

Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE ## G 15842

ROUTED TO: WR

TOWNSHIP/

RANGE-SECTION: 345 / 6W-27

CONDITIONS ATTACHED? [☒] yes [☐] no

REMARKS OR FURTHER INSTRUCTIONS:

Reviewer: IRG

TO: Water Rights Section

NOVEMBER 12, 2002

FROM: Groundwater/Hydrology Section IVAN GALL

Reviewer's Name

SUBJECT: Application G- 15842

GROUNDWATER/SURFACE WATER CONSIDERATIONS

1. PER THE _____ Basin rules, one or more of the proposed POA's is/is not within _____ feet/mile of a surface water source (_____) and taps a groundwater source hydraulically connected to the surface water.
2. BASED UPON OAR 690-09 currently in effect, I have determined that the proposed groundwater use
 - a. _____ will have the potential for substantial interference with the nearest surface water source, namely _____; or
 - b. _____ will not have the potential for substantial interference with the nearest surface water source, namely _____; or
 - c. ☒ will, if properly conditioned, adequately protect the surface water from interference:
 - i. ☒ The permit should contain condition #(s) 7B, 7F, 7J; or
 - ii. ☒ The permit should contain special condition(s) as indicated in "Remarks" below;
 - iii. _____ The permit should be conditioned as indicated in item 4 below; or
 - d. _____ will, with well reconstruction, adequately protect the surface water from substantial interference.

GROUNDWATER AVAILABILITY CONSIDERATIONS

3. BASED UPON available data, I have determined that groundwater for the proposed use
 - a. _____ will likely be available in the amount requested without injury to prior rights and/or is within the capacity of the resource; or
 - b. _____ will not be available in the amount requested without injury to prior rights and/or is within the capacity of the resource; or
 - c. ☒ will, if properly conditioned, avoid injury to existing rights or to the groundwater resource:
 - i. ☒ The permit should contain condition #(s) 7B, 7F, 7J;
 - ii. ☒ The permit should contain special condition(s) as indicated in "Remarks" below;
 - iii. _____ The permit should be conditioned as indicated in item 4 below; or
4.
 - a. _____ THE PERMIT should allow groundwater production from no deeper than _____ feet below land surface;
 - b. _____ The permit should allow groundwater production from no shallower than _____ feet below land surface;
 - c. _____ The permit should allow groundwater production only from the _____ groundwater reservoir between approximately _____ feet and _____ feet below land surface;
 - d. _____ Well reconstruction is necessary to accomplish one or more of the above conditions.
 - e. _____ One or more POA's commingle two or more sources of water. The applicant must select one source of water per POA and specify the proportion of water to be produced from each source.

REMARKS:

GROUND WATER MAY NOT BE APPROPRIATED FOR ANY USE OR IN ANY AMOUNT
FROM THE SUMP WELL, ONLY FROM THE TWO DRILLED WELLS, UNDER
THIS PERMIT.

(Well Construction Considerations on Reverse Side) N/A

RECEIVED

NOV 15 2002

WATER RESOURCES DEPT.
SALEM, OREGON

WELL CONSTRUCTION (If more than one well doesn't meet standards, attach an additional sheet.)

5. THE WELL which is the point of appropriation for this application does not meet current well construction standards based upon:

- a. ☐ review of the well log;
- b. ☐ field inspection by _____;
- c. ☐ report of CWRE _____;
- d. ☐ other: (specify) _____

6. THE WELL construction deficiency:

- a. ☐ constitutes a health threat under Division 200 rules;
- b. ☐ commingles water from more than one groundwater reservoir;
- c. ☐ permits the loss of artesian head;
- d. ☐ permits the de-watering of one or more groundwater reservoirs;
- e. ☐ other: (specify) _____

7. THE WELL construction deficiency is described as follows: _____

8. THE WELL

- a. ☐ was constructed according to the standards in effect at the time of original construction or most recent modification.
- b. ☐ was not constructed according to the standards in effect at the time of original construction or most recent modification.
- c. ☐ I do not know if it met standards at the time of construction.

RECOMMENDATION:

- A. ☐ I recommend including the following condition in the permit: "No water may be appropriated under terms of this permit until the well(s) has been repaired to conform to current well construction standards and proof of such repair is filed with the Enforcement Section of the Water Resources Department."
- B. ☐ I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Enforcement Section of the Water Resources Department.
- C. ☐ REFER this review to Enforcement Section for concurrence.

THIS SECTION TO BE COMPLETED BY ENFORCEMENT PERSONNEL

I concur in G/H's recommendation A or B above relating to conditioning or withholding the permit.

(Signature)

_____, 200__

I do not concur in G/H's recommendation A or B above relating to conditioning or withholding the permit for the following reasons: _____

(Signature)

_____, 200__

MEMO

Nov 12, 2002

☒ Yes☐ No☒ Yes☐ No[illegible]



Oregon

John A. Kitzhaber, M.D., Governor

Water Resources Department

942 SW 6th Street
Suite E
Grants Pass, OR 97526
(541) 471-2886
FAX (541) 471-2876

WATER RESOURCES DEPARTMENT MEMORANDUM

Date: November 12, 2002
To: Groundwater/Hydrology
From: Ivan Gall – Southwest Region Hydrogeologist, Grants Pass
Subject: GW Application **G-15842**

Applicant: Wayne N. and Janet M. McKy
Seek: 8.5 gpm, 3.75 acre feet
From: Two drilled wells and one sump well, Rogue Basin
Proposed Use: Irrigation of 1.5 acres
Quad Name: Merlin

Well # 1 (**JOSE ???**) No well log available; owner supplied well construction info
34S/06W-27 (NE of the SW) Taxlot 800, Josephine County
Well elevation at site is ~ 1,320 feet (NGVD 1929)
Well is 62 feet deep, cased to 60 feet bgs
Well drilled in 1955
SWL: unknown

Well # 2 (**JOSE 53086**)
34S/06W-27 (NE of the SW) Taxlot 800, Josephine County
Well elevation at site is ~ 1,330 feet (NGVD 1929)
Well is 100 feet deep, cased to 48 feet and sealed to 40 feet bgs
First water found at 80 feet bgs (elevation 1,250 feet)
SWL: 12-29-1999 20 feet bgs (from well log)
Water Level Elevation is approximately 1,310 feet

Sump Well No construction or depth information available

Nearby Surface Water Bummer Creek, tributary to Quartz Creek (Rogue River Basin)
Wells #1 and #2 are ~ 1,800 feet east from Bummer Creek, a seasonal stream
Bummer Creek elevation near site is ~1,280 feet (NGVD 1929)

Evaluation Summary

The subject property is located south of Hugo Road in Josephine County, Oregon, east of the unincorporated community of Hugo. Topography slopes to the west towards the Bummer Creek



drainage. The applicant is applying for 8.5 gallons per minute (gpm) for a primary irrigation right for 1.5 acres. The total annual quantity requested in the application is 3.75 acre feet.

The bedrock in the area is composed of the Grants Pass granitic pluton. The well log for Well #2 notes "granite soft" from 20 to 40 feet bgs, and "granite med hard" from 40 to 100 feet bgs. Well logs in the vicinity of the subject site suggest that the depth to bedrock hard bedrock is approximately 20 to 45 feet. Ground water appears to be encountered in both the overlying weathered granite and within the fractured bedrock.

Well logs in Section 27 listed in GRID: 97

Well logs with yields of 5 gpm or less: 21

Highest well yield: 100 gpm

Well depth range: 53 logs with depths less than or equal to 100 feet, 8 wells over 300 feet deep

Number of Well Deepenings: 5 deepenings occurred, all in the early to the mid-1980s

Based on the reported well yields, the area appears to be good for domestic ground water development. Many wells have yields exceeding 20 gpm. Sustainable well yields are generally reliable in the weathered and fractured granite. No well interference complaints have been reported for this area recently.

The subject well log for Well #2 reports the yield as 20 gpm.

No water level data from state observation wells are available for this area.

There are three instream water rights Jumpoff Joe Creek; none appear for Quartz Creek. The certificates are 73026, 72696, and 59772. The minimum flow in Certificate 72696, with a priority date of December 1990, is 2.51 cfs. One percent of this flow is 0.0251 cfs, which is greater than what the applicant is applying for. No water availability data are available for Bummer Creek or Quartz Creek, and there does not appear to be an instream water right on either. However, the WRD water availability model for Jumpoff Joe Creek shows no water available for any month at the 80% exceedance level.

Based on the elevation of the water-bearing zone and the water level for Well #2, this aquifer could discharge ground water into Bummer Creek. Well #1 also likely produces water from the weathered and fractured portions of the aquifer. However, insufficient data exist to show direct hydraulic connection and the potential for substantial interference on Bummer Creek, given the relatively low requested rate and duty. Bummer Creek, according to the local watermaster, typically contains flow during the wettest months of the year, and is dry the remainder of the year.

Appropriation of ground water from the sump has a greater potential to impact flows in Bummer Creek. The very shallow/upper portion of the aquifer does intersect small drainages (including Maple Creek in the northwest corner of the property) that drain into Bummer Creek. It is likely that ground water use from the sump will have the potential for substantial interference on flows in Bummer Creek (and downstream Jumpoff Joe Creek, where water is not available 12 months of the year) early in the irrigation season, when the shallow flow system is saturated.

Because of the distance to other offsite wells, it is unlikely that the potential for substantial interference between the applicant's wells and sump and nearby wells exist. The aquifer appears capable of supporting a sustained yield of 8.5 gpm for the irrigation season.

Recommendation:

Ground water appears to be available from the applicant's two drilled wells for irrigation in the requested amount without the potential for substantial interference with other nearby wells or Bummer Creek. No water shall be appropriated from the sump because of the potential for substantial interference with nearby surface water.

References:

1. WRD GRID well log database.
2. 1986 Provisional USGS topographic map, Merlin, Oregon. 1:24,000 sheet.
3. Availability of Ground Water in the Grants Pass Area, Josephine County, Oregon. HA-480, US Geological Survey, 1973.

