmk: 1-5-054:006
LINE (8) 
LINE (9) 
LINE (10) 

**DATE:** July 6, 2005
STATE OF HAWAI’I
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
APPLICATION FOR A WELL CONSTRUCTION / PUMP INSTALLATION PERMIT

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 96749, Honolulu, Hawaii 96678. The application must be accompanied by a refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 808-622-25. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr.wrm.

WELL LOCATION INFORMATION

1. STATE WEL # (if already assigned)
   2. NEW WELL
      200-1-01

2. WEL NAME
   Box 4781
   RR#2 Box 4781
   P.O. Box 967 PAHOA Hawaii 96678

3. ISLAND
   Hawaii

4. TANK
   1
   5
   7
   80

The following be attached before this application is accepted as complete (check off if attached):

☐ Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad.
☐ Property tax map, showing well location referenced to established property boundaries.
☐ Photograph of the proposed well site.
☐ A schematic diagram showing the well site, access road and proposed well infrastructure (if applicable)

5. WELL OPERATOR'S NAME/COMPANY
   Well Operator's Contact
   Jan Moxley

6. LANDOWNER'S NAME/COMPANY
   Stephen paul & Marjore Ann Feldmen Chase

7. LANDOWNER'S ADDRESS
   PO BOX 967 PAHOA Hawaii 96678

8. WELL OPERATOR'S PHONE
   808-965-9420

9. WELL OPERATOR'S FAX
   808-965-6459

10. LANDOWNER'S PHONE
    808-965-0085

11. LANDOWNER'S FAX
    808-965-6459

WELL OPERATOR'S MAILING ADDRESS
RR#2 box 4781 PAHOA Hawaii 96678

LANDOWNER'S MAILING ADDRESS
PO BOX 967 PAHOA Hawaii 96678

10. Is the well part of a battery of wells? ☐ Yes ☐ No

15. Proposed Surveyor name and license number (a surveyor is required for all Well Construction Permits and may be required for some Pump installation Permits) Deffered

PROPOSED USE

☐ 16. Municipal (water systems serving greater than 25 individuals or 15 service connections)

☐ 17. Domestic Number of units to be served:

☐ 18. Industrial (describe) car wash, laundrymat

☐ 19. Irrigation (describe crop and no. of acres)

☐ 20. Military (describe)

☐ 21. Other (describe)

OTHER LEGAL REQUIREMENTS

☐ Required, Items 22 and 23 must be obtained before the Commission can legally issue a permit

☐ 22. Conservation District Use Permit (CDUP) ☐ date approved
   ☑ Required, CDUP # ☐ date approved
   ☑ Not Required (attach documentation from OCLL)

☐ 23. Special Management Area Permit (SMAP) ☐ date approved
   ☑ Required, SMA # ☐ date approved
   ☑ Not Required (attach documentation from applicable County agency)

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

NOTE: Signing below indicates that the signatories understand and swear that the information provided is accurate and true to the best of their knowledge.
Further, the signatories understand that upon permit approval, 1) the proposed work is to be completed within two (2) years of the approval date, 2) the contractor shall submit to the Commission a well completion/abandonment report within 60 days after the completion date of the permitted work; 3) in the event that the application is not completed correctly, any permit may be suspended until the item is brought in to compliance, and any work done while the permit is in suspension may result in fines of up to $500 per day.

24. WEL DRILLER (Must be filled out if application is for Well Construction)
    Rodney K Diamond
    BC23379
    C-57C-STA License No.
    July 1, 2005

25. PUMP INSTALLER (Must be filled out if application is for Pump installation)
    Rodney K Diamond
    BC23379
    C-57C-STA License No.
    July 1, 2005

For Official Use Only:

Signature
Rodney K Diamond
July 1, 2005

Address
HCR #3 Box 14073 Keaau HI 96749
Phone 987-8100
Fax 966-4129

Signature
Rodney K Diamond
July 1, 2005

Address
HCR #3 Box 14073 Keaau HI 96749
Phone 987-8100
Fax 966-4129
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 601 ft, msl

- **Cement Grout:** 400 ft
  - (min. 70ft of distance from ground elevation to top of water surface or 500 ft, whichever is less.)
- **Air voids space between hole and casing (1.5") for positive displacement, 3" for other methods:** 3 in.
- **Rock or Gravel Packing:**
  - Material:
    - Crushed Basalt
    - Rounded Gravel

**Estimated Water Level Elevation:** 1 ft, msl

- **Total Depth:** 530 feet.

**Grouting method:**
- [ ] Other
- [ ] Positive Displacement

**Casing Material:**
- [ ] Steel: Stainless
- [ ] Steel: Carbon
- [ ] PVC Plastic conforming to:
- [ ] ASTM F480
- [ ] Centrifugally Cast Resin Pipe conforming to AWWA C950
- [ ] Filament Wound Resin Pipe conforming to ASTM D2996
- [ ] PTFE Fluorocarbon Tubing conforming to ASTM D3296

**Solid Casing:**

<table>
<thead>
<tr>
<th>Total Length (ft)</th>
<th>Nominal Diameter (in)</th>
<th>Wall Thickness (in)</th>
<th>Bottom Elevation (ft, msl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>6</td>
<td>188</td>
<td></td>
</tr>
</tbody>
</table>

**Open Casing:**

<table>
<thead>
<tr>
<th>Total Length (ft)</th>
<th>Nominal Diameter (in)</th>
<th>Wall Thickness (in)</th>
<th>Bottom Elevation (ft, msl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>6</td>
<td>188</td>
<td></td>
</tr>
</tbody>
</table>

**Open Hole:**

<table>
<thead>
<tr>
<th>Length (ft)</th>
<th>Diameter (in)</th>
<th>Bottom Elevation (ft, msl)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**Grouting: (Please refer to the HAWAII WELL CONSTRUCTION AND PUMP INSTALLATION STANDARDS**

- **Cement:**
  - (min. 30% x (Ground Elevation - Water Level Elev))

- **Total Length:** 600 ft
- **Nominal Diameter:** 6 in
- **Wall Thickness:** 188 in
- **Bottom Elevation:** 0 ft, msl

**Open Casing:**

- [ ] Perforated
- [ ] Screen

**Open Hole:**

- [ ] Perforated
- [ ] Screen

**Solid Casing Material:**

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

- **Stainless Steel:** compliant with (check one or more):
  - [ ] ASTM A242 (or A606)
  - [ ] Type E
  - [ ] Type S
  - [ ] Grade B
  - [ ] Other

**PVC Plastic:**

- [ ] ASTM F480
- [ ] ASTM D1785
- [ ] ASTM D2241

**Thermoset Plastic:**

- [ ] 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

**Open Casing Material:**

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

- **Stainless Steel:** compliant with (check one or more):
  - [ ] ASTM A242 (or A606)
  - [ ] Type E
  - [ ] Type S
  - [ ] Grade B
  - [ ] Other

**PVC Plastic:**

- [ ] ASTM F480
- [ ] ASTM D1785
- [ ] ASTM D2241

**Thermoset Plastic:**

- [ ] Filament Wound Resin Pipe conforming to ASTM D2996
- [ ] Centrifugally Cast Resin Pipe conforming to ASTM D2997
- [ ] Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- [ ] Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- [ ] PTFE Fluorocarbon Tubing conforming to ASTM D3296
- [ ] FEP Fluorocarbon Tubing conforming to ASTM D3296

---

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

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or, Bottom Elevation of Well Limit = (Water Elevation - ) Example: Estimated x 2 ft. Water Level Elev. Bottom Elevation of Well Limit = (2 - ) = -18.5 ft.

**Solid Casing Material:**

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

- **Stainless Steel:** compliant with (check one or more):
  - [ ] ASTM A242 (or A606)
  - [ ] Type E
  - [ ] Type S
  - [ ] Grade B
  - [ ] Other

**PVC Plastic:**

- [ ] ASTM F480
- [ ] ASTM D1785
- [ ] ASTM D2241

**Thermoset Plastic:**

- [ ] Filament Wound Resin Pipe conforming to ASTM D2996
- [ ] Centrifugally Cast Resin Pipe conforming to ASTM D2997
- [ ] Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- [ ] Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- [ ] PTFE Fluorocarbon Tubing conforming to ASTM D3296
- [ ] FEP Fluorocarbon Tubing conforming to ASTM D3296

---

**Open Casing Material:**

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

- **Stainless Steel:** compliant with (check one or more):
  - [ ] ASTM A242 (or A606)
  - [ ] Type E
  - [ ] Type S
  - [ ] Grade B
  - [ ] Other

**PVC Plastic:**

- [ ] ASTM F480
- [ ] ASTM D1785
- [ ] ASTM D2241

**Thermoset Plastic:**

- [ ] 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