

TO: Water Rights Section

OCT 23, 2001

FROM: Groundwater/Hydrology Section IVAN GALL - GRANTS PASS
Reviewer's Name

SUBJECT: Application G- 15611

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) _____; 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, 7C, 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:

See attached review.

(Well Construction Considerations on Reverse Side)

RECEIVED

OCT 25 2001

WATER RESOURCES DEPT.
SALEM, OREGON

MEMO

OCT. 23, 2001

FROM GW: IVAN GALL
(Reviewer's Name)

☒ Yes☐ No☒ Yes☐ No☒

Exercise of this permit is calculated to reduce monthly flows in _____ Scenic Waterway by the following amounts expressed as a proportion of the consumptive use by which surface water flow is reduced.

[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: October 23, 2001

To: Groundwater/Hydrology

From: Ivan Gall – Hydrogeologist, Grants Pass

Subject: GW Application **G-15611**

Applicant: Kathy and George Murphy

Seek: 20 gpm for 12.19 acres; 6.5 acre-feet

From: One drilled well

Proposed Use: Domestic (year-round, school), Irrigation (March 1 – October 31) of lawns, flower garden, and pasture

Quad Name: Rio Canyon

Well # 1 **(JACK 34110)**

38S/01E-17cb (NW of the SW), Tax Lot 500 Jackson County

Well elevation at site is ~2,240 feet (NGVD 1929)

Well is located 1665 feet North and 165 feet East of the Southwest corner of Section 17 (from application map)

Well is ~400 feet west from an unnamed seasonal creek

Well is 320 feet deep, sealed and cased to 27 feet bgs

Water bearing zone is 299 to 301 feet bgs

SWL: August 1994 89 feet bgs (from well log)

Evaluation Summary

The subject property is located at 2868 North Valley View Road, northeast of Ashland, Oregon. Topography at the site consists of low hills, generally sloping south towards Bear Creek. Several small, seasonal creeks drain the area; the creeks generally are dry if no precipitation has recently fallen. Land use is rural residential, with a Talent Irrigation District lateral approximately 3000 feet south of the applicant's well. The irrigation lateral may intercept water from the seasonal creeks.

The applicant is applying for a primary right of 20 gallons per minute (gpm) with a total duty of 6.5 acre-feet for year-round domestic use and seasonal irrigation. The log for the subject well indicates that the well produces 75 gpm. An aquifer test conducted by Emcon in April 1995 pumped the well at 45 gpm for 24 hours.



The surficial geology in the area is composed of sandstone, conglomerate, and mudstone of the upper part of the Payne Cliffs Formation (Hladkey, 1998). A relatively thin, variable thickness of soil and weathered bedrock is present in some areas. Based on nearby well logs, it appears that most wells are completed into the fractured bedrock. The depth to unweathered bedrock in the area appears to range from 5 to 35 feet below ground surface (bgs).

GRID lists 19 well logs for section 17 (two abandonments and two reconditions) and 4 well logs for section 18 (two are abandonments). Six of these wells are monitoring wells at the Ashland Sanitary Landfill. Most of the well abandonments are associated with the landfill. Ground water occurrence in the area appears to be adequate for domestic use, with most reported well yields listed as producing greater than 10 gpm. Reported well yields go over 50 gpm for several wells. No well interference complaints have been received from this area recently.

No long-term water level data from state observation wells exist for this area. The subject well encountered the water-bearing fracture at 299 to 301 feet bgs. Emcon, as part of work they were conducting at the adjacent Ashland Sanitary Landfill, drilled the subject well in 1994 and then conducted a 24-hour pumping aquifer test in April 1995. Results of the aquifer test appear to indicate that the well can support 45 gpm flow rate, but the time-drawdown data suggest that a low permeability boundary may be present near the well and/or that aquifer storage may be limited. The recovery data for the well indicates that full recovery was not reached 24 hours after pumping ceased. Given these data, there still appears to be ample drawdown available in the subject well to support a 20 gpm pumping rate.

Recommendation:

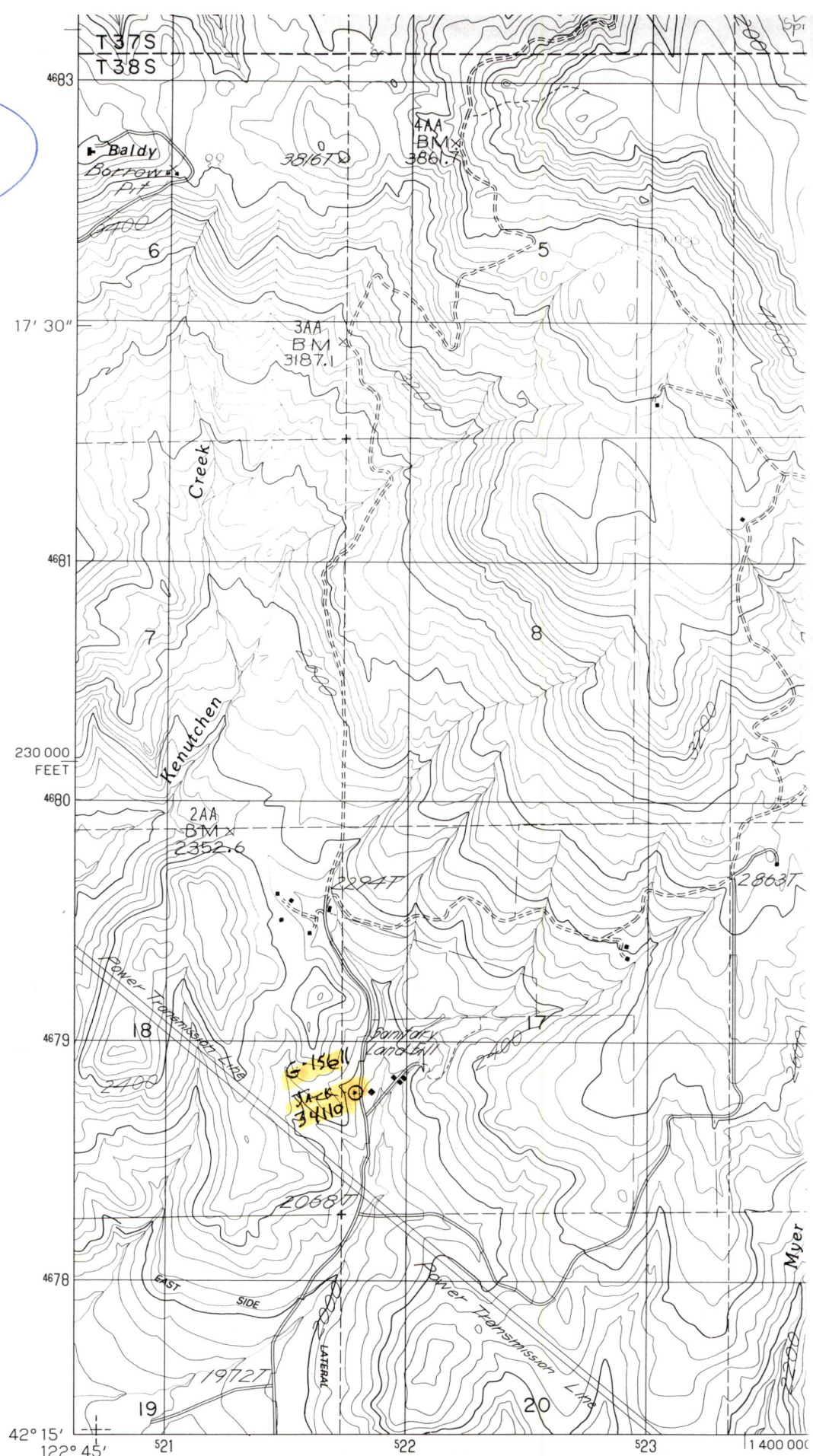
The ground water resource appears to be available at this location to support irrigation of 12.19 acres at 20 gallons per minute with a duty of 6.5 acre feet and year-round domestic use without the potential for substantial interference with neighboring wells or nearby surface water. The permit should include the following conditions:

7B, 7C, 7F, 7J

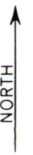
References:

1. WRD GRID well log database.
2. USGS 7.5 minute topographic map, Rio Canyon, OR 1:24,000 sheet.
3. Hladky, F. R. Geology and Mineral Resources Map of the Rio Canyon Quadrangle, Jackson County, Oregon. State of Oregon Department of Geology and Mineral Industries, GMS-108, 1998.

Rio
Canyon

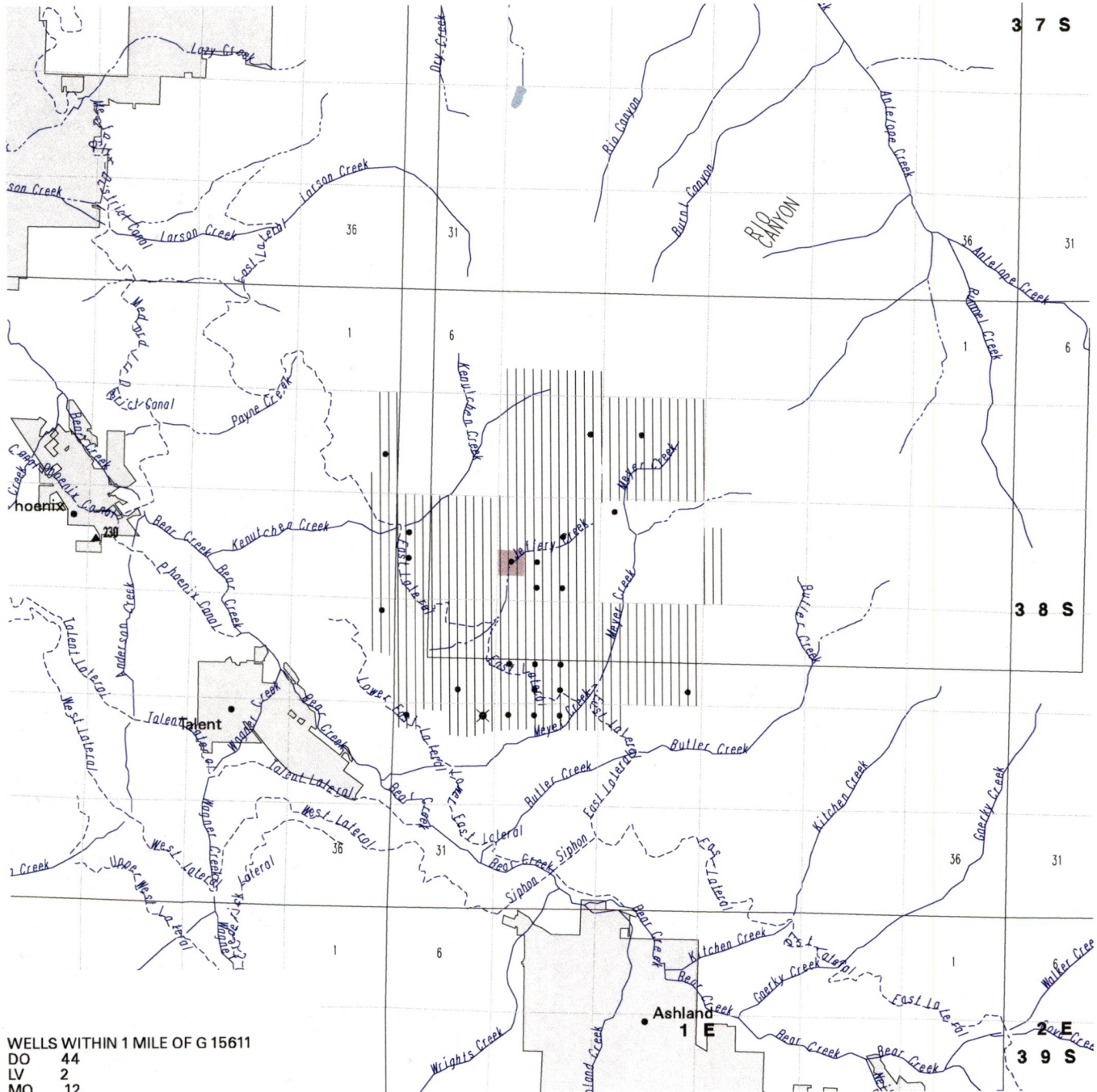


PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
 CONTROL BY USGS, NOS/NOAA
 COMPILED FROM AERIAL PHOTOGRAPHS TAKEN1981
 FIELD CHECKED1982. MAP EDITED1988
 PROJECTION LAMBERT CONFORMAL CONIC
 GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATORZONE 10
 10 000-FOOT STATE GRID TICKS OREGON SOUTH ZONE



Wells in the vicinity of application G 15611

- Application well(s) in this 1/4-1/4 section
- Well(s) identified in this section from OWRD's well log database within 1 mi. radius of application well(s)
- Well(s) identified in this 1/4-1/4 section from OWRD's well log database within 1 mi. radius of application well(s)
- Permitted well(s) in this 1/4-1/4 section within 1 mi. radius of application well(s)
- Conditioned, permitted well(s) in this 1/4-1/4 section within 5 mi. radius of application well(s)
- OWRD Observation well and well-id within 5 mi. radius of application well(s)
- Critical GW Area
- Regulated GW Area



WELLS WITHIN 1 MILE OF G 15611
 DO 44
 LV 2
 MO 12

PERMITTED WELLS WITHIN 1 MILE OF APPLICATION G 15611

\$RECNO	APPLICATION	PERMIT	LOC-QQ	USE	RATE	DIV-UNITS
1	G 6869	G 6405	38.00S 1.00E30NENE	IS	0.1800	C
1	G 6869	G 6405	38.00S 1.00E30NENE	TC	0.1800	C

NO CONDITIONED WELLS WITHIN 1 MILE OF APPLICATION G 15611

APPLICATION G 15611 FALLS WITHIN THESE QUAD(S)

RIO CANYON
