## **MEMO**

To:

Juno Pandian, Well Construction and Compliance Section Manager

From:

Kristopher Byrd, Well Construction Program Coordinator

Subject:

Review of Water Right Application G-17267

Date:

June 10, 2011

The attached application was forwarded to the Well Construction and Compliance Section by Water Rights. Josh Hackett reviewed the application. Please see Josh's review and the Well Log.

Well #1 (Mari 63260): Based on a review of the Well Report, Well #1 seems to protect the groundwater resource.

The construction of Well #1 may not satisfy hydraulic connection issues.

6 chart

## INTEROFFICE MEMORANDUM

TO:

Kris Byrd, Enforcement

FROM:

Kerry Kavanagh, Water Rights, x 60816

DATE:

6-1-2011

RE:

G-17267 TA Operating LLC - request for determination of compliance with well

construction standards

On December 8, 2009, Josh Hackett completed a public interest review of a proposed basalt well which included the following special conditions:

The well shall produce ground water only from the basalt ground water reservoir.

Groundwater production in the well shall be limited to a single aquifer in the Columbia River Basalt Group lavas. The well shall be cased and sealed at least 20 feet into hard, dense basalt. The open interval in the well shall be no greater than 100 feet except as noted below. Open interval means the total length of borehole that is not behind sealed casing. The borehole above the open interval shall be continuously cased and continuously sealed to land surface. A larger open interval may be approved by the Department if the applicant can demonstrate, using packer tests or other suitable methods, that the hydraulic heads of water-bearing zones in the proposed open interval are equivalent or if the applicant can demonstrate that the open interval is part of a continuous zone of interconnected porous materials such as a sequence of pillow lavas or an hyaloclastite complex.

During the drilling process, electrical conductivity measurements shall be collected and recorded at each water-bearing zone in the Columbia River Basalt aquifer system.

On January 8, 2010, the Department issued an Initial Review (IR).

On September 2, 2010, the basalt well was drilled and assigned well MARI 63260. Please review the attached well log and determine if 1) Well MARI 63260 meets current minimum well construction standards; and 2) if the special conditions recommended by Josh Hackett (described above) were met .

Please route to me when completed.

Thanks.