WAIAWA—CRABBE WELL
(Well No. 2358—52)
Job Name: Gendrano-NAME 2358-52

A. OWNER: Buddy Gendrano
NAME: 2358-52

B. GENERAL LOCATION: Pearl City, Waiawa

C. DRILLING COMPANY: Roscoe Moss Company

D. TYPE OF RIG: Cable Tool
DRILLING COMPLETED: 6/90
DRILLER: J. Woerner

E. ELEVATION, msl: Top of drilling platform: approx 15 ft. Bench mark and method used to determine height of drilling platform above ground surface:

F. HOLE SIZE:
12 inch dia. to 70 ft. below drilling platform.
8 inch dia. to 75 ft. below drilling platform.

G. CASING INSTALLED:
8 in. I.D. x 25 ft. wall solid section to 50 ft. below drilling platform.
9 in. I.D. x 25 ft. wall perforated section to 70 ft. below drilling platform.

H. ANNULS: Grouted 0 ft. to 33 ft. below drilling platform.

Gravel packed 33 ft. to 70 ft. below drilling platform.

I. PERMANENT PUMP INSTALLATION:
- Pump type, make, serial no. Submersible, 27081216, Grundfos
Capacity: 20 g.p.m.
Motor type, H.P., voltage, r.p.m. 1 H.P., 230 V

Depth of pump intake setting: 33 ft. below Ground level
which elevation is 15 ft.

Depth of bottom of airline: which elevation is ft.

J. INITIAL WATER LEVEL: ft. below drilling platform. Date of measurement:

K. INITIAL CHLORIDE: ppm, total depth of well ft. below drilling platform

L. PUMPING TESTS:
Date: June 15, 1990

Start water level +17 ft. below R. P.
End water level +17 ft. below R. P.
Depth of well 75 ft. below R. P.


M. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Water Level, ft.</th>
<th>Rock Description &amp; Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0...to...8</td>
<td>to</td>
<td>Boulder Rocks</td>
</tr>
<tr>
<td>8...to...22</td>
<td>to</td>
<td>Black silt</td>
</tr>
<tr>
<td>22...to...24</td>
<td>to</td>
<td>Weathered Rock</td>
</tr>
<tr>
<td>24...to...33</td>
<td>to</td>
<td>Gray clay</td>
</tr>
<tr>
<td>33...to...50</td>
<td>to</td>
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<tr>
<td>50...to...60</td>
<td>to</td>
<td>Hard Rock</td>
</tr>
<tr>
<td>60...to...75</td>
<td>to</td>
<td>Loose Rock</td>
</tr>
</tbody>
</table>

N. REMARKS:

INSTRUCTIONS: Send three(3) copies to: Manager-Chief Engineer, Division of Water and Land Development, P. O. Box 373, Honolulu, Hawaii 96809.


FOR OFFICIAL USE

Latitude: 21° 23' 41"
Longitude: 157° 58' 51"
Well No.: 2358-52
**CHECKLIST**

**WELL CONSTRUCTION PERMIT**

**PUMP INSTALLATION PERMIT**

**WELL NAME or LOCATION:** Waialua - Cane

**WELL NUMBER:** 2358-52

**OWNER or OPERATOR:** Franklin + Jeanette Crabbe

**ADDRESS:** 94-378 Pupukea St.

Wai'anae, Hi 96797

**TELEPHONE (contact person):** Ron Nakatani Realty 671-8561 Ron/Sharon

**Date application received:** 10/19/89

**Date acknowledged receipt/request more info:** 10/23/89

**Date application accepted:**

**Suspense date (90 days):**

**Date filing fee deposited:** 10/23/89

**Application sent to following:**

<table>
<thead>
<tr>
<th>Dept. of Health</th>
<th>Date sent</th>
<th>Comments received</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10/26/89</td>
<td>10/26/89</td>
<td>11/21/89 12-4-89 (Final)</td>
</tr>
</tbody>
</table>

**Date agenda due:**

**Date submittal due:**

**Date submittal sent to applicant:**

**Date application **✓** approved or **disapproved:** 12-13-89

**Date applicant notified of decision:** 12-10-89

**REMARKS:**

10/23/89

- Well for domestic use.

- 2 duplex units on property 1/3

- bedrooms per unit = 12 people (?) or 4 service connections.

- No WUP required.
WELL CONSTRUCTION PERMIT

for

Waialua-Crabbe Well
Well No. 2358-52
Waialua, Oahu

TO: Franklin and Jeanette Crabbe
94-378 Pupupani Street
Waipahu, Hawaii 96797

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well No. 2358-52 within Tax Map Key: 9-6-02:6 for domestic use is approved, subject to the following conditions:

1. The Division of Water and Land Development (DOWALD) shall be notified (ph. 548-7619) before any work covered by this permit commences.

2. It is recommended that an annular space of at least 3 inches all around the casing be provided and that it be grouted from 0 to 40 ft. instead of from 0-25 ft. as proposed.

3. The proposed use shall not adversely affect existing legal uses and appurtenant rights in the area.

4. The source shall not be used to serve potable water unless properly tested and treated.

5. The following shall be submitted to DOWALD within 30 days after completion of the well:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) 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 record; including time, pumping rate, drawdown, chloride content, and water quality data.
6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management

DEC 18 1989
Date of Issuance

cc: USGS
Department of Health,
Drinking Water Program
Ground Water Protection Program
Honolulu Board of Water Supply
Ron Nakatsu Realty
December 4, 1989

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATION
WAIAWA-CRABBE WELL
STATE WELL NO. 2358-52
WAIAWA, OAHU

This letter is an addendum to our letter of November 6, 1989. In that letter, we commented that the applicant will be required to comply with the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems" if the source is to serve potable water to 25 or more persons at least 60 days of the year. We would like to offer the following additional comments:

1. We have extreme reservations about the use of this source for potable water because of the wastewater disposal practices found in this area. However, if the source will be used to serve potable water, we recommend that the source be used on a temporary basis only.

2. During the period that the well is serving potable water, we recommend that the applicant have weekly microbiological and annual nitrate testing performed for his own protection.
The Honorable William W. Paty  
Page 2  
December 4, 1989

Should you have any questions, please contact the Safe Drinking Water Branch at 543-8258.

Very truly yours,

[Signature]

JOHN C. LEWIN, M.D.  
Director of Health

cc:  Franklin and Jeanette Crabbe  
94-378 Pupupani Street  
Waipahu, Hawaii  96797
December 11, 1989

Mr. Franklin Crabbe  
Ms. Jeanette Crabbe  
94-378 Pupupani Street  
Waipahu, Hawaii 96797

Dear Mr. Crabbe & Ms. Crabbe:

The Commission on Water Resource Management will be acting on your permit application for Waiawa-Crabbe Well at its regular meeting on December 13, 1989, at 2:00 p.m. in Room 132, Kalanimoku Bldg., 1151 Punchbowl Street, Honolulu:

The application will be included on the agenda as Item 11 (attached).

You or your representative are invited to attend the meeting.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:ko
Encl.
cc:  Ron Nakatsu Realty
December 4, 1989

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: WELL CONSTRUCTION PERMIT APPLICATION
          WAIAWA-CRABBE WELL
          STATE WELL NO. 2358-52
          WAIAWA, OAHU

This letter is an addendum to our letter of November 6, 1989. In that letter, we commented that the applicant will be required to comply with the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems" if the source is to serve potable water to 25 or more persons at least 60 days of the year. We would like to offer the following additional comments:

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The Honorable William W. Paty
Page 2
December 4, 1989

Should you have any questions, please contact the Safe Drinking Water Branch at 543-8258.

Very truly yours,

JOHN C. LEWIN, M.D.
Director of Health

cc: Franklin and Jeanette Crabbe
    94-378 Pupupani Street
    Waipahu, Hawaii 96797
Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource
Management
Department of Land and Natural
Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Tagomori:

Subject: Your Letter of October 23, 1989 Regarding the Waiawa-Crabbe Well Construction Permit Application

We do not have any objections to the proposed domestic well (Well No. 2358-52).

Very truly yours,

KAZU HAYASHIDA
Manager and Chief Engineer
November 6, 1989

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: WELL CONSTRUCTION PERMIT APPLICATION
WAIAWA-CRABBE WELL
STATE WELL NO. 2358-52
WAIAWA, OAHU

Thank you for the opportunity to review the subject document. We have reviewed the application and have the following comments to offer:

1. The permit application indicates that the well will be for domestic use. If the well is to serve 25 or more individuals at least 60 days per year or will have a minimum of 15 service connections, the applicant will be required to comply with the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems."

2. Section 11-20-29 of Chapter 20 requires that a new source of potable water serving a public water system be approved by the Director of Health prior to its use. Such an approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.
If you should have any questions, please contact the Safe Drinking Water Branch at 543-8258.

Very truly yours,

[Signature]

JOHN C. LEWIN, M.D.
Director of Health

cc: Franklin & Jeanette Crabbe
    94-378 Pupupani Street
    Waipahu, HI 96797
October 23, 1989

Franklin & Jeanette Crabbe
94-378 Pupupani Street
Waipahu, Hawaii 96797

Dear Franklin & Jeanette Crabbe:

We acknowledge receipt of your application and filing fee for Waiawa-Crabbe Well (Well No. 2358-52) at Tax Map Key: 9-6-2:6, Waiawa, Oahu.

My staff is processing the application and will call you should there be any questions.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:bm
cc: Ron Nakatsu Realty
Honorable John C. Lewin, M.D.
Director of Health
Department of Health
1250 Punchbowl Street
Honolulu, Hawaii 96813

Attention: Mr. Thomas Arizumi, Drinking Water Branch

Dear Dr. Lewin:

Well Construction Permit Application

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168-12(c), we are sending you a copy of the following permit application:

Waiawa-Crabbe Well (Well No. 2358-52)

Please submit your comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Manabu Tagomori at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
October 23, 1989

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96843

Dear Mr. Hayashida:

We are sending you a copy of the following permit application for your review and comments:

Waiawa-Crabbe Well (Well No. 2358-52)

Please submit any comments to us, orally or in writing, within three weeks from the date of this letter.

If you have any questions, please contact Ed Sakoda at 548-7543.

Sincerely,

[Signature]

MANABU TAGOMORI
Deputy Director

ES:bm
Enc.
October 23, 1989

Franklin & Jeanette Crabbe
94-378 Pupupani Street
Waipahu, Hawaii 96797

Dear Franklin & Jeanette Crabbe:

We acknowledge receipt of your application and filing fee for Waiawa-Crabbe Well (Well No. 2358-52) at Tax Map Key: 9-6-2:6, Waiawa, Oahu.

My staff is processing the application and will call you should there be any questions.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:bm
cc: Ron Nakatsu Realty
TO ____________________________

DATE ____________________________

TIME ____________________________

WHILE YOU WERE OUT

MARY SHAM

Phone 671-8561

PHONE 2 Pump units (4)

WILL RETURN CALL

RETURN YOUR CALL

Message

2 Pump units (4) are used.

5 Santa Clinic / 15 individuals

TO SEE YOU

TELEPHoned

PLEASE CALL

WANTS TO SEE YOU

WHILE YOU WERE OUT

WILL CALL AGAIN

of Hawaii

R RESOURCE MANAGEMENT

I and Natural Resources

Resource Management

ACTION FOR

application with attachments to the Division of Water and Land

must be accompanied by a non-refundable filing fee of $25.00

(Filing fee waived for government agencies.) If necessary, phone

-9-6-2-6

carl City, HI 96782

10 property tax map showing well location

daries.)

LANDOWNER

Contact Person Ron Nakatsu

Address 94-378 Pupupani St.

Waipahu, HI 96797

Phone 671-8561

Firm Name Franklin & Jeannette Crabbe

3. PROPOSED CONTRACTOR FOR: ☒ Well Drilling ☐ Pump Installation

Name Roscoe Moss Co.

Address 830 Ahua St.

Honolulu, HI

Contractor's License No. C-2101

Phone 839-6888

4. PROPOSED WORK

☒ Drill New Well ☐ Redrill

☐ Alter ☐ Seal

☒ Install New Pump ☐ Replace Pump

☐ Abandon ☐ Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

☒ Municipal (including hotels, stores, etc.) ☐ Military

☒ Domestic (individual, noncommercial water systems) ☐ Industrial

☐ Irrigation (specify) ☐ Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 15,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: ☒ Vertical Turbine ☐ Submersible ☐ Centrifugal

Motor: ☐ Diesel ☐ Gas ☐ Electric: __________ Rated Horsepower

Rated Pump Capacity __________ gallons per minute (gpm)

9-6-2-6

carl City, HI 96782

10 property tax map showing well location
daries.)

LANDOWNER

Contact Person Ron Nakatsu

Address 94-378 Pupupani St.

Waipahu, HI 96797

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Firm Name Franklin & Jeannette Crabbe

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☒ Domestic (individual, noncommercial water systems) ☐ Industrial

☐ Irrigation (specify) ☐ Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 15,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: ☒ Vertical Turbine ☐ Submersible ☐ Centrifugal

Motor: ☐ Diesel ☐ Gas ☐ Electric: __________ Rated Horsepower

Rated Pump Capacity __________ gallons per minute (gpm)
Briefly describe the proposed work:

Drill 10" diameter bore hole to 80 ft. Install casing gravel pack and grout the annulas. Test the well at a rate of 100 G.P.M.

PROPOSED SECTION OF WELL

Elevation at top of casing + 41 ft., msl.

Cement Grout 25 ft.

Hole Dia. 10 in.

Total Depth 80 ft.

Rock Packing 55 ft.

Ground Elev., approx. +40 ft., msl*

Solid Casing:
- Material: Steel
- Length: 40 ft.
- Diameter: 6 in.
- Wall thickness: 0.312 in.

Casing: /Perforated /Screen
- Material: Steel
- Length: 40 ft.
- Diameter: 6 in.
- Wall thickness: 0.312 in.
- Openings: 29 sq. in./L.F.

Open Hole:
- Length: None
- Diameter: ********** in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
<table>
<thead>
<tr>
<th>Pay</th>
<th>Twenty Five and 00/100 Dollars</th>
</tr>
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<tbody>
<tr>
<td>To the order of</td>
<td>Dept. of Land &amp; Natural Res.</td>
</tr>
<tr>
<td></td>
<td>10/7/89</td>
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<td></td>
<td>Well Construction Permit filing fee</td>
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<td>Wainamu-Grabbe Well (Well No. 2358-57)</td>
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<tr>
<td></td>
<td>John P. Kaneko</td>
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<td>1595</td>
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WAIAWA—CRABBE WELL
(Well No. 2358—52)