Ms. Lenore Nakama  
State of Hawaii, Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Schofield Army Barracks RI/FS Well Information  
Permit Applications and Completion Reports  
Schofield Barracks, Hawaii

Dear Ms. Nakama:

As discussed during our telephone conversation on August 27, 1996, we have enclosed a copy of a USGS topographic map showing the locations of 12 monitoring wells installed for this project. The monitoring wells are identified on the map by their Army identification numbers. When we received your letter dated April 11, 1996, there seemed to be some confusion over which state well identification numbers were assigned to which of our monitoring wells. Your letter indicated that Wells 4-2 and 4-4 were assigned state well identification numbers 3-2900-01 and 3-3004-03, respectively. The actual geographic location of Well 4-2 does not correspond to well identification number 3-2900-01. Based on our records, the state well identification numbers should be assigned as follows:

<table>
<thead>
<tr>
<th>Project Well Number</th>
<th>Hawaii State Well ID Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>3-2901-13</td>
</tr>
<tr>
<td>2-1</td>
<td>3-2900-02</td>
</tr>
<tr>
<td>2-2</td>
<td>3-2903-01</td>
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<td>2-3</td>
<td>3-2902-03</td>
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<td>2-4</td>
<td>3-2801-02</td>
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<td>2-5</td>
<td>3-2959-01</td>
</tr>
<tr>
<td>2-6</td>
<td>3-2802-01</td>
</tr>
<tr>
<td>4-2</td>
<td>3-3004-02</td>
</tr>
<tr>
<td>4-2A</td>
<td>3-3004-05</td>
</tr>
<tr>
<td>4-3</td>
<td>3-3004-03</td>
</tr>
<tr>
<td>4-4</td>
<td>3-3004-04</td>
</tr>
</tbody>
</table>

We hope this table and the map will help clear up the confusion regarding the well numbers and locations.

As requested in your April 11, 1996 letter, we have enclosed the following information:

1. Well 1-1 (State Well ID No. 3-2901-13)  
   a. After-the-fact application for a well construction/pump installation permit  
   b. Well completion report
October 14, 1996
28339.06.01.12
0225AR
Ms. Lenore Nakama
State of Hawaii, DLNR
Page 2

2. Well 4-2 (State Well ID No. 3-3004-02)
   a. Well completion report
   b. Well completion diagram

Although 12 monitoring wells were installed over the lifetime of the project, only 11 are
functioning with submersible pumps. There were problems during the installation of
Well 4-2. The cable used to pull the pump out of the well broke. After numerous
unsuccessful attempts to retrieve the pump, the pump was abandoned and is not functional.
Thereafter, Well 4-2 was used only to measure groundwater levels. Thus, a pump installation
report and diagram were never included in the original permit application. Because Well 4-2
could not be used as a monitoring well, a new well was drilled within 15 feet of the old well.
We gave the new well the name 4-2A, and this may have led to additional confusion.

Your April 11 letter also requested information on State Wells 3-2900-01 and 3-3004-03. From
our records, State Well 3-3004-03 refers to Well 4-3 instead of 4-4, as listed in your letter. But
we are uncertain which wells are referred to by State Wells 3-2900-01 and 3-2900-02. At one
time, we did propose to install a monitoring well in a part of the East Range, but that idea was
rejected. It is possible, perhaps, that someone such as the drilling company may have
submitted a permit application in advance. If that is the case, that particular permit should be
withdrawn, as that well was never drilled. Because of the confusion, we have enclosed copies
of the well completion reports for both Wells 4-3 and 4-4.

In addition, we have enclosed survey data for all the wells, and the well completion report for
Well 2-6 with supporting boring log and well completion diagram information.

We hope that this information will help clarify the confusion between the two well
identification systems. I will be available to discuss these wells with you personally if you so
desire. If you have any questions, please feel free to call.

Sincerely yours,

HARDING LAWSON ASSOCIATES

Bruce S. Wedgeworth
Associate Geologist

Enclosures

cc: Mr. Jon Fukuda / U.S. Army, Department of Public Works
July 16, 1996

R. M. TOWILL CORPORATION

Harding Lawson Associates
235 Pearlridge Center, Phase I
98-1005 Moanalua Road
Aiea, Hawaii 96701

Attn: Mr. Bruce S. Wedgeworth

Subject: FIELD LOCATION OF MW 2-6

At Wheeler Army Airfield
Oahu, Hawaii

<table>
<thead>
<tr>
<th>Northing</th>
<th>Easting</th>
<th>Elevation</th>
<th>Latitude</th>
<th>Longitude</th>
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<tr>
<td>MW 2-6</td>
<td>111702.132</td>
<td>484685.053</td>
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<td>BM#3</td>
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Coordinates referred to Hawaii State Plane Coordinate System - Zone 3
Elevation Datum = Mean Sea Level (MSL)

Well Name: MW 2-6
Well Permit No.: 3-2802-01

RMC Ref. I-17793-0-3

(Bottom of Sounding Tube)
ELEVATION OF MONITORING WELLS AS SURVEYED ON 7/15/95 (with Bruce & Mark of Harding and Lawson)

MW-4-2A = 940.87 feet — Black mark on top of tube
MW-4-2 = 947.11 feet — Black mark on top of tube
"+" cut near casing of MW-4-2A = 945.91 feet

MW-4-1 = 853.47 feet (as surveyed on 3/16/95)
"+" cut = 851.12 feet
Diff. = 2.35 feet (Bruce need diff. in elev. only)

MW-4-3 = 884.15 feet (as surveyed on 3/16/95)
"+" cut = 882.52 feet
Diff. = 1.63 feet (Bruce need diff. in elev. only)

MW-4-4 = 829.88 feet — Black mark

MW-2-2 = 864.34 feet — Black mark on top of tube
"+" cut = 862.90 feet

Mkl-2-3 = 828.81 feet — Black mark on top of tube
"+" cut = 827.20 feet

Mkl-2-4 = 829.70 feet — Black mark on top of tube
"+" cut = 828.00 feet

MW-2-1 = 903.75 feet — Black mark on top of tube
Coordinate File Name: HARDING.CO

Job #: 10

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<thead>
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<th>Easting</th>
<th>Elev</th>
<th>Descr</th>
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<td>863.3800 MW 2-2</td>
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<td>sp. 2</td>
<td>121016.1042</td>
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<td>853.4671 MW 4-1</td>
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<td>472744.1700</td>
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<td>884.1500 MW 4-3</td>
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<td>474006.8800</td>
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0.9999900 SCALE FACTOR
0.9999464 GRID FACTOR

SP - HAWAII STATE PLANE COORDINATE SYSTEM, ZONE 3 (NAD 27)
Mr. Jon Fukuda  
United States Army  
DPW, Attn: APVG-GWV, U.S. Army  
Schofield Barracks, Hawaii 96857-5000

Dear Mr. Fukuda:

Well Construction Permit  
MW 2-5 (Well No. 2959-01)

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s). As part of the Chairperson’s approval, the following special conditions were added and are part of your permit under Standard Permit Condition 11:

Special Conditions

1. Standard Conditions 1, 2, and 9 are waived.

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

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214 or 1-800-468-4644 extension 70214.

Aloha,

MICHAEL D. WILSON  
Chairperson

Enclosures
WELL CONSTRUCTION PERMIT

MW 2-5 Well, Well No. 2959-01

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 MW 2-5 Well (Well No. 2959-01) at Schofield Barracks, Oahu, TMK 7-6, subject to the following conditions:

STANDARD PERMIT CONDITIONS

1. The Commission on Water Resource Management, P.O. Box 821, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work by this permit commences.

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 Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Commission 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 Commission.

3. 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.

4. 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 contact the Department's Historic Preservation Division (587-0045) immediately.

5. 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.

6. The following shall be submitted to the Commission within thirty (30) 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 water quality data.

7. The permittee shall comply with all applicable laws, rules, and ordinances.

8. The well construction permit application is incorporated into the permit by reference.

9. 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 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 Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

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

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

Date of Approval: 5/9/96
Expiration Date: 5/9/98

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.

Applicant's Signature: ___________________________ Date: ______________

Printed Name: ___________________________ Firm or Title: ___________________________

Please sign both copies and return one copy of this permit to the Commission and retain a copy for your record.

Attachment
cc: USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Honolulu Board of Water Supply

MICHAELE D. WILSON, Chairperson
Commission on Water Resource Management
Mr. Jon Fukuda  
United States Army  
DPW, Attn: APVG-GWV, U.S. Army Garrison  
Schofield Barracks, Hawaii 06857-5000  

Dear Mr. Fukuda:

After-the-Fact Pump Installation Permit  
MW 2-5 (Well No. 2959-01)  

Enclosed are two (2) copies of your approved Pump Installation Permit for the captioned well(s). As part of the Commission's approval, the following special conditions were added and are part of your permit under Standard Permit Condition 10:

Special Conditions

1. Standard Conditions 1 and 8 are waived.

2. The requirement to install a flowmeter (Standard Condition 3) is waived.

Please sign the permit copies and return one for our files.

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214 or 1-800-468-4644 extension 70214.

Aloha,

[Signature]

MICHAEL D. WILSON  
Chairperson

Enclosures
AFTE THE-FACT PUMP INSTALLATION PERMIT

MW 2-5 Well, Well No. 2959-01

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 MW 2-5 Well (Well No. 2959-01) at Schofield Barracks, Oahu, TMK 7-4-01, subject to the following conditions:

STANDARD PERMIT CONDITIONS

1. 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 covered by this permit commences.

2. The pump installation permit shall be for installation of a 25 gpm capacity, or less, pump in the well.

3. The permittee 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 a monthly basis.

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 is 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 applicant shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Commission within thirty (30) days from the date of approval.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application is incorporated into the permit by reference.

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 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 Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

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Expiration Date: 5/9/98

MICHAEL D. WILSON, 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.

Applicant's Signature: ________________________________ Date: ______________

Printed Name: ________________________________ Firm or Title: ________________________________

Please sign both copies and return one copy of this permit to the Commission and retain a copy for your record.

Attachment

USGS
Department of Health/ Safe Drinking Water & Wastewater Branches
Honolulu Board of Water Supply
TO: Honorable Lawrence Miike, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
            William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
   Commission on Water Resources Management

SUBJECT: After-the-Fact Applications for Well Construction/Pump Installation Permits
         MW2-1 through 2-5, MW4-2A, & MW4-4 Wells
         Well Nos. 2900-02, 2903-01, 2902-03, 2801-02, 2959-01, 3004-05, & 3004-04

Transmitted for your review and comment are copies of after-the-fact applications for well
construction/pump installation permits.

We would appreciate your comments on the captioned applications for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your department. Please respond
by returning this cover memo form by April 29, 1996.

Please find a map, attached, to locate the wells. If you have any questions about these
permit applications, request additional information, or request additional review time, please contact
Lenore Nakama at 587-0218.

LN: ss
Attachment(s)

RESPONSE: ( ) We have no comments
           ( ) Comments attached

Contact Person: Bill Dong Phone: 586-0258

Signed: Bill Dong Date: 4/15/96

APR 11 1996
TO: Honorable Lawrence Miike, Director
   Department of Health
   Attention: Dennis Tulang, Wastewater Branch
   William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson
       Commission on Water Resource Management

SUBJECT: After-the-Fact Applications for Well Construction/Pump Installation Permits
         MW2-1 through 2-5, MW4-2A, & MW4-4 Wells
         Well Nos. 2900-02, 2903-01, 2902-03, 2801-02, 2959-01, 3004-05, & 3004-04

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We would appreciate your comments on the captioned applications for any conflicts or
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Please find a map, attached, to locate the wells. If you have any questions about these
permit applications, request additional information, or request additional review time, please contact
Lenore Nakama at 587-0218.

LN:ss
Attachment(s)

RESPONSE: ( ) We have no comments
           ( ) Comments attached

Contact Person: Lori N. Kajiwara
                Phone: 587-2181

Signed: Lori N. Kajiwara
        Date: 4-15-96
Mr. Jon Fukuda  
U.S. Army  
DPW, Attn: APVG-GWV, U.S. Army Garrison  
Schofield Barracks, HI 96857-5000

Dear Mr. Fukuda:

Permit Applications for MW2-1 through 2-5, MW4-2A, & MW4-4  
(Well Nos. 2900-02, 2903-01, 2902-03, 2801-02, 2959-01, 3004-05, & 3004-04)

We accepted your after-the-fact well construction/pump installation permit applications  
on February 27, 1996, and hereby acknowledge that they are complete. You can expect your  
applications to be processed for action within ninety (90) days from that acceptance date.

We are returning your check for $175.00 because government agencies are not subject to  
the payment of any fees (§13-171-12(c) HAR).

Thank you for submitting the boring logs and well completion diagrams for Wells MW1-1, MW4-1, and MW4-3. We have reviewed the record for each of the monitor wells shown on your map. Listed below are the items that should be submitted to complete the record for the  
following wells:

1. MW1-1 (Well No. 2901-13)  
   a. After-the-fact application for a well construction/pump installation permit.  
   b. Well completion report (Parts I and II, attached)

2. MW4-2 (Well No. 3004-02)  
   a. Well completion report (Parts I and II, attached)  
   b. As-built sectional drawing of the well  
   c. As-built sectional drawing of the pump

3. MW4-2 (Well No. 2900-01)  
   a. As-built sectional drawing of the pump

4. MW4-4 (Well No. 3004-03)  
   a. Well completion report (Parts I and II, attached)

In addition, documentation from a Hawaii-licensed surveyor should be submitted for all  
of your monitor wells.

If you have any questions, please contact Lenore Nakama at 587-0218.

Sincerely,

RAE M. LOUI  
Deputy Director

LN:ss  
Enclosure
TO: Honorable Lawrence Miike, Director  
Department of Health  
Attention: Dennis Tulang, Wastewater Branch  
William Wong, Safe Drinking Water Branch

FROM: Michael D. Wilson, Chairperson  
Commission on Water Resources Management

SUBJECT: After-the-Fact Applications for Well Construction/Pump Installation Permits  
MW2-1 through 2-5, MW4-2A, & MW4-4 Wells  
Well Nos. 2900-02, 2903-01, 2902-03, 2801-02, 2959-01, 3004-05, & 3004-04

Transmitted for your review and comment are copies of after-the-fact applications for well construction/pump installation permits.

We would appreciate your comments on the captioned applications for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by April 29, 1996.

Please find a map, attached, to locate the wells. If you have any questions about these permit applications, request additional information, or request additional review time, please contact Lenore Nakama at 587-0218.

LN:ss  
Attachment(s)

RESPONSE: ( ) We have no comments  
( ) Comments attached

Contact Person: ____________________________ Phone: __________________________

Signed: ____________________________ Date: __________________________
To: Mr. Charlie Ice  
Commission on Water Resource Management  
P. O. Box 621  
Honolulu, Hawaii 96809

From: Bruce S. Wedgeworth  
Associate Geologist

Date: February 27, 1996

Subject: Schofield Barracks RI/FS; Schofield Barracks, Oahu, Hawaii

Project Number: 28339 01.01.12

Submitted for your review and approval are seven Applications for Permits and seven Well Completion Reports for monitoring wells MWs 2-1 through 2-5, MW4-2A, and MW4-4 that were installed for the Schofield Barracks Remedial Investigation/Feasibility Study (RI/FS) project. Also enclosed are boring logs and well completion diagrams for Wells MW1-1, MW4-1, and MW4-3, though they were previously permitted. We are conducting this project on behalf of the U.S. Army. Groundwater chemistry data for each of the wells are pending but will be published by the Army in the Final OU 2 RI Report. If requested, this data can be sent to you after release by the Army.

Also enclosed is a check for $175 (for seven well applications at $25 each).

If you have any questions, please contact me.

BSW/MWC/rmf

Enclosures: Applications for Permit, Wells MW2-1 through MW2-5, MW4-2A, and MW4-4  
Well Completion Reports, Wells MW2-1 through MW2-5, MW4-2A, and MW4-4  
Monitoring Well Location Map, USGS Quadrangles  
Tax Map Key  
Table 1. Water-Level Data  
Table 2. Location Coordinates of Wells Drilled at Schofield Barracks  
Boring Logs and Well Completion Diagrams (also includes MWs 4-1, 4-3, and 1-1)  
$175 Check Payment, Harding Lawson Associates
WELL COMPLETION REPORT

(STATE NO. 2959-01)

1. STATE WELL NO. 2959-01

2. LOCATION: Address: East Range Rd., Schofield Barracks,
   Tax Map Key 7-6-01

3. DRILLING OR PUMP INSTALLATION CONTRACTOR: Roscoe Moss Hawaii, Inc.

4. CONTRACTOR'S C-57 LICENSE NUMBER: C-16437

5. NAME OF DRILLER WHO PERFORMED WORK: Elmo Shephard

6. TYPE OF RIG/CONSTRUCTION: Air Rotary/Star 150K

7. DATE OF WELL DRILLING COMPLETION: 7/19/95

8. GROUND ELEVATION (mel): 910 ft.

9. DRILLER'S LOG:

10. TOTAL DEPTH OF WELL BELOW GROUND: 816 ft.

11. HOLE SIZE:

12. CASING INSTALLED:

13. ANNULUS:

14. INITIAL WATER LEVEL: 634.75 ft. below ground.

15. INITIAL CHLORIDE: 19 ppm

16. INITIAL TEMPERATURE: 71.5°F

17. PUMPING TESTS:

18. AQUIFER PUMP TEST PROCEDURES DATA & GRAPHS ATTACHED? Yes _X No

PUMP INSTALLATION REPORT

19. DATE OF PUMP INSTALLATION: 10/4/95

20. PUMP INSTALLATION:

   Submersible, Meyers, Capacity 25 gpm
   Motor type, H.P., Voltage, rpm Franklin Electric, 7.5 HP, 460V, 1760 RPM
   Pumping Head is 640 ft.
   Remarks:

   (If more space is needed, continue on back.)

Contractor (print): Roscoe Moss Hawaii, Inc.
Title: Manager
Signature:

For Driller's Use: Job Name ___________________ Job No. ____________
For Official Use: Well No. 2959-01
Longitude 157 59 23
Latitude 21 29 34

13/12/95 WCR Form
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<th>Time Measured</th>
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<th>Depth to Water (FT)</th>
<th>Vertical Displacement (FT)</th>
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NA = Not assigned yet by the DLNR.
3.5" DIAMETER STEEL PICKET FILLED WITH CEMENT

30  880

Cement Mound

18" DIAMETER AUGERED HOLE

12" DIAMETER STEEL SURFACE CASING

CEMENT BENTONITE INNER SEAL

6" DIAMETER CARBON STEEL BLANK CASING

10" DIAMETER HOLE DRILLED WITH AIR ROTARY

CEMENT BENTONITE INNER SEAL

1" PVC SOUNDER TUBE (BOTTOM 30' PERFORATED)

SILICA SAND FILTER PACK (#4 STANDARD SIEVE SIZE)

6" DIA. STAINLESS STEEL LOUVERED SCREEN (0.060" SLOT SIZE)

SAND SLough

(NOT TO SCALE)

+DATUM: MEAN SEA LEVEL

Harding Lawson Associates
Engineering and Environmental Services

Monitoring Well 2-5
Schofield Barracks
Island of Oahu, Hawaii

DRAWN: jcl
JOB NUMBER: 28339.09.02.12
APPROVED: 28339027 10
FILE: 19951002.1446
DATE: 9/95

PUMP SECTION ONLY.
Pump Installation Diagram for Monitoring Well 2-5
Schofield Barracks
Island of Oahu, Hawaii

**DEPT (FT)**  **ELEVATION (FT)**

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<td>810</td>
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**Datum: Mean Sea Level**

- **Fine Sand**
- **1" dia. SCH 80 PVC sounding tube**
- **1.5" dia. Steel discharge pipe**
- **Jacketed submersible**
- **Stainless steel safety cable**
- **Rubber torque arrestor**
- **Check valve**
- **Stainless steel electrical cable wire guard**
- **3.75" dia. Myers pump**
- **Pump intake**
- **3.75" dia. Franklin 7.5 horsepower electric motor**
- **Silica sand filter pack**
- **6" dia. Stainless steel louvered screen**
- **10" dia. hole drilled with air rotary**
- **Sand**
- **Slough**

(NOT TO SCALE)
APPLICATION FOR PERMIT

1. APPLICANT: (circle primary contact (a), (b), or (c))
   (a) WELL OWNER
   Firm/Name: U.S. Army
   Contact Person: Jon Fukuda
   Address: Schofield Barracks, Garrison
   Date ________ 
   Signature _________ 
   (b) LANDOWNER
   Firm/Name: SAME AS WELL OWNER
   Contact Person: 
   Address: 
   Date ________ 
   Signature _________ 

2. WELL LOCATION/NAME: Schofield Barracks-East Range/MW2-5 Island Oahu
   Address: East Range Road, Schofield Barracks, HI 96786
   Tax Map Key 7-6-01
   (Attach a USGS map, scale 1"=2000", and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:  
   □ Drill New Well  □ Deepen  □ Install New Pump
   □ Modify Existing Well  □ Redrill  □ Modify Pump
   □ Abandon/Seal *  □ Replace Pump
   * Be sure to complete and submit well abandonment report upon completion of work.

4. PROPOSED PUMP INFORMATION:  
   Rated Pump Capacity: 25 gallons per minute
   Pump Type: □ Deep Well Turbine
              □ Rotary Turbine
              □ Submersible
              □ Centrifugal
   Motor: □ Diesel
          □ Propeller
          □ Reciprocating
          □ Impulse
   If Pump Replacement, Existing Pump Capacity: _______ gallons per minute

5. PROPOSED USE:  
   □ Municipal (including hotels, stores, etc.)
   □ Military
   □ Domestic (individual, noncommercial water sys.)
   □ Industrial
   □ Irrigation (crop)
   □ Other (explain) _______

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 6 gallons per day
   (b) METHOD OF FLOW MEASUREMENT: □ Flow-meter  □ Open-pipe  □ Orifice Plate  □ Weir

7. PENDING ACTIONS: □ CDUA  □ SMA  □ EIS  □ EA  □ NONE  □ Other (explain)  
   Completion Date: 

8. REMARKS, EXPLANATIONS:  
   Well shall be used for monitoring of groundwater quality and for collecting groundwater elevation data.
   
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 water use data shall be submitted to the Commission; 4) such approval shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner ___________________  Landowner ___________________  Contractor ___________________
Signature ___________  Signature ___________  Signature ___________
Date ___________  Date ___________  Date ___________

For Official Use Only:  
For Official Use Only:  
Date Received  
Date Accepted  
Field Checked By  
Longitude ___________  Aquifer System Name ___________  
Latitude ___________  State Well No. ___________

110905 WCP Form
8. Remarks, Explanations (cont'd):

9. PROPOSED WELL SECTION

Elevation at top of casing
912 ft., ma

Cement Grout 586 ft.

Bentonite Seal 13 ft.

Rock Packing 211 ft.

Ground Elevation: 910 ft., ma

Solid Casing:
Material carbon steel
Length 625 ft.
Diameter 6 in.
Wall thickness 0.28 in.

Casing: □ Perforated □ Screen (louvered)
Material stainless steel
Length 150 ft.
Diameter 6 in.
Wall thickness 0.25 in.
Openings 2.4 sq. in./f.

Open Hole:
Length 0 ft.
Diameter in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (masl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.