Ms. Patricia Wagner  
Project Manager  
Chevron Products Company  
Hawaii Refinery  
91-480 Malakole Street  
Kapolei, Hawaii 96707-1807

Dear Ms. Wagner:

Ground-Water Monitoring and Reporting of Water Use for Chevron Wells at Hawaii Refinery

The Commission on Water Resource Management has been monitoring ground-water conditions throughout the Ewa Plain for the past two years. Your well, D2-01, located in the parking lot of your facility has been used as a monitoring site. Every three or four months we measure depth to water and measure specific conductance for the upper twenty feet of the well. These data provide baseline data for changes that may occur due to cessation of sugar cultivation in the Kapolei area, and water level changes that may occur from enlargement of the Barbers Point Deep Draft Harbor. The table below are data collected since our monitoring program began.

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<tr>
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<td>6/14/95</td>
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<tr>
<td>3/11/95</td>
<td>2,530*</td>
<td>3,220**</td>
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</table>

*New inner tube will not allow probe to go deeper than five feet.  
**Depth -5 feet
We request permission to install several pressure transducer data loggers in well D2-01 (Chevron number) and in any other well that can be made available for ground-water level monitoring.

Attached to this letter is a U.S. Geological Survey map showing the location of wells that are in the state's database. As you can see, well D2-01 is not in our database. Numbering protocol would make this well 1906-07. We have no information regarding this well's physical characteristics such as depth, casing length, etc. If you are able to provide these data and any other well locations on your property with corresponding data, please contact our office.

We also have in our database information regarding your wells 1806-06 and 1907-02. Pump capacities are 1,460 and 1,572 gallons per minute (gpm) respectively. Are these wells, or any other wells currently being used? If total pumpage exceeds 50,000 gallons per month, then by our Rules, your pumpage needs to be reported to our office on a monthly basis. We can supply reporting forms to you.

Also attached to this letter is a draft copy of the report "Reevaluation of the Ground-Water Resources and Sustainable Yield of the Ewa Caprock Aquifer" which you requested.

If you have any questions regarding our requests or the data presented, please contact Glenn Bauer of my staff at 587-0263.

Sincerely

RAE M. LOUI
Deputy Director

GB:fc

Attach.
Mr. Marshall A. McCormick  
CHEVRON USA, Inc.  
P.O. Box 29789  
Honolulu, HI 96820  

Dear Mr. McCormick:

Warning of Potential Water Shortages  
Ewa Caprock Water Management Area

The Commission has recently approved additional temporary water use permits in the Ewa Caprock Water Management Area. As a part of these approvals, the Commission has directed staff to issue a formal warning of potential future ground water shortages in this water management area to all other existing water use permittees.

The reason for concern is that as urbanization continues to replace existing sugarcane, there is potential for the caprock water to increase beyond usable brackish limits unless the irrigation recharge supplied to the caprock by Oahu Sugar Company (OSCo.) is replaced by some other means. It is possible that by 1995, recharge from sugarcane irrigation may completely cease.

Staff is presently working on the Ewa Caprock Regional Plan which is, in part, an effort to bring about alternative sources to supply non-potable demands in the Ewa region. This effort is to supplement and provide a back-up non-potable source to the caprock aquifer. If you are interested in participating in this regional plan, please contact us.

Staff is also requesting all permittees, who have not done so already, to submit a water shortage plan. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Ewa Caprock Ground Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required by law to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please contact Roy Hardy at 587-0274.

Sincerely,

RAE M. LOUI
Deputy Director

RH:ko
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Chevron U.S.A. Inc., Application for a Water Use and a
Well Construction/Pump Installation Permit
Barbers Point-Chevron Fire Protection Well, Barbers Point, Oahu

Applicant: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, HI 96707-1883

Landowner: Same

Action Requested: Approval of a water use and a well construction/pump installation permit to use 1,525 gallons per minute (2.189 mgd) of saline water from the well (Well No. 1907-02) to supplement the Chevron Oil Refinery fire protection system.

Source of Water Supply: Shallow, seaward, saline portion of the Caprock Aquifer, Pearl Harbor Water Management Area.

Project Location: The proposed well will be located at Campbell Industrial Park at Tax Map Key: 9-1-14:10, Oahu.

Well Description:

- Ground elevation: 4.5 ft.
- Casing diameter: 36-inches
- Solid casing depth: 5 ft.
- Screen casing depth: 25 ft.
- Open hole: 5 ft.
- Total depth: 30 ft.
- Grouted annulus: 5 ft.
- Pump capacity: 1,525 gpm

Impact on Surrounding Wells: The well will only be used for fire fighting and periodic testing. No adverse impacts are expected.

Water Availability: The well is located in the Malakole Sector of the Caprock Aquifer. Sustainable yield of the brackish portion of the aquifer is estimated at less than 1.0 mgd. However, the well will draw water from the shallow, seaward, saline portion of the caprock which is a separate aquifer from the Malakole Sector.
Chairperson and Members  
Commission on Water Resource Management  
February 13, 1991

Public Notice: In accordance with DLNR Administrative Rules, a public notice was published in the Star Bulletin on January 4 and 11, 1991. In addition, copies of the public notice were sent to the Mayor's office, the County Council, the Department of Health, the Department of Hawaiian Home Lands, the Office of Hawaiian Affairs, Oahu Sugar Company, Campbell Estate, United States Geological Survey, and the Honolulu BWS. Written objections to the proposed permit were to be submitted to the Commission by January 28, 1991. There have been no objections to the project.

RECOMMENDATION:

That the Commission approve the issuance of a water use and a well construction/pump installation permit to Chevron U.S.A. to use 1,525 gallons per minute of saline water for fire protection, subject to the following conditions:

1. The water use authorized by the permit shall be for the reasonable-beneficial use described in the permit.

2. The use shall not adversely affect existing or future legal uses in the area.

3. Modification of any permit condition shall be approved by the Commission.

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

5. The permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within 24 months from the date of permit issuance.

Respectfully submitted,

KAZUO G. AKITA  
Manager-Chief Engineer

WILLIAM W. PATY, Chairperson
Referring to the original 25 mgd sustainable yield for the area, Mr. Cox recalled staff was to prepare a revised figure for the area by the end of 1990. Mr. Tagomori stated that staff was briefed by the consultants in December and that they had since completed the report. Copies were readied for circulation for the Commission's review. A briefing will be held for the Commission after they have a chance to review the report.

Mr. Cox asked verification that a public hearing would also need to be held if the sustainable yield figure was changed.

Mr. Tagomori said that was correct but at the moment they would like to see what the consultants had reported on the re-study.

Mr. Penn also submitted testimony on this application (see attached). He commented that he could not find the well listed in the Oahu Water Development Plan.

Mr. Cox stated this was an existing well and the permit was just requesting an increase of use and should be shown on the records of wells. He commented that when the Commission approved the Plans, it was stated that there were changes that would need to be made/added. The State Legislature approved monies to build the desalting plant and to experiment and it appeared to be a good project for the future of the island and its water supply.

Unanimously approved as amended (Fujimura/Chun).

ITEM 7 CHEVRON U.S.A. INC., APPLICATION FOR A WATER USE AND A WELL CONSTRUCTION/PUMP INSTALLATION PERMIT, BARBERS POINT—CHEVRON FIRE PROTECTION WELL, BARBERS POINT, OAHU

Unanimously approved (Cox/Chun).

ITEM 8 MAUNA LANI RESORT, INC., APPLICATION FOR WELL CONSTRUCTION/PUMP INSTALLATION PERMITS, MAUNA LANI SALT WATER WELLS 1 TO 4, SOUTH KOHALA, HAWAII

Deferred for action pending contested case proceedings.

ITEM 9 MAUI FIRST ASSEMBLY OF GOD APPLICATION FOR A WELL CONSTRUCTION/PUMP INSTALLATION PERMIT, PUUNENE—FIRST ASSEMBLY WELL, PUUNENE, MAUI

Unanimously approved (Chun/Lewin).

ITEM 10 COUNTY OF MAUI APPLICATION FOR A PUMP INSTALLATION PERMIT, WAIEHU GOLF COURSE WELL, WAIEHU, MAUI

Referring to the 90% scrutiny of the lao Aquifer (as referenced), Dr. Lewin asked how staff verifies that the alluvial aquifer is not contiguous or contained. If there is any connection it could generate more concern on the lao Aquifer.

Mr. Sakoda said well logging information is on file which show it is in an alluvial aquifer and it never hit the basalt aquifer. From the logs of the well and the quality of the water, staff is certain that it is not in the basal aquifer and it would not be part of the 20 mgd.
CHECKLIST for WATER USE PERMITS

WATER MANAGEMENT AREA:    Pearl Harbor

WELL OWNER:
Firm Name    Chevron U.S.A. Inc.
Contact Person    V.A. Carvalho
Address    91-480 Malakole St
Phone

LANDOWNER:
Firm Name    Same
Contact Person
Address
Phone

SOURCE NAME or LOCATION:    Barbers Pt - Chevron Fire Protec. Well

WELL NUMBER:    1907-02

Date application received              12-21-90
Date acknowledged receipt/request more info
Date application accepted              
   Suspense date (no hearing = 90 days)   
   Suspense date (hearing = 180 days)    
Date application filing fee deposited

Application sent to following:

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Dates of Public Notice: and
Suspense date for objections
Date of hearing, if any

Date agenda due
Date submittal due
Date submittal sent to applicant

Date application approved or disapproved
Date applicant notified of decision

REMARKS:    

* Ballou 7-14CP, 1-10-91
  Keala - Capital Int
  Meyer - USGS
Referring to the original 25 mgd sustainable yield for the area, Mr. Cox recalled staff was to prepare a revised figure for the area by the end of 1990. Mr. Tagomori stated that staff was briefed by the consultants in December and that they had since completed the report. Copies were readied for circulation for the Commission's review. A briefing will be held for the Commission after they have a chance to review the report.

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Unanimously approved as amended (Fujimura/Chun).

ITEM 7 CHEVRON U.S.A. INC., APPLICATION FOR A WATER USE AND A WELL CONSTRUCTION/PUMP INSTALLATION PERMIT, BARBERS POINT—CHEVRON FIRE PROTECTION WELL, BARBERS POINT, OAHU

Unanimously approved (Cox/Chun).

ITEM 8 MAUNA LANI RESORT, INC. APPLICATION FOR WELL CONSTRUCTION/PUMP INSTALLATION PERMITS, MAUNA LANI SALT WATER WELLS 1 TO 4, SOUTH KOHALA, HAWAII

Deferred for action pending contested case proceedings.

ITEM 9 MAUI FIRST ASSEMBLY OF GOD APPLICATION FOR A WELL CONSTRUCTION/PUMP INSTALLATION PERMIT, PUUNENE—FIRST ASSEMBLY WELL, PUUNENE, MAUI

Unanimously approved (Chun/Lewin).

ITEM 10 COUNTY OF MAUI APPLICATION FOR A PUMP INSTALLATION PERMIT, WAIEHU GOLF COURSE WELL, WAIEHU, MAUI

Referring to the 90% scrutiny of the lao Aquifer (as referenced), Dr. Lewin asked how staff verifies that the alluvial aquifer is not contiguous or contained. If there is any connection it could generate more concern on the lao Aquifer.

Mr. Sakoda said well logging information is on file which show it is in an alluvial aquifer and it never hit the basal aquifer. From the logs of the well and the quality of the water, staff is certain that it is not in the basal aquifer and it would not be part of the 20 mgd.
FACSIMILE TRANSMITTAL PAGE

Please deliver the following pages to:

Name: Marshall McCormick
Company: Chevron USA
From: Ed Sakada
Date: 2-7-91 Time: 3:15 pm

Message: 


Total number of pages (including Transmittal Page): 5

If you do not receive all of the pages legibly, please call back: (808) 548-7643
Sending Facsimile Number: (808) 548-6052
Receiving Facsimile Number: (___) 682-2214

TRANSMISSION REPORT

THIS DOCUMENT (REDUCED SAMPLE ABOVE) WAS SENT

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*** SEND ***

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AGENDA

FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: February 13, 1991
TIME: 9:00 a.m.
PLACE: Kalanimoku Building
Board Room, Room 132
1151 Punchbowl Street
Honolulu, Hawaii

1. Resubmitted for Approval, Minutes of December 19, 1990
2. Approval of the Minutes of January 17, 1991
3. City and County of Honolulu Department of Public Works, Application for Stream Channel Alteration Permit, Kalauao Stream, Aiea, Oahu
4. Approval of Report to the 1991 Legislature: Protection of High Natural Quality Rivers and Streams
5. Puuloa Homes, Ltd. Applications for a Water Use and Well Construction/Pump Installation Permit, Puuloa Homes Golf Course Irrigation Well, Ewa Beach, Oahu
6. Honolulu Board of Water Supply Application for a Water Use Permit, Demonstration Desalting Plant Basal Well, Barbers Point, Oahu
7. Chevron U.S.A. Inc. Applications for a Water Use and Well Construction/Pump Installation Permit, Barbers Point–Chevron Fire Protection Well, Barbers Point, Oahu
8. Mauna Lani Resort, Inc. Application for Well Construction/Pump Installation Permits, Mauna Lani Salt Water Wells 1 to 4, South Kohala, Hawaii
9. Maui First Assembly of God Application for a Well Construction/Pump Installation Permit, Puunene–First Assembly Well, Puunene, Maui
10. County of Maui Application for a Pump Installation Permit, Waiehu Golf Course Well, Waiehu, Maui
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Chevron U.S.A. Inc., Application for a Water Use and a
Well Construction/Pump Installation Permit
Barbers Point-Chevron Fire Protection Well, Barbers Point, Oahu

Applicant: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, HI 96707-1883

Landowner: Same

Action Requested: Approval of a water use and a well construction/pump installation permit to use 1,525 gallons per minute (2.189 mgd) of saline water from the well (Well No. 1907-02) to supplement the Chevron Oil Refinery fire protection system.

Source of Water Supply: Shallow, seaward, saline portion of the Caprock Aquifer, Pearl Harbor Water Management Area.

Project Location: The proposed well will be located at Campbell Industrial Park at Tax Map Key: 9-1-14:10, Oahu.

Well Description:

- Ground elevation: 4.5 ft.
- Casing diameter: 36-inches
- Solid casing depth: 5 ft.
- Screen casing depth: 25 ft.
- Open hole: 5 ft.
- Total depth: 30 ft.
- Grouted annulus: 5 ft.
- Pump capacity: 1,525 gpm

Impact on Surrounding Wells: The well will only be used for fire fighting and periodic testing. No adverse impacts are expected.

Water Availability: The well is located in the Malakole Sector of the Caprock Aquifer. Sustainable yield of the brackish portion of the aquifer is estimated at less than 1.0 mgd. However, the well will draw water from the shallow, seaward, saline portion of the caprock which is a separate aquifer from the Malakole Sector.

ITEM 7
Public Notice: In accordance with DLNR Administrative Rules, a public notice was published in the Star Bulletin on January 4 and 11, 1991. In addition, copies of the public notice were sent to the Mayor's office, the County Council, the Department of Health, the Department of Hawaiian Home Lands, the Office of Hawaiian Affairs, Oahu Sugar Company, Campbell Estate, United States Geological Survey, and the Honolulu BWS. Written objections to the proposed permit were to be submitted to the Commission by January 28, 1991. There have been no objections to the project.

RECOMMENDATION:

That the Commission approve the issuance of a water use and a well construction/pump installation permit to Chevron U.S.A. to use 1,525 gallons per minute of saline water for fire protection, subject to the following conditions:

1. The water use authorized by the permit shall be for the reasonable-beneficial use described in the permit.
2. The use shall not adversely affect existing or future legal uses in the area.
3. Modification of any permit condition shall be approved by the Commission.
4. The applicant shall comply with all applicable laws, rules, and ordinances.
5. The permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within 24 months from the date of permit issuance.

Respectfully submitted,

KAZUO G. AKITA
Manager-Chief Engineer

APPROVAL FOR SUBMITTAL:

WILLIAM W. PATY, Chairperson
January 24, 1991

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:


We have no comments regarding the applications.

If you have any questions, please call Herbert Minakami at 527-6183.

Very truly yours,

FOR
KAZU HAYASHIDA
Manager and Chief Engineer
Mr. Manabu Tagomori  
Manager and Chief Engineer  
Commission on Water Resource Management  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Tagomori:

Subject: YOUR LETTER DATED JANUARY 10, 1991 REGARDING WELL PERMIT FOR CHEVRON U.S.A. WELL NO. 1907-02

Thank you for giving us the opportunity to comment on the Chevron Well application.

We are concerned about the casing material for the proposed well. The galvanized casing and screen will corrode quickly from the salty groundwater of the caprock aquifer at this location. We suggest the use of corrosion-resistant material such as PVC or fiberglass.

Very truly yours,

[Signature]

FOR KAZU HAYASHIDA  
Manager and Chief Engineer
PUBLIC NOTICE

Applications for Water Use Permits
Pearl Harbor Water Management Area, Oahu

Applications for the following water use permits have been received and are hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

1. PUUOLA GOLF COURSE IRRIGATION WELL
(Well No. 1900-21)
Applicant: PUUOLA HOMES, LTD.
745 Fort Street, Suite 311
Honolulu, Hawaii 96813
Date Application Received: December 7, 1990
Source of Water Supply: Honolulu-Puuloa Sector, Caprock Aquifer, Pearl Harbor Water Management Area.
Location of Well: Ewa Beach, Oahu, at Tax Map Key: 9-1-01-27.
Quantity Requested: 100,000 gallons per day.
Proposed Water Use: Golf course irrigation. Place of Water Use: Puuloa Golf Course.

2. DEMONSTRATION DESALTING PLANT BASAL WELL
(Well No. 1905-04)
Applicant: Honolulu Board of Water Supply
630 South Beretania Street
Honolulu, Hawaii 96883
Date Application Received: December 17, 1990
Location of Well: Near Campbell Industrial Park, Oahu, at Tax Map Key: 9-1-15-12.
Quantity Requested: 600,000 gallons per day.

3. BARBERS POINT-CHEVRON FIRE PROTECTION WELL
(Well No. 1907-02)
Applicant: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, HI 96707-1783
Date Application Received: December 21, 1990
Source of Water Supply: Seawater Aquifer, Caprock Subarea, Pearl Harbor Water Management Area.
Location of Well: Campbell Industrial Park, Oahu, at Tax Map Key: 9-1-14.
Quantity Requested: 1,525 gallons per minute.
Proposed Water Use: For fire fighting only. Place of Water Use: Chevron Refinery, Campbell Industrial Park.

Written objections or comments on the applications for water use may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply or who will be directly and immediately affected by the proposed water uses. Written objections shall: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permits. Send written objections by January 21, 1991, to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809.

State of Hawaii
Commission on Water Resource Management
Manabu Tagomori, Deputy Director
for WILLIAM W. PATY, Chairperson
(Hon. S-B: Jan. 4, 11, 1991) (SB-2125)
Public Notice for Water Use Permit Applications
Pearl Harbor Water Management Area, Oahu

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-171-17(a), we are sending you a public notice which was published in the Honolulu Star Bulletin.

Please submit any comments to us by January 28, 1991.

Very truly yours,

/s/ MANABU TAGOMORI

for WILLIAM W. PATY

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

Honorable Frank F. Fasi  
Mayor  
City and County of Honolulu  
530 South King Street  
Honolulu, Hawaii 96813

Chair and Members  
Honolulu City Council  
Honolulu Hale  
Honolulu, Hawaii 96813

Honorable John C. Lewin, M.D.  
Director  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813

Honorable Hoaliku L. Drake  
Director  
Dept. of Hawaiian Home Lands  
P.O. Box 1879  
Honolulu, Hawaii 96805

Mr. Thomas K. Kaulukukui, Sr.  
Chairman & Trustee-At-Large  
Office of Hawaiian Affairs  
1600 Kapiolani Blvd., Suite 1500  
Honolulu, Hawaii 96814

Mr. William D. Balfour, Jr.  
President and Manager  
Oahu Sugar Company  
P.O. Box O  
Waipahu, Hawaii 96797

Mr. Samuel Keala  
Campbell Estate  
828 Fort Street Mall  
Honolulu, Hawaii 96813

Mr. William Meyer, District Chief  
U.S. Dept. of the-Interior  
Geological Survey  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813
PUBLIC NOTICE

Applications for Water Use Permits
Pearl Harbor Water Management Area, Oahu

Applications for the following water use permits have been received and are hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

1. PUULOA GOLF COURSE IRRIGATION WELL (Well No. 1900-21)

   **Applicant:** PUULOA HOMES, LTD.
   745 Fort Street, Suite 311
   Honolulu, Hawaii  96813
   **Date Application Received:** December 7, 1990
   **Source of Water Supply:** Honouliuli-Puuloa Sector, Caprock Aquifer, Pearl Harbor Water Management Area.
   **Location of Well:** Ewa Beach, Oahu, at Tax Map Key: 9-1-01:27.
   **Quantity Requested:** 100,000 gallons per day.
   **Proposed Water Use:** Golf course irrigation.
   **Place of Water Use:** Puuloa Golf Course.

2. DEMONSTRATION DESALTING PLANT BASAL WELL (Well No. 1905-04)

   **Applicant:** Honolulu Board of Water Supply
   630 South Beretania Street
   Honolulu, Hawaii  96843
   **Date Application Received:** December 17, 1990
   **Source of Water Supply:** Waianae Basal Aquifer, Waianae Subarea, Pearl Harbor Water Management Area.
   **Location of Well:** Near Campbell Industrial Park, Oahu, at Tax Map Key: 9-1-15:12.
   **Quantity Requested:** 600,000 gallons per day.
   **Proposed Water Use:** Demonstration desalting facility.
   **Place of Water Use:** Honolulu BWS Ewa-Waianae System.

3. BARBERS POINT-CHEVRON FIRE PROTECTION WELL (WELL NO. 1907-02)

   **Applicant:** Chevron U.S.A. Inc.
   91-480 Malakole Street
   Ewa Beach, HI 96707-1883
   **Date Application Received:** December 21, 1990
   **Source of Water Supply:** Seawater Aquifer, Caprock Subarea, Pearl Harbor Water Management Area.
   **Location of Well:** Campbell Industrial Park, Oahu, at Tax Map Key: 9-1-14.
   **Quantity Requested:** 1,525 gallons per minute.
   **Proposed Water Use:** For fire fighting only.
   **Place of Water Use:** Chevron Refinery, Campbell Industrial Park.
Written objections or comments on the applications for water use may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply or who will be directly and immediately affected by the proposed water uses. Written objections shall: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permits. Send written objections by January 28, 1991, to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809.

State of Hawaii
Commission on Water Resource Management

/s/ Manabu Tagomori, Deputy Director
WILLIAM W. PATY, Chairperson

Dated: DEC 28 1990

Publish in:
Mr. V.A. Carvalho  
Chevron U.S.A. Inc.  
91-480 Malakole St.  
Ewa Beach, HI 96707-1883  

Dear Mr. Carvalho:

Water Use Permit Application

We acknowledge receipt of your application for a water use permit for the  
Barbers Point-Chevron Fire Protection Well (Well No. 1907-02).

My staff is reviewing the application and will contact you should there be any questions.

Sincerely,

[Signature]

MANABU TAGOMORI  
Deputy Director

ES:bm
PUBLIC NOTICE

Applications for Water Use Permits
Pearl Harbor Water Management Area, Oahu

Applications for the following water use permits have been received and are hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

1. PUULOA GOLF COURSE IRRIGATION WELL (Well No. 1900-21)

Applicant: PUULOA HOMES, LTD.
745 Fort Street, Suite 311
Honolulu, Hawaii 96813
Date Application Received: December 7, 1990
Source of Water Supply: Honouliuli-Puuloa Sector, Caprock Aquifer, Pearl Harbor Water Management Area.
Location of Well: Ewa Beach, Oahu, at Tax Map Key: 9-1-01:27.
Quantity Requested: 100,000 gallons per day.
Proposed Water Use: Golf course irrigation.
Place of Water Use: Puuloa Golf Course.

2. DEMONSTRATION DESALTING PLANT BASAL WELL (Well No. 1905-04)

Applicant: Honolulu Board of Water Supply
630 South Beretania Street
Honolulu, Hawaii 96843
Date Application Received: December 17, 1990
Location of Well: Near Campbell Industrial Park, Oahu, at Tax Map Key: 9-1-15:12.
Quantity Requested: 600,000 gallons per day.
Proposed Water Use: Demonstration desalting facility.
Place of Water Use: Honolulu BWS Ewa-Waianae System.

3. BARBERS POINT-CHEVRON FIRE PROTECTION WELL (WELL NO. 1907-02)

Applicant: Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, HI 96707-1883
Date Application Received: December 21, 1990
Source of Water Supply: Seawater Aquifer, Caprock Subarea, Pearl Harbor Water Management Area.
Location of Well: Campbell Industrial Park, Oahu, at Tax Map Key: 9-1-14.
Quantity Requested: 1,525 gallons per minute.
Proposed Water Use: For fire fighting only.
Place of Water Use: Chevron Refinery, Campbell Industrial Park.
Written objections or comments on the applications for water use may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply or who will be directly and immediately affected by the proposed water uses. Written objections shall: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permits. Send written objections by January 28, 1991, to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809.

State of Hawaii
Commission on Water Resource Management

Dated: DEC 28 1990

/s/ Manabu Tagomori, Deputy Director
WILLIAM W. PATY, Chairperson

Publish in:
DEPARTMENT OF LAND AND NATURAL RESOURCES

Chevron U.S.A. Inc.
Honolulu, Hawaii

Chevron U.S.A. Inc.

First Hawaiian Bank
Ewa Beach Branch

No. 16308

Date
Month
Day
Year
12
20
90

Debtors: Point - Chevron Fire Protection Well
WELL No. 1907-02

Two signatures required if $10,000 or more

50-101

1213

60-300-HAW-3 (OS-2-46)
APPLICATION FOR WATER USE

Mr. Ed Sakoda  
Department of Land and Natural Resources  
Division of Water and Land Development  
P. O. Box 373  
Honolulu, HI  96809

Dear Mr. Sakoda:

Chevron proposes to construct a brackish-water well and install a vertical turbine-type pump on its refinery property. The refinery property is located on Oahu in the Campbell Industrial Park at 91-480 Malakole Street, Ewa Beach, Hawaii 96707, tax map key 1-9-1-14, Lot 3001, Map 299.

The well is to be located at latitude 21°19'00" North and longitude 158°07'08" West (coordinates approximate). This location is about 1000-feet from the shoreline at ground elevation of approximately 4.5-feet above mean sea level. Water will be used to supplement an existing fire protection system for the refinery. It is anticipated that, except for weekly test run periods, water will not be drawn from the well unless required for actual fire fighting.

Enclosed is our "Application for Water Use Permit" along with the $25.00 filing fee. Please contact Mr. Marshall A. McCormick, the project engineer, at telephone number 682-2313 if you require additional information.

Very truly yours,

K. O. MOHN

MAM:jt

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

APPLICATION FOR WATER USE PERMIT  
☐ GROUNDWATER or  ☐ SURFACE WATER  

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 371, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 848-7543, Hydrologic Unit Section for assistance.  

---  

1. WATER MANAGEMENT AREA  

2. (a) WELL/DIVERSION OWNER:  
   Firm Name:  
   Contact Person:  
   Address:  
   Phone:  

2. (b) LANDOWNER:  
   Firm Name:  
   Contact Person:  
   Address:  
   Phone:  

3. SOURCE TYPE:  
   ☐ Spring  
   ☐ Stream  
   ☐ Dike-confined  
   ☐ Perched  
   ☐ Basal  
   ☐ Caprock  

4. SOURCE NAME AND NUMBER  
   LPJG Area Firewater Well  
   (well or stream diversion name/number)  

5. SOURCE LOCATION:  
   Island:  
   Tax Map Key:  
   Address:  
   (Attach a USGS map (scale 1"=2000') and property tax map showing source location referenced to established property boundaries.) See item #15.  

6. LOCATION OF PROPOSED WATER USE (if different from #5)  
   (Indicate location of water use on same map showing source location.)  

7. QUANTITY OF WATER REQUESTED  
   See Item #15 gallons per day  

8. QUALITY OF WATER REQUESTED (check appropriate box)  
   ☐ Fresh  
   ☐ Brackish  
   ☐ Salt  
   ☐ Potable  
   ☐ Non-Potable  

9. PROPOSED USE  
   ☐ Municipal (including hotels, stores, etc)  
   ☐ Military  
   ☐ Domestic (individual, noncommercial water sys.)  
   ☐ Industrial  
   ☐ Irrigation (specify)  
   ☐ Other (specify)  
   ☐ Fire Protection  

10. DESCRIBE ANY POTENTIAL RESTRICTIONS ON USE (i.e., instream standards, seasonal variations)  
    None.  

11. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION  
    See Item #15 (indicate hours of operation)  

12. PROPOSED METHOD OF TAKING THE WATER  
    ☐ Artesian Flow  
    ☐ Diverted Flow  
    ☐ Submersible Pump  
    ☐ Centrifugal Pump  
    ☐ Vertical Turbine Pump  

13. NO. OF RESIDENTIAL OR COMMERCIAL UNITS TO BE SERVED (specify)  
    None.  

14. TOTAL ACRES PROPOSED FOR IRRIGATION  
    None. Type of Crop: Not Applicable.  

15. REMARKS, EXPLANATIONS  
    Except for weekly test runs, water will  
    (if more space is needed, continue on back side)  

---  

Owner (print):  
Landowner (print):  

Signature:  
Date:  

---  

For Official Use Only:  
Date Received:  
Hydrologic Unit:  
Diversion Works No.:  
Date Accepted:  
State Well No.: 1907-02.
15. REMARKS, EXPLANATIONS (cont.) not be drawn from the
well unless required for actual fire fighting. Rated
pump capacity is 1525 GPM.

A USGS map and property tax map were sent to
the Division of Water and Land Development with
the Application for Well Construction and Pump
Installation Permits on November 27, 1990.
STATE WELL NO. 1907-02
WELL NAME: ISLAND
LOCATION: Chevron Refinery, Campbell Industrial Park
TAX MAP KEY: 
WELL OWNER: Chevron U.S.A. Inc., 21-480 Malakole St., Kailua, Hawaii, 96707

DRILLING OR PUMP INSTALLATION CONTRACTOR: Foundation International Inc.

TYPE OF RIG: Watson 3000 Truck mounted rig
DRILLER & M.L. MARKUS

DATE OF WELL COMPLETION: 3-29-91
DATE OF PUMP INSTALLATION:

GROUND ELEVATION (m.a.s.l.) ft.
Top of Drilling Platform (m.a.s.l.) ft.
Height of drilling platform above ground surface ft.

TOTAL DEPTH OF WELL BELOW GROUND ft.

HOLE SIZE: 48" inch dia. from ft. to ft. below ground

CASING INSTALLED:
36" in. I.D. x 16 Ga. In. well solid section to 10 ft. below ground
36" in. I.D. x 16 Ga. In. well perforated section to 10" ft. below ground
Type of perforation: 1/2" x 1" I vertical slots

ANNULUS:
Grouted from ft. to ft. below ground
Gravel packed from ft. to ft. below ground

PERMANENT PUMP INSTALLATION:
Pump type, make, serial No.:
Motor type, H.P., voltage, r.p.m.:
Depth of pump intake setting ft. below ground which elevation is ft.
Depth of bottom of pipeline ft. below ground which elevation is ft.

PROPOSED USE: Firewater Supply Well

INITIAL WATER LEVEL: 5 ft. below ground. Date and time of measurement: 10 A.M. / 3-29-91
INITIAL CHLORIDE: ppm.

PUMPING TESTS: Reference point (R.P.) used: [ground level which elevation is ft.]

Date: 3-29-91 (uncased)
Start water level: 5 ft. below R.P.
End water level: 12'/6" ft. below R.P.
Depth of well: 41 ft. below R.P.

10A 2:37:10 1530.2 9.4 6 2:37:20 1502.7 9.4 157 2
2:37:20 1502.7 9.4
3:45:30 1572.8
4:53:40 1572.8
5:01:50 1572.8
6:09:50 1437.8
6:33:50 1398.8
7:01:50 1296.8
7:33:50 1296.8
8:01:50 1296.8
8:33:50 1296.8
9:01:50 1296.8
10:01:50 1296.8

DRILLER'S LOG:

Depth, ft. Rock Description & Remarks Water Level, ft. Depth, ft. Rock Description & Remarks Water Level, ft.

0' to 2' coral fill to to
2' to 15' med. dense coral 8' to to
15' to 18' soft coral sand to to
18' to 26' med. dense coral to to
26' to 29' less dense coral/sand to to
29' to 31' dense coral to to
31' to 38' med. dense coral to LAT. 21° 19' 01" to
38' to 41' dense coral to LONG. 158° 07' 06" to
41' to Well No. 1907-02 to

REMARKS:

FILLED BY (PRINT) [Signature]

Title

DATE [Printed Date]
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P. O. BOX 621
HONOLULU, HAWAII 96809

WELL CONSTRUCTION/PUMP INSTALLATION PERMIT

for

Barbers Point-Chevron Fire Protection Well
Well No. 1907-02
Barbers Point, Oahu

TO:  Chevron U.S.A. Inc.
91-480 Malakole Street
Ewa Beach, HI 96707-1883

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, test, and install a pump in Barbers Point-Chevron Fire Protection Well (Well No. 1907-02) within Tax Map Key: 9-1-14:10, to supplement the Chevron Oil Refinery fire protection system, 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 covered by this permit commences.

2. The permit shall be for construction, testing, and installation of a 1,525 gallons per minute capacity, or less, pump in the well, as determined by the pumping test results. The applicant shall submit to DWRM the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson’s approval.

3. The proposed use shall not adversely affect existing or future legal uses in the area.

4. The following shall be submitted to DWRM 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.

5. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring total water usage.

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 the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within 24 months from the date of permit issuance.

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management

FEB 21 1991

Date of Issuance

cc: USGS
    Department of Health
    Drinking Water Branch
    Ground Water Protection Program
    Honolulu Board of Water Supply
April 16, 1991

Department of Water & Land Development

Well Construction/Pump Installation Permit for the Fire Protection Well
(Well No. 1907-02)

Mr. Ed Sakoda
Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, Hawaii 96809

Attention: Mr. Ed Sakoda

Dear Mr. Sakoda:

This is to inform you that construction and installation of the above-referenced well was completed on March 29, 1991.

Attached are the following documents as required by the permit:

- Well Completion Report
- Elevation survey (referenced to mean sea level) by Walter P. Thompson, Inc.
- As-built sectional drawing of the well
- Refinery plot plan showing the exact location of the well
- Pump test records (Foundation International's letter of April 1, 1991)

Mr. Sakoda agreed with the following items during a previous telephone conversation:

- Chloride content and water quality data are not required since this well will be used for fire water only.
- Chevron will install an approved meter on the pump test line as required by NFPA-20. This meets the requirement stated in paragraph 5 of the permit.
Chevron feels that all the requirements of the permit for well and permanent pump installation have been met.

Fire water pump package is expected to arrive at the refinery in the early part of May and we will proceed with the installation unless you advise otherwise.

Please contact Marshall McCormick at 682-2313 if you require any further information.

Very Truly Yours,

K.O. MOHN

ESE: jmk
April 13, 1991

Chevron U.S.A., Inc.
Hawaiian Refinery
91-480 Malakole Street
Ewa Beach, HI 96707

Attn: Mr. Suat Erol
Project Engineer

Gentlemen:

This is to certify that on April 12, 1991, we prepared a vertical survey to ascertain the mean sea level elevation of the well site located near the northeast corner of the intersection of Midway and Oahu Streets within the Chevron Refinery at Campbell Industrial Park, Honolulu, Ewa, Oahu, Hawaii as shown on Tax Map Key: 9-1-14: Por. 10.

The elevation of the top of the corrugated metal pipe is 5.17 mean sea level.

Very truly yours,

WALTER P. THOMPSON, INC.

James R. Thompson
Registered Professional Land Surveyor - 3627S
April 1, 1991

Chevron U.S.A., Inc.
Hawaiian Refinery
91-480 Malakole Street
Ewa Beach, Hawaii 96707

Attention: Mr. Suat Erol

Project: Firewater Supply Well
Chevron Refinery
Campbell Industrial Park
Ewa Beach, Hawaii

Subject: Quotation for Pump Test

Dear Mr. Erol,

As per the contract documents, Foundation International is pleased to submit our Well Completion Report.

Foundation International mobilized a truck mounted Watson 3000 drill rig to the project site on March 28, 1991. A 48" diameter shaft was excavated to 41' below ground surface and the bottom of the shaft cleaned of silt and debris. The shaft was allowed to sit overnight and then the bottom was cleaned again, after the remaining debris settled.

The first pump test was conducted on March 29, 1991 at 10:00 AM, in the open shaft. Over a fifteen minute duration, the water level dropped from 5 feet below ground surface to 12'6" below ground surface. The total drawdown was 7 feet. The open shaft yielded a constant 1660 gallons per minute. As the results of this test met the project criteria, it was decided to complete the well.

After approximately two feet of #2A basalt rock was placed in the shaft, a 36" diameter casing was lowered to a depth of 39 feet below ground surface. The casing had been perforated throughout the lower 30 feet of length. The annulus was filled with #2A basalt rock to 8 feet below ground surface, and a crushed coral fill brought to ground level.

SOIL TESTING • DEWATERING • PREDRILLING • PROBE HOLES • BELLED CAISSONS
Upon completion of the well, a second pump test was performed, lasting 25 minutes in duration. The well yielded 1572 gpm with a total water drawdown of 6'2", measured from the top of the casing. At this time, the Chevron U.S.A. representative on site accepted the well and Foundation International demobilized its equipment.

If we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

FOUNDATION INTERNATIONAL, INC.

Warren O. Holcomb
Project Coordinator
March 25, 1991

Mr. Ed Sakoda
Department of Land and Natural Resources
Division of Water and Land Development
P.O. Box 373
Honolulu, Hawaii 96809

Attention: Mr. Ed Sakoda

Dear Mr. Sakoda:

This is to inform you, as required by the Permit, that Foundation International, Inc. will start installation of the above referenced well on March 28, 1991.

Please contact Marshall McCormick at 682-2313 if you require any further information.

Very truly yours,

K.O. Mohn

ESE:lsj
MEMORANDUM

TO: Don Hibbard, Director
    Historic Preservation Program

FROM: Manabu Tagomori, Deputy Director
    Commission on Water Resource Management

SUBJECT: Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

<table>
<thead>
<tr>
<th>Island</th>
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<td>Puunene-First Assembly</td>
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<td>Hawaii</td>
<td>Mauna Lani SW Nos. 1-4</td>
<td>5651-02 to 05</td>
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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, by January 25, 1991.

Should you have any questions, please contact our Regulation Branch at 548-7541.

DN: bm
Enc.
Honorable John C. Lewin, M.D.
Director
Department of Health
State of Hawaii
1250 Punchbowl Street
Honolulu, Hawaii 96813

Attn: Mr. Thomas Arizumi, Drinking Water Branch

Dear Dr. Lewin:

Well Construction and Pump Installation Permit Application(s)

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Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
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:  

Well Construction and Pump Installation Permit Application(s)  

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Should you have any questions, please contact our Regulation Branch at 548-7541.

Sincerely,

[Signature]

MANABU TAGOMORI  
Deputy Director

DN:bm  
Enc.
Honorable Hoaliku L. Drake
Director
Department of Hawaiian Home Lands
State of Hawaii
P.O. Box 1879
Honolulu, Hawaii 96805

Dear Mr. Drake:

Transmitted for your review and comment is a copy of the following permit application(s):

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Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
Mr. Thomas K. Kaulukukui, Sr.
Chairman & Trustee-At-Large
Office of Hawaiian Affairs
1600 Kapiolani Blvd., Suite 1500
Honolulu, Hawaii 96814

Attn: Ms. Linda Delaney, Land & Natural Resources Division

Dear Mr. Kaulukukui:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, by January 25, 1991.

Should you have any questions, please contact Manabu Tagomori, Deputy Director at 548-7533.

Very truly yours,

WILLIAM W. PATY

Enc.
APPLICATION FOR

✓ WELL CONSTRUCTION PERMIT
✓ PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96833. Application must be accompanied by a non-refundable filing fee of $11.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone (808) 444-3443, Hydrology/Geology Section for assistance.

1. WELL LOCATION

Island Oahu Tax Map Key 1-9-1-14:10
Address 91-480 Malahale St., Ewa Beach, HI 96707-1823
(Attach a USGS map (scale 1"=5000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name Chevron U.S.A., Inc. Firm Name Same as well owner
Contact Person V.A. Carvalho Contact Person
Address 91-480 Malahale St. Address 91-480 Malahale St., Ewa Beach, HI 96707-1823
Phone 682-2248 Phone 682-2248

3. PROPOSED CONTRACTOR FOR:

Name Foundation International Phone 682-2800
Address P.O. Box 29113 Contractor's License No.
Honolulu, HI 96820

4. PROPOSED WORK

Drill New Well
Alter
Install New Pump
Deepest
Seal
Replace Pump
Redrill
Abandon
Modify Pump
Install 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.)
Domestic (individual, noncommercial water systems)
Irrigation (specify)
Military
Industrial
Other (specify) Fire Water

6. PROPOSED AMOUNT OF WITHDRAWAL (gallons per day)

7. PROPOSED PUMP INFORMATION

Pump Type: Vertical Turbine
Submersible
Centrifugal
Motor: Diesel
Gas
Electric: 750 Rated Horsepower
Rated Pump Capacity 152.5 gallons per minute (gpm)

Signature __________________________ Signature __________________________
Date 1/12/79 40

For Official Use Only:

Field Checked By __________________________ Latitude ________ Hydrologic Unit ________
Date __________________________ Longitude ________ State Well No. 1907-02
Quad Map No. 9c
Briefly describe the proposed work:

Drill well and install vertical turbine type Firewater pump to supplement the Chevron Oil Refinery Fire Protection System.

**PROPOSED SECTION OF WELL**

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation at top of casing</td>
<td>5.0 ft., msl.</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>5 ft.</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>48 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>40 ft.</td>
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<tr>
<td>Rock Packing</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Ground Elev.</td>
<td>4.5 ft., msl*</td>
</tr>
<tr>
<td>Solid Casing:</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>CS (Galvanized)</td>
</tr>
<tr>
<td>Length</td>
<td>5 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>3/4 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>3/16 in.</td>
</tr>
<tr>
<td>Casing:</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>CS (Galvanized)</td>
</tr>
<tr>
<td>Perforated</td>
<td></td>
</tr>
<tr>
<td>Screen</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>3/4 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>3/16 in.</td>
</tr>
<tr>
<td>Openings</td>
<td>1/8 screen sq. in./L.F.</td>
</tr>
<tr>
<td>Open Hole:</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>5 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>48 in.</td>
</tr>
</tbody>
</table>

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.

**Note:**

This well/pump will be used exclusively for fire protection. Therefore, gallon/day capacity is not applicable.
MEMORANDUM

TO: Manabu Tagomori, Deputy Director
Commission on Water Resource Management

FROM: Don Hibbard, Acting Administrator
State Historic Preservation Division

SUBJECT: DLNR Division of Water Resource Management -- Well construction and pump installation permit (Chevron USA) Honouliuli, 'Ewa, O'ahu
TMK: 9-1-14: 10

February 11, 1991

A review of our records indicates that the project area has not been surveyed, so the presence or absence of significant historic sites cannot be determined. The 'Ewa Plain has yielded many archaeological and paleontological sites, so it is likely that historic sites were located in the project area. Aerial photographs from the late 1970s show the area to be covered with vegetation, unlike the surrounding area, which has been altered by construction of the refinery.

We recommend that a condition of the permit be that the applicant either 1) supply documentation of past bulldozing or other land alteration activities in the project area, or 2) complete the historic preservation review process. The first step in this process is the completion of a survey to identify and inventory historic sites on the property. Should no significant historic sites be found, the review process ends. If significant sites are found, then a mitigation plan must be developed to minimize the impact of the project on the sites. The mitigation plan usually entails archaeological data recovery, but in circumstances involving unusually significant sites it may entail site preservation.

Our office maintains a list of individuals and organizations presently engaging in archaeological consultant work in Hawai'i and we would be happy to make this available on request.
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 AND PUMP INSTALLATION PERMIT APPLICATION
BARBERS POINT-CHEVRON WELL
STATE WELL NO. 1907-02
EWA BEACH, OAHU

Thank you for the opportunity to review and comment on the subject application. We have examined the application and have the following comments to offer:

1. Since the proposed well will be used to supplement the Chevron oil Refinery fire protection system, the Department's Administrative Rules, Title 11, Chapter 20, "Potable Water Systems," are not applicable. However, in the event that the proposed use were to change, please inform the Safe Drinking Water Branch.

2. The non-potable, fire protection system should be carefully designed and operated to prevent cross-connections and backflow conditions. The potable and non-potable water systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow preventers to avoid contaminating the potable water supply.

If you should have any questions, please contact the Drinking Water Program at 543-8258.

Very truly yours,

[Signature]

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

cc: V.A. Carvalho
Chevron U.S.A., Inc.
91-480 Malakole Street
Ewa Beach, HI 96707-1883
January 23, 1991

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

RE: Well Construction and Pump Installation Permit Application(s)

Dear Mr. Paty:

Thank you for the opportunity to review the following water permit applications:

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>O'ahu</td>
<td>Barbers Pt.-Chevron</td>
<td>1907-02</td>
<td>Well &amp; Pump</td>
</tr>
<tr>
<td>Maui</td>
<td>Puunene-First Assembly</td>
<td>5527-08</td>
<td>Well</td>
</tr>
<tr>
<td>Hawai'i</td>
<td>Waikoloa Village</td>
<td>5546-02</td>
<td>Well</td>
</tr>
<tr>
<td>Hawai'i</td>
<td>Waikoloa Exploratory</td>
<td>5345-01</td>
<td>Well</td>
</tr>
<tr>
<td>Hawai'i</td>
<td>Mauna Lani SW Nos 1-4</td>
<td>5651-02  to 05 Well</td>
<td></td>
</tr>
</tbody>
</table>

Our comments pertain to the first application, No. 1907-02. This well will be developed on the Ewa plain. There is considerable residential and commercial development under construction and planned for the future in this part of O'ahu. The allocation of water to this area has been a problem for some time. The Ewa Plain Water Development Corporation (EPWDC) has been established to research and plan for water needs on the Ewa plain. We suggest that the applicant coordinate with the EPWDC on water usage.

We have no other comments at this time.

Sincerely,

Richard Paglinawan
Administrator

cc: Moses Keale, Chair
    Board of Trustees
William W. Paty, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Paty,

Well Construction and Pump Installation Applications  
Barber's Pt. Well and Pump  
Puunene Well  
Waikoloa Wells  
Mauna Lani SW Wells 1-4

Thank you for the opportunity to comment on the following permit applications:

- Barber's Point-Chevron Well 1907-02 and Pump  
- Puunene-First Assembly Well 5527-08  
- Waikoloa Village Well 5546-02  
- Waikoloa Exploratory Well 5345-01  
- Mauna Lani SW Wells 5651-02 to 05

These do not impact Hawaiian Home Lands; we do not have comments at this time.

We look forward to understanding the results of the proposed use of the Mauna Lani Saltwater Wells. To pump 8 Mgd from an area near natural and man-made ponds, and near the the edge of a groundwater lens, may produce some interesting hydrologic effects.

Warmest aloha,

Hoalikau L. Drake, Chairman  
Hawaiian Homes Commission
CHECKLIST

- WELL CONSTRUCTION PERMIT  - PUMP INSTALLATION PERMIT

WELL NAME or LOCATION: Barbers Point - Chevron ISLAND: Oahu
WELL NUMBER: 1907-02  Tax Map Key: 1-9-1-14:10

OWNER/OPERATOR:
Firm Name Chevron U.S.A. Inc.  LANDOWNER:
Contact Person V.A. Carvalho  Contact Person Same
Address 91-480 Maili Kole St.  Address
Ewa Beach, Hawaii 96707-1882
Phone 682-2248  Phone Same

Date application received: 11-29-90
Date acknowledged receipt/request more info:
Date application accepted:
Suspense date (90 days): 1-25-91
Date filing fee deposited: 1-4-91

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>Dept. of Hawn Home Lands</td>
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<tr>
<td>Dept/Bd of Water Supply</td>
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<tr>
<td>Historic Preserv. Prog.</td>
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<tr>
<td>Koolauoa NB #26 (Cahui)</td>
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<tr>
<td>Dept/Pub Wrk (Hawaii)</td>
<td></td>
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<tr>
<td>Office of Hawaiian Affairs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date agenda due:
Date submittal due:
Date submittal sent to applicant:
Date application approved or disapproved:
Date applicant notified of decision:

REMARKS: Applicant needs to file Water Use Permit Application.
12/12 Called Applicant to have firm's requirement/mailed out form/fax.
Need to login computer/Manual log.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Division of Water Resource Management

APPLICATION FOR

✓ WELL CONSTRUCTION PERMIT
✓ PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96820. Application must be accompanied by a non-refundable filing fee of $15.00 payable in the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 516-6143, Hydrology/Geology Section for assistance.

1. WELL LOCATION

Island Oahu Tax Map Key 1-9-1-1410
Address 91-480 Malakole St., Ewa Beach, HI 96707-1883
(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name Chevron U.S.A., Inc.
Contact Person V.A. Carvalho
Address 91-480 Malakole St.
Ewa Beach, HI 96707-1883
Phone 682-2248

3. PROPOSED CONTRACTOR FOR: □ Well Drilling □ Pump Installation

Name Foundation International Phone 682-2800
Address P.O. Box 29113
Honolulu, HI 96820
Contractor's License No.

4. PROPOSED WORK

□ Drill New Well □ Deepen □ Abandon
□ Alter □ Seal □ 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 systems) □ Industrial
□ Irrigation (specify) □ Other (specify) Fire water

6. PROPOSED AMOUNT OF WITHDRAWAL Back page gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: □ Vertical Turbine □ Submersible □ Centrifugal
Motor: □ Diesel □ Gas □ Electric: 240 Rated Horsepower
Rated Pump Capacity 1525 gallons per minute (gpm)

Signature ____________________________ Signature ____________________________
Date 11/27/70 Date ____________________________

For Official Use Only:
Field Checked By ____________________________ Latitude ____________________________ Hydrologic Unit ____________________________
Date ____________________________ Longitude ____________________________ State Well No. 1907-02
Quay Map No. 56
Briefly describe the proposed work:

Drill well and install vertical turbine type firewater pump to supplement the Chevron oil Refinery Fire Protection System.

PROPOSED SECTION OF WELL

Elevation at top of casing 5.0 ft., msl.

Solid Casing:
- Material: CS (Galvanized)
- Length: 5 ft.
- Diameter: 36 in.
- Wall thickness: 3/16 in.

Casing: 1/4 Perforated 1/4 Screen
- Material: CS (Galvanized)
- Length: 20 ft.
- Diameter: 36 in.
- Wall thickness: 3/16 in.
- Openings: 1/8 screen sq. in./L.F.

Open Hole:
- Length: 5 feet
- Diameter: 48 in.

*Approximate elevation at time of filling application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.

Note:

This well/pump will be used exclusively for fire protection. Therefore, gallon/day capacity is not applicable.
Barbers Pt.—Chevron
(Well No. 1907–02)
Mr. Ed Sakoda  
Department of Land and Natural Resources  
Division of Water and Land Development  
P. O. Box 373  
Honolulu, HI  96809

Dear Mr. Sakoda:

Pursuant to our November 20 telephone conversation (Carvalho/Sakoda), Chevron proposes to construct a brackish-water well and install a vertical turbine-type pump on its refinery property. The refinery property is located on Oahu in the Campbell Industrial Park at 91-480 Malakole Street, Ewa Beach, Hawaii 96707, tax map key 1-9-1-14, Lot 3001, Map 299.

The well is to be located at latitude 21°19'00" North and longitude 158°07'08" West (coordinates approximate). This location is about 1000-feet from the shoreline at ground elevation of approximately 4.5-feet above mean sea level. Water will be used to supplement an existing fire protection system for the refinery. It is anticipated that, except for daily test run periods, water will not be drawn from the well unless required for actual fire fighting.

Enclosed is our application for well construction and pump installation permits along with the $25.00 filing fee. Please contact Mr. Marshall A. McCormick, the project engineer, at telephone number 682-2313 if you require additional information.

Very truly yours,

K. O. MOHN

MAM:vso

enclosure
APPLICATION FOR

✓ WELL CONSTRUCTION PERMIT
✓ PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96819. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 148-7543, Hydrology/Geology Section for assistance.

1. WELL LOCATION
   Island Oahu    Tax Map Key 1-9-1-14:10 /
   Address 91-480 Malahole St., Ewa Beach, HI 96707-1883
   (Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER
   Firm Name Chevron U.S.A., Inc.
   Contact Person V.A. Carvalho
   Address 91-480 Malahole St.
   Ewa Beach, HI 96707-1883
   Phone 682-2248
   LANDOWNER
   Firm Name Same as well owner
   Contact Person
   Address
   Phone

3. PROPOSED CONTRACTOR FOR: ☑ Well Drilling ☑ Pump Installation
   Name Foundation International
   Address P.O. Box 29113
   Honolulu, HI 96820
   Phone 682-2500
   Contractor's License No.

4. PROPOSED WORK
   ☑ Drill New Well ☑ Deepen ☑ Redrill
   ☑ Alter ☑ Install New Pump ☑ Seal ☑ Abandon
   ☑ 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 systems) ☑ Industrial
   ☑ Irrigation (specify) ☑ Other (specify) Fire Water

6. PROPOSED AMOUNT OF WITHDRAWAL
   See Note on Back Page gallons per day

7. PROPOSED PUMP INFORMATION
   Pump Type: ☑ Vertical Turbine ☑ Submersible ☑ Centrifugal
   Motor: ☑ Diesel ☑ Gas ☑ Electric: 2 hp
   Rated Pump Capacity 152.5 gallons per minute (gpm)

Signature [Signature]
Date 11/27/80 [Date]

For Official Use Only:
Field Checked By __________________________ Latitude ____________ Hydrologic Unit __________________________
Date __________________________ Longitude ____________ State Well No. 1907-02
Quad Map No. 00
briefly describe the proposed work:
Drill well and install vertical turbine type Firewater pump to supplement the Chevron Oil Refinery Fire Protection System.

PROPOSED SECTION OF WELL

Elevation at top of casing 5.0 ft., msl.
Cement Grout 5 ft.
Hole Dia. 4 8 in.
Total Depth 40 ft.
Rock Packing 20 ft.

Ground Elev. 4.5 ft., msl*
Solid Casing:
Material CS (Galvanized)
Length 5 ft.
Diameter 3 6 in.
Wall thickness 3/16 in.

Casing: / /Perforated / /Screen
Material CS (Galvanized)
Length 20 ft.
Diameter 3 6 in.
Wall thickness 3/16 in.
Openings 1/8" screen sq. in./L.F.

Open Hole:
Length 5 feet
Diameter 4 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.

Note:
This well/pump will be used exclusively for fire protection. Therefore, gallon/day capacity is not applicable.