February 19, 2002

Mr. Gordon Tribble
U.S. Geological Survey
677 Ala Moana Blvd., Suite 415
Honolulu, HI 96813

Dear Mr. Tribble:

Well Completion Report for Well No. 2400-07

We received your Well Completion Report Part I for the Waikele Observation (Well No. 2400-07) on December 23, 1999 and acknowledge that it is complete. We understand that the casing was extended and the ground surface raised around the casing during construction of the Waikele development and the original benchmark is no longer usable. Please inform us of the new benchmark elevation for our records.

If you have any questions, please contact Lenore Nakama of the Commission staff at 587-0218.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ss
MEMORANDUM FOR THE RECORD

FROM: Lenore Nakama
SUBJECT: Elevation Survey for 2400-07

10/10/01 Spoke w/Delwin Oki of USGS. They still have not resurveyed since they extended the casing (bench mark was top of old casing). When they resurvey, they will submit the elevation data to us.
Ms. Linnel T. Nishioka  
Deputy Director  
State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resources Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Nishioka:

Enclosed please find the Well Completion Reports for the Kohala Observation Well (7448-06), the Waikele USGS Observation Well (2400-07), and the Kaeie Mauka Well (4708-02).

We expect to submit the final Well Completion Report for the Waiaka Tank Exploratory Well (6141-01) in the next two weeks.

If you have any questions, please contact me or Todd Presley at 522-8290.

Sincerely,

Gordon W. Tribble  
District Chief

Enclosures
Well Completion Report

State of Hawaii
Commission on Water Resource Management
Department of Land and Natural Resources

Well Construction Report

(Check Appropriate Box)  □ Well Construction  □ (Permanent) Pump Installation

Instructions: Please print or type and submit completed report within 30 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at 587-0225, or 1-800-468-4644 Extension 70225.

1. State Well No.: 2400-07
2. Location/Address: Waimanalo, Town of Pearl City, West Oahu

Part I. Well Construction Report

4. Name of driller who performed work: John Siuver
5. Type of rig/construction: AIR ESTATE / OPEX
6. Date(s) Well Construction and pump tests (if any) completed: 1/26/96
7. GROUND ELEVATION (referred to mean sea level, msl): ~148 ft.
   Well Bench Mark (description/location): ____________________________
   Elevation(msl): ______ ft.
8. DRILLER'S LOG: Please attach geologic log (if available or if required by permit)
   Depths (ft.) Rock Description, Water Level, Dates, etc. Depths (ft.) Rock Description, Water Level, Dates, etc.
   ______ to ______
   ______ to ______
   ______ to ______
   (If more space is needed, continue on back)

9. Total depth of well below ground: 419 ft.
10. Hole size: 12.25 inch dia. from 0 ft. to 119 ft. below ground
    11.5 inch dia. from 119 ft. to 419 ft. below ground
    7.5 inch dia. from ______ ft. to ______ ft. below ground
11. Casing installed: 5 in. I.D. x 1/4 in. wall solid section to 119 ft. below ground
    _____ in. I.D. x ______ in. wall perforated section to ______ ft. below ground
    Casing Material/Slot Size: ________________________________
12. Annulus: Grouted from ______ ft. below ground to ______ ft. below ground
    Gravel packed from ______ ft. below ground to ______ ft. below ground
13. Initial water level: ______ ft. below ground
14. Initial chloride: ______ ppm
15. Initial temperature: ______ °F
16. PUMPING TESTS: Reference Point (R.P.) used: ________ which elevation is ______ ft.
    (1) Step-Drawdown Test Date ________ (2) Long-term Aquifer Test Date ________
    Start water level ______ ft. below R.P.  Start water level ______ ft. below R.P.
    End water level ______ ft. below R.P.  End water level ______ ft. below R.P.
17. Aquifer Pump Test Procedures data & graphs (1/9/96 LTAT Form) attached?  Yes  No
18. As-built drawings attached?  Yes  No
19. Other remarks/comments: (On back of this form) ________________

Well Drilling Contractor (print) Gordon TRUDGE C-57 Lic. No. ____________
Signature ____________________________ Date 12/22/96

Surveyor (print) Gordon TRUDGE Lic. No. ____________
Signature ____________________________ Date 12/22/96

Applicant (print) ____________________________
Signature ____________________________ Date 12/22/96
PART II. (PERMANENT) PUMP INSTALLATION REPORT

20. Pump Installation Company:

21. Name of person performing work:

22. Date Pump Installation Completed:

23. PUMP INSTALLATION:
   - Pump Type, Make, Serial No.: ________________________________
   - Capacity: ______ gpm
   - Motor type, H.P., Voltage, rpm:
   - Depth of Pump Intake Setting _______ ft. below _______, which elevation is ________ ft.
   - Depth to bottom of airline _______ ft. below _______, which elevation is ________ ft.
   - Pumping Head is _______ ft. Type of flow meter: ________________ which measures in ________

24. As-built drawings attached? ___ Yes ___ No

25. Other remarks/comments: (See below)

Pump Installation Contractor (print) __________________________ C-57 Lic. No. __________________________

Signature __________________________ Date __________________________

Applicant (print) __________________________

Signature __________________________ Date __________________________

8. (cont'd) DRILLER'S LOG (cont'd):

<table>
<thead>
<tr>
<th>Water Level Depth (ft.)</th>
<th>Rock Description, Remarks, Dates</th>
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<tbody>
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19. & 25. Remarks:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
REMARKS

USGS Waikele Observation Well D, 3-2400-07

A series of observation wells were drilled for the Regional Aquifer System Analysis (RASA) project in 1986. Observation well D was drilled close to the H-1 freeway.

In 1991, excavation began for the Waikele development. Hole D was in an area where the grade was to be raised nearly 20 feet. To save the well, 19 feet of 8 inch casing was added to the well. The ground surface was raised around the extension.

A new measuring point has not been leveled or a water level taken since the extension of the casing.
The wells highlighted need WCR's, we noticed dream via a letter dated 10/28/96 (no response) on all 4. Others were submitted, but we didn’t WCR WCR accept or accommodate.

<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Applicant</th>
<th>Type</th>
<th>Rcvd</th>
<th>Accept</th>
<th>Approved</th>
<th>WCP Issued</th>
<th>Accepted</th>
<th>PIP Part 1 Issued</th>
<th>Accepted</th>
<th>PIP Part 2 Issued</th>
<th>Accepted</th>
<th>gpm</th>
<th>mgd</th>
<th>Use</th>
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<tbody>
<tr>
<td>0437-01</td>
<td>Olaa-Mt. View</td>
<td>U.S. Geological Survey</td>
<td>WELL</td>
<td>3/28/94</td>
<td>6/9/94</td>
<td>6/9/94</td>
<td>5/1/97</td>
<td>9/16/97</td>
<td>WCR WCR submitted not accepted (def-)</td>
<td>0.00</td>
<td>OBS</td>
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<tr>
<td>3255-01</td>
<td>Kohala Expl.</td>
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<td>WCR WCR rejected</td>
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<td>9/16/97</td>
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Total for HAWAII: 13

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<th>Island of KAUAI</th>
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<tr>
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<tr>
<td>756-01</td>
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<td>748-01</td>
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</table>

Total for KAUAI: 8

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<thead>
<tr>
<th>Island of OAHU</th>
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<tr>
<td>Well No.</td>
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<tr>
<td>Well No.</td>
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<tr>
<td>8-7345-03</td>
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<tr>
<td>8-7347-03</td>
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<tr>
<td>8-7448-06</td>
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</tbody>
</table>

**Note:** Lined Out Wels Were Permitted But Never Drilled.

- Canceled In Volcanic Drst and Thrown Off of Well Map.
UNITED STATES DEPARTMENT OF THE INTERIOR

GEOPHYSICAL SURVEY
WATER RESOURCES DIVISION
677 Ala Moana Boulevard, Suite 418
Honolulu, Hawaii 96813

FAXIMILE COVER SHEET

DATE: 9/2/91
TO: Calema Bauer
COMPANY NAME: 
FROM: Gordon Trimble
NO. OF PAGES INCLUDING COVER SHEET: 6

REMARKS:

Calema,

This is what I have on the available well modification. Can we call if you have any
more questions.

OFFICE PHONE NO: POTS: 551-2663 OR COMMERCIAL: (808) 541-2663
FAX PHONE NO: POTS: 551-3611 OR COMMERCIAL: (808) 541-3611

COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Division of Water Resource Management

APPLICATION FOR: Well Construction or Pump Installation PERMIT

1. WELL LOCATION NAME: USGS OBSERVATIONAL WELL B
   Address: WAIKELE, WAIPAHU
   Tax Map Key: W-69-11-13
   (Refer to State Map, space "WAIKELE", and a property tax map showing well location referenced to established property boundaries)
   Island: Oahu

2. (M) WELL OWNER: (L) LANDOWNER:
2. (a) WELL OWNER: 
   Name: William Meyer
   Address: 668 Alakamua St.
   Phone: 951-6880
   Water Test: Yes

3. PROPOSED CONTRACTOR: 
   Name: U.S. Geological Survey
   Address: 333 S. Front St.
   Phone: 951-6880

4. PROPOSED WORK: 
   [Box checked: Recharge]
   [Box unchecked: Drill New Well, Bed, Abandon, Install New Pump, Abandon Pump, Existing Pump, Deep Water Well, Other]

5. PROPOSED USE: 
   [Box checked: Military]
   [Box unchecked: Commercial, Industrial, Municipal, Irrigation, Other (specify), Observation]

6. PROPOSED AMOUNT OF WITHDRAWAL: None

7. PROPOSED PUMP INFORMATION: 
   Pump Type: 
   [Box checked: Submersible]
   [Box unchecked: Deep, Other]
   Horsepower: 
   Gallons per Minute: 
   Horsepower of a head pumped of

Well Owner: Charles R. Hunt
Signature: [Signature]
Date: 1-17-84

Landowner: [Signature]
Date: 1-17-84

For Office Use Only: 
Received Date: [Date]
Received By: [Signature]
Received From: [Signature]
Received Unit: [Unit]
Received By: [Signature]
Received Date: [Date]
Briefly describe the proposed work:

**RECONSTRUCT WELD HEAD TO FLUSH, AT GRADE CONFIGURATION**

**WITH STEEL LOCKING WELL COVER, CUT EXISTING STEEL CASING TO GRADE. OR WELD IN STEEL CASING RISER IF FINAL GRADE WILL BE HIGHER THAN PRESENT. PLACE PVC PIPE SLEEVE AROUND RISER AND FILL ANNUAL WITH CEMENT GROUT, IMPLACRE LOCKING WELL COVER WITHIN GROUT. CAP WELL AND LOCK COVER.**

**PROPOSED SECTION OF WELL**

*Estimated elevation at time of filing application. Final elevation (ft) by a surveyor licensed by the State must be submitted at time of construction.*
TO: United States Geological Survey
677 Ala Moana Blvd., Suite 415
Honolulu, HI 96813

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to alter Waieke-USGS Observation Well (Well No. 2400-07) is approved, subject to the following conditions:

1. The Division of Water Resource Management (DWRM), P.O. Box 373, Honolulu, HI 96809, shall be notified, in writing, before any work by this permit commences.

2. The well shall be used for observation purposes only.

3. The following shall be submitted to DWRM within 30 days after completion of the well:
   b. As-built sectional drawing of the well.
   c. Periodic reports of observation results.

4. The applicant shall comply with all applicable laws, rules, and ordinances.
WELL MODIFICATION PERMIT
Well No. 2400-07

5. The work proposed in the permit application shall be completed within 24 months from the date of permit issuance.

[Signature]
WILLIAM W. PATY

Date of Issuance
8-1-91

Enc. (Well Completion Report form)
cc: Department of Health
    Safe Drinking Water Branch
    Ground Water Protection Program
    Honolulu Board of Water Supply
Mr. William Paty  
Dept. of Land and Natural Resources  
Division of Water Resource Management  
P. O. Box 373  
Honolulu, Hawaii  96809

Dear Mr. Paty:

We have received the approved Well Modification Permit for Waikele Well No. 2400-07. By conveyance of this letter, the U. S. Geological Survey conveys its intention to start alteration of this well (Well No. 2400-07). We agree to comply with the conditions set forth in the Well Modification Permit, and will submit details of the alteration within 30 days of the completion of work.

Thank you for your assistance and cooperation.

Respectfully,

Gordon Tribble  
Hydrologist
Manabu - I spoke with Gordon Tritle. They will weld a 19" section coming onto the top of the riser coming to accommodate the change in topography when the golf course is built. The riser will then be cut flush with the new grade level.

G. AKITA
L. Nanbu
E. Sakoda
G. Matsumoto
E. Lau
L. Chang
Y. Shiroma

FOR YOUR:
--- Approval
--- Signature
--- Information

PLEASE:
--- See Me
--- Take Action By
--- Route to Your Branch
--- Review & Comment
--- Draft Reply
--- Acknowledge Receipt
--- Xerox copies
--- File
--- Mail

REMARKS:
Print m on
9/3
Mr. William Paty  
Dept. of Land and Natural Resources  
Division of Water Resource Management  
P. O. Box 373  
Honolulu, Hawaii  96809  

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[Signature]

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Hydrologist
TO: United States Geological Survey  
677 Ala Moana Blvd., Suite 415  
Honolulu, HI 96813

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2. The well shall be used for observation purposes only.

3. The following shall be submitted to DWRM within 30 days after completion of the well:
   b. As-built sectional drawing of the well.
   c. Periodic reports of observation results.

4. The applicant shall comply with all applicable laws, rules, and ordinances.
5. The work proposed in the permit application shall be completed within 24 months from the date of permit issuance.

Date of Issuance: 8-1-91

Enc. (Well Completion Report form)

cc: Department of Health
    Safe Drinking Water Branch
    Ground Water Protection Program
    Honolulu Board of Water Supply
**APPLICATION FOR:** \(\square\) Well Construction or \(\square\) Pump Installation PERMIT

**Instructions:** Please print or type and send completed application with attachments to the Div. of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 548-7643, Hydrology/Geology Section for assistance.

### 1. WELL LOCATION/NAME:
- **U.S. S. OBSERVATION WELL**
  - Island: **OAHU**
  - Address: **WAILEE**
  - Tax Map Key: **9-4-07-13**

### 2. (a) WELL OWNER:
- **Firm Name:** U.S. GEOLOGICAL SURVEY
- **Contact Person:** GORDON TRIBBLE
- **Address:** 677 ALA MOKA AUA BLVD. SUITE A15
- **Honolulu**
- **Ph:** 541-2655

### 2. (b) LANDOWNER:
- **Firm Name:** AMFAC/JMB HAWAII INC
- **Contact Person:** AUSTIN SMITH
- **Address:** 700 BISHOP ST Box 3260
- **Honolulu**
- **Ph:** 945-8111

### 3. PROPOSED CONTRACTOR:
- **Name:** U.S. GEOLOGICAL SURVEY
- **Contractor’s License No.:**
- **Address:** 677 ALA MOKA AUA BLVD. SUITE A15
- **Honolulu**
- **Ph:** 541-2655

### 4. PROPOSED WORK:
- **Drill New Well**
- **Deepen**
- **Redrill**
- **Install New Pump**
- **Replace Pump**
- **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 supply)
- **Industrial**
- **Irrigation** (specify)
- **Other** (specify)

### 6. PROPOSED AMOUNT OF WITHDRAWAL:
- **0** gallons per day

### 7. PROPOSED PUMP INFORMATION:
- **NO PUMP**
- **OBSERVATION WELL**

- **Motor:**
  - **Gas**
  - **Electric, at a rated horsepower of**

**U.S. GEOLOGICAL SURVEY**

**GORDON TRIBBLE**

**Signature:**

**Date:** 30, 1991

**AMFAC/JMB HAWAII INC**

**Signature:**

**Date:** 7/24/91

For Official Use Only:

- **Field Checked By:**
- **Date:**

- **Latitude:** 21° 24.13’
- **Longitude:** 158° 00.18’
- **Hydrologic Unit:** 3-2400-07
- **State Well No.:** 9-4-07-13
Briefly describe the proposed work:

**RECONSTRUCT WELL HEAD TO FLUSH AT-GRADE CONFIGURATION.**

**CUT OR EXTEND STEEL CASING AS NECESSARY, PLACE PVC SLEEVE AROUND STEEL CASING AND POUR GROUT SEAL WITH FLUSH MOUNT PROTECTIVE WELL COVER.**

**PROPOSED SECTION OF WELL**

Elevation at top of casing: 128.47 ft., msl.

Cement Grout: 100 ft.

Hole Diameter: 12 1/4 in.

Total Depth: 100 ft.

Rock Packing: 0 ft.

Solid Casing:

- Material: STEEL
- Length: 100 ft.
- Diameter: 8 in.
- Wall thickness: 3/16 in.

Casing: □ Perforated □ Screen

- Material: 
- Length: 
- Diameter: 
- Wall thickness: 
- Openings: sq. in./L.F.

Open Hole:

- Length: 400 ft.
- Diameter: 7 5/8 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.