

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

**REPORT OF EXAMINATION**

TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

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✓4825*

- Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)
- Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE January 9, 1992	APPLICATION NUMBER G2-28402	PERMIT NUMBER	CERTIFICATE NUMBER
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NAME William and Jill Carel			
ADDRESS (STREET) 182 Carlsborg Road	(CITY) Sequim	(STATE) Washington	(ZIP CODE) 98382-9450

**PUBLIC WATERS TO BE APPROPRIATED**

SOURCE A well		
TRIBUTARY OF (IF SURFACE WATERS)		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 29	MAXIMUM ACRE-FEET PER YEAR 2.35
QUANTITY, TYPE OF USE, PERIOD OF USE 2.35 acre-feet per year	Multiple domestic supply	Year-round, as needed

**LOCATION OF DIVERSION/WITHDRAWAL**

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL  
800 feet east and 450 feet south of the northwest corner of Section 23

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) NW/4NW/4	SECTION 23	TOWNSHIP N. 30	RANGE, (E. OR W.) W.M. 4W	W.R.I.A. 18	COUNTY Clallam
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**RECORDED PLATTED PROPERTY**

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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**LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED**

Lot 6 of Survey recorded in Volume 13 of Surveys, Page 14, under Clallam County recording No. 591551, being a survey of a portion of the north half of the northwest quarter of Section 23, Township 30 North, Range 4 West, W.M., Clallam County, Washington

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**DESCRIPTION OF PROPOSED WORKS**

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A 6-inch by 61-foot well with a 2 horsepower pump and a 2-inch distribution line

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**DEVELOPMENT SCHEDULE**

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BEGIN PROJECT BY THIS DATE: Started	COMPLETE PROJECT BY THIS DATE: Completed	WATER PUT TO FULL USE BY THIS DATE: April 1, 1998
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**REPORT**

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I recommend issuance of a permit under Application #G2-28402 based on the following report:

**BACKGROUND:**

Pursuant to Chapter 90.03 and 90.44 Revised Code of Washington (RCW), William and Jill Carel applied for a permit to appropriate public ground water from a well. A withdrawal rate of 29 gallons per minute (gpm) was requested for multiple domestic supply. The application was assigned a priority date of January 9, 1992.

Legal notice of the proposed appropriation was published on April 8 and 15, 1992, in *The Sequim Gazette* and on April 3 and 10, 1992, in *The Peninsula Daily News* of Clallam County. No protests were received as a result of these notices.

**INVESTIGATIONS:**

Vicki Windust and I conducted a field investigation of the project site on June 23, 1993. I reviewed Department of Ecology records of ground water use and area well logs. I also referred to U.S. Geological Survey Water Resources Investigations Report 83-4094, Impact of Changes in Land Use on the Ground-water System in the Sequim-Dungeness Peninsula, Clallam County, Washington. William Carel was contacted for additional information.

Location and Site Description

The project site is located off of Runnion Road (north of Highway 101), approximately two miles west of the City of Sequim in Clallam County. The surrounding area is dominated by agricultural and residential use. The well is situated near an irrigation ditch, approximately 3/4 mile west of the Dungeness River.

Proposed Water System Description

The Carel well was completed by Louie's Well Drilling, Inc., on December 6, 1990. The water system currently serves six residences and will eventually serve one additional connection.

Well head elevation:	200 feet above mean sea level
Well depth:	61 feet
Casing diameter:	6 inches
Static water level:	33 feet
Screen depth:	56 to 61 feet
Pump size:	2 horsepower
Mainline diameter:	2 inches

The well is completed in a water-bearing formation consisting of brown sand and gravel from 49 to 61 feet. It is completed in the shallow water-table aquifer and is probably partially sustained by leakage from the nearby irrigation ditch.

Effect on Existing Rights

The following records of ground water use are on file with the Department of Ecology:

- Nine ground water right certificates have been issued within a half mile radius of this well. These certificates authorize a combined withdrawal of 996 gpm and 616.4 acre-feet per year. The nearest wells with recorded water rights are located approximately 1/4 mile away.

- 37 claims are recorded in Section 23.
- 66 well logs are recorded within a half mile of the subject well. These wells range in depth from 30 to 298 feet.

Well density is high in this area. Most neighboring wells, like the Carel well, are completed in the shallow water-table aquifer. However, due to the small instantaneous withdrawal rate requested and the small annual quantity required for one additional connection, there should be no significant adverse impacts to neighboring wells as a result of the proposed appropriation.

#### Potential Effects on Dungeness River Instream Flows

This well is located within the Dungeness-Quilcene Water Resources Management Regional Planning Area. Under the Regional Plan, a comprehensive water resources study is being conducted to provide the basis for future water use decisions. Pending applications which pre-date the Plan will be evaluated based on currently available information.

In the 1983 U.S. Geological Survey report, Impact of Changes in Land Use on the Ground-water System in the Sequim-Dungeness Peninsula, Clallam County, Washington, Drost calculated the following ground water budget estimates for the Sequim-Dungeness area, using a steady-state model:

- Ground water inflow from upland areas = 15.2 cfs\*
- Recharge from precipitation = 15.1 cfs
- Recharge from irrigation = 32.3 cfs
- Ground water outflow to saltwater bodies = 68.4 cfs
- Total ground water pumpage (in 1979) = approximately 2 cfs

\*cfs = cubic feet per second

He concluded that the amount of ground water pumping occurring in the area was insignificant when compared to the estimated amount of ground water discharging to saltwater bodies.

The Dungeness-Quilcene Regional Plan encourages the development of public water systems rather than the proliferation of individual wells. Approval of this application will prevent an additional well from being drilled at this site. The Plan also recommends protection of surface water flows. Although it is likely that this well is hydraulically connected to the Dungeness River, information from Drost's study indicates that the additional connection proposed under this application should not have an adverse effect on the hydrological system.

#### Water Requirements

All of the applicant's lots have access to irrigation district water and will not require water for irrigation of lawn and garden. The water requirement for domestic supply of these homes should not exceed an average of 300 gallons per day per unit. This amounts to a total of 2.35 acre-feet per year for seven homes.

#### CONCLUSION:

In accordance with Chapters 90.03 and 90.44 RCW, I find there is water available for appropriation from the source in question, that the appropriation as recommended is a beneficial use, and should not impair existing rights or be detrimental to public welfare. Furthermore, approval of the requested withdrawal appears to be consistent with the conclusions and recommendations of the Dungeness-Quilcene Regional Plan.

#### RECOMMENDATIONS:

I recommend approval of this application and issuance of a permit to allow appropriation of 29 gpm, 2.35 acre-feet per year, from this well for multiple domestic supply. The period of use shall be year-round, as needed.

The permit shall be subject to all applicable State laws and regulations and to the following provisions:

Provisions

The water appropriated under this application will be used for public water supply. The State Board of Health rules require public water supply owners to obtain written approval from the Office of Water Supply, Department of Health, Mail Stop 7822, Building 3, Olympia, Washington 98504-7822, prior to any new construction or alterations of a public water supply system.

Installation and maintenance of an access port as described in WAC 173-160-355 is required. An air line and gauge may be installed in addition to the access port.

An approved metering device shall be installed and maintained in accordance with RCW 90.03.360, WAC 508-64-020 through -040 (installation, operation, and maintenance requirements are attached). Meter readings shall be recorded at least monthly.

This permit may be subject to implementation of the minimum requirements established in the Conservation Planning Requirements, Guidelines and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs, July 1994, and as revised.

Under RCW 90.03.005 and 90.54.020(6), conservation and improved water use efficiency must be emphasized in the management of the State's water resources, and must be considered as a potential new source of water. Accordingly, as part of the terms of this permit, the applicant may be required to prepare and implement a water conservation plan approved by Department of Health. The standards for such a plan may be obtained from either the Department of Health or the Department of Ecology.

"The applicant is advised that notice of Proof of Appropriation of water (under which the final certificate of water right is issued) should not be filed until the permanent distribution system has been constructed and that quantity of water allocated by the permit has been put to full beneficial use."

REPORTED BY:       Marie Peter       Date:       March 30, 1995      

The statutory permit fee for this application is \$20.00.