

**OREGON WATER RESOURCES DEPARTMENT
INTEROFFICE MEMO**

To: Ground Water Files/Jerry Gainey Date: November 6, 2001

From: Michael J. Zwart

Subject: Application Re-review: G-15484, Tom and Bev Mallams

This application proposes one new well with construction similar to an existing nearby well (KLAM 1635). Another nearby well (KLAM 2033) irrigates under certificate 50502. I have determined that these two existing wells produce ground water from the same confined aquifer (source). My research indicates that the proposed well for this application is not likely yet constructed. The proposed well therefore should develop the same source unless the applicants modify the its proposed construction.

KLAM
1635

35/12-34R(1)

File Original and
First Copy with the
STATE ENGINEER,
SALEM, OREGON

JAN 19 1961

WATER WELL REPORT

STATE OF OREGON G1918

State Well No.

State Permit No.

(1) OWNER:

Name John & Lillian Mills
Address P.O. Box 145
Beatty, Oregon.

(2) LOCATION OF WELL:

County Klamath Owner's number, if any— No 1
SE 1/4 SE 1/4 Section 34 T. 35S., R. 12E., W.M.
Bearing and distance from section or subdivision corner
N. 4° 15' W. - 795.0 ft. from S.E.
corner of Sec. 34, T. 35S., R. 12E.
W.M.

(3) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) TYPE OF WELL:

Rotary Driven
Cable Jetted
Dug Bored

(6) CASING INSTALLED:

Threaded Welded
12" Diam. from 0 ft. to 80 ft. Gage 1250
" Diam. from _____ ft. to _____ ft. Gage _____
" Diam. from _____ ft. to _____ ft. Gage _____

(7) PERFORATIONS:

Perforated? Yes No
Type of perforator used _____
SIZE of perforations in. by in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

(8) SCREENS:

Well screen installed Yes No
Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
_____ Slot size _____ Set from _____ ft. to _____ ft.

(9) CONSTRUCTION:

Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.
Was a surface seal provided? Yes No To what depth? 75 ft.
Material used in seal— cement
Did any strata contain unusable water? Yes No
Type of water? good Depth of strata 25
Method of sealing strata off cement

(10) WATER LEVELS:

Static level _____ ft. below land surface Date _____
Artesian pressure _____ lbs. per square inch Date _____

Log Accepted by:

[Signed] _____ Date _____ 19____
(Owner)

(11) WELL TESTS:

Drawdown is amount water level is lowered below static level
Was a pump test made? Yes No If yes, by whom? Imstate P.
Yield: 1250 gal./min. with 60 ft. drawdown after 2 hrs.
" " " " " "
" " " " " "
Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.
Artesian flow 200 g.p.m. Date Nov 16
Temperature of water _____ Was a chemical analysis made? Yes No

(12) WELL LOG:

Diameter of well 12 inches.
Depth drilled 845 ft. Depth of completed well 845 ft.
Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

| MATERIAL | FROM | TO |
|---------------------|------|-----|
| Top soil | 0 | 3 |
| coarse gravel | 3 | 7 |
| yellow sandstone | 7 | 15 |
| yellow shale | 15 | 27 |
| gravel | 27 | 33 |
| blue shale | 33 | 68 |
| blue shale and sand | 68 | 82 |
| blue shale | 82 | 127 |
| gravel | 127 | 131 |
| blue shale | 131 | 147 |
| gravel | 147 | 151 |
| shale | 151 | 189 |
| sand | 189 | 196 |
| shale | 196 | 225 |
| shale and sand | 225 | 372 |
| gravel | 372 | 394 |
| shale | 394 | 448 |
| rock and gravel | 448 | 600 |
| shale and sand | 600 | 750 |
| white lava rock | 750 | 845 |

Work started _____ 19____ Completed Nov 1960

(13) PUMP:

Manufacturer's Name Lane and Boulder
Type: turbine H.P. 30

Well Driller's Statement:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME W. L. Hartley & Son
(Person, firm, or corporation) (Type or print)

Address Bernanga Dr.

Driller's well number _____

[Signed] Robert F. Hartley
(Well Driller)

License No. 164 Date Nov 16, 1960

RECEIVED
FEB 10 1966
STATE ENGINEER
SALEM, OREGON

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the
STATE ENGINEER, SALEM 10, OREGON
within 30 days from the date
of well completion.

WATER WELL REPORT
(Please type or print)

KLAM
2033

State Well No. *36/12-20*

State Permit No. _____

(1) OWNER:

Name *L. L. Crawford*
Address *Beatty Oregon*

(2) LOCATION OF WELL:

County *Wash* Driller's well number _____
NW 1/4 NW 1/4 Section 2 T. 36 R. 12 W.M.
Bearing and distance from section or subdivision corner
*800 ft east
Badawa Spring
road*

(3) TYPE OF WORK (check):

Well Deepening Reconditioning Abandon
Abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) TYPE OF WELL:

Rotary Driven
Cable Jetted
Dug Bored

(6) CASING INSTALLED:

Threaded Welded
1 1/2" Diam. from 0 ft. to 15.0 ft. Gage 25.0
12" Diam. from _____ ft. to 17.9 ft. Gage 12.5.0
" Diam. from _____ ft. to _____ ft. Gage _____

(7) PERFORATIONS:

Perforated? Yes No
Type of perforator used _____
Size of perforations in. by in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

(8) SCREENS:

Well screen installed Yes No
Manufacturer's Name _____
Model No. _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(9) CONSTRUCTION:

Well seal—Material used in seal *cement*
Depth of seal *1.50* ft. Was a packer used? *Yes*
Diameter of well bore to bottom of seal *2.0* in.
Were any loose strata cemented off? Yes No Depth _____
Was a drive shoe used? Yes No
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.
Did any strata contain unusable water? Yes No
Type of water? _____ Depth of strata _____
Method of sealing strata off _____

(10) WATER LEVELS:

Static level _____ ft. below land surface Date _____
Artesian pressure *3* lbs. per square inch Date *Feb 15*

(11) WELL TESTS:

Drawdown is amount water level is
lowered below static level.
Was a pump test made? Yes No If yes, by whom? *Drury*
Yield: *2200* gal./min. with *70* ft. drawdown after *4* hr
" " " " " "
" " " " " "
" " " " " "
" " " " " "
" " " " " "
Bailer test _____ gal./min. with _____ ft. drawdown after *70* hr
Artesian flow *600* g.p.m. Date *Feb 15-63*
Temperature of water *60* Was a chemical analysis made? Yes No
549 16- 1.

(12) WELL LOG:

Diameter of well below casing *16-* in.
Depth drilled *1127* ft. Depth of completed well *1127* ft.
Formation: Describe by color, character, size of material and structure, and
show thickness of aquifers and the kind and nature of the material in each
stratum penetrated, with at least one entry for each change of formation

| MATERIAL | FROM | TO |
|-------------------|------------|-------------|
| <i>top soil</i> | <i>0</i> | <i>3</i> |
| <i>sandstone</i> | <i>3</i> | <i>8</i> |
| <i>chalk</i> | <i>8</i> | <i>140</i> |
| <i>sandstone</i> | <i>140</i> | <i>160</i> |
| <i>chalk</i> | <i>160</i> | <i>500</i> |
| <i>white rock</i> | <i>434</i> | <i>1127</i> |

(13) PUMP:

Manufacturer's Name _____
Type: _____ H.P. _____

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME *W. L. Hartley & Son*
(Person, firm or corporation) (Type or print)

Address *Bonanza Dr*

Drilling Machine Operator's License No. *120*

[Signed] *Robert F Hartley*
(Water Well Contractor)

Contractor's License No. *164* Date *Feb 15, 1966*

**OREGON WATER RESOURCES DEPARTMENT
INTEROFFICE MEMO**

To: Ground Water Files

Date: August 9, 2001

From: Michael J. Zwart

Subject: Application Review: G-15484, Tom and Bev Mallams

This application proposes to use about 2.0 cfs from one proposed well for primary irrigation of 140.4 acres. Based on the proposed construction, similar to a nearby well (KLAM 1635), the well will likely penetrate a confined aquifer developed in sand, shale and gravel, and possibly basalt at the bottom of the well.

The well is about 2800 feet from the Sycan River. The aquifer targeted is not in hydraulic connection with the nearby reach of the river. There is no potential for substantial interference, based on the confined aquifer targeted and the distance.

I recommend permit conditions 7B and 7J.

**OREGON WATER RESOURCES DEPARTMENT
INTEROFFICE MEMO**

To: Ground Water Files Date: August 9, 2001

From: Michael J. Zwart

Subject: Application Review: G-15484, Tom and Bev Mallams

This application proposes to use about 2.0 cfs from one proposed well for primary irrigation of 140.4 acres. Based on the proposed construction, similar to a nearby well (KLAM 1635), the well will likely penetrate a confined aquifer developed in sand, shale and gravel, and possibly basalt at the bottom of the well.

The well is about 2800 feet from the Sycan River. The aquifer targeted is not in hydraulic connection with the nearby reach of the river. There is no potential for substantial interference, based on the confined aquifer targeted and the distance.

I recommend permit conditions 7B and 7J.

TO: Water Rights Section August 9, 2001
FROM: Groundwater/Hydrology Section Michael Zwart
SUBJECT: Application G- 15484 Reviewer's Name

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, or _____ have the potential for substantial interference with the nearest
b. ___ will not _____ surface water source, namely _____; or
c. will if properly conditioned, adequately protect the surface water from interference:
 i. The permit should contain condition #(s) FJ;
 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 from substantial interference.

GROUNDWATER AVAILABILITY CONSIDERATIONS

- 3. BASED UPON available data, I have determined that groundwater for the proposed use
a. ___ will, or _____ likely be available in the amounts requested without injury to prior rights
b. ___ will not _____ and/or 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) FB;
 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 _____ ft. below land surface;
b. ___ The permit should allow groundwater production from no shallower than _____ ft. below land surface;
c. ___ The permit should allow groundwater production only from the _____ groundwater reservoir between approximately _____ ft. and _____ ft. below land surface;
d. ___ Well reconstruction is necessary to accomplish one or more of the above conditions.
e. ___ One or more POA's commingle 2 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: _____

(Well Construction Considerations on Reverse Side)

15484

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, or constructed according to the standards in effect at the time of
 - b. ___ was not original construction or most recent modification.
 - c. ___ I don't know if it met standards at the time of construction.

RECOMMENDATION:

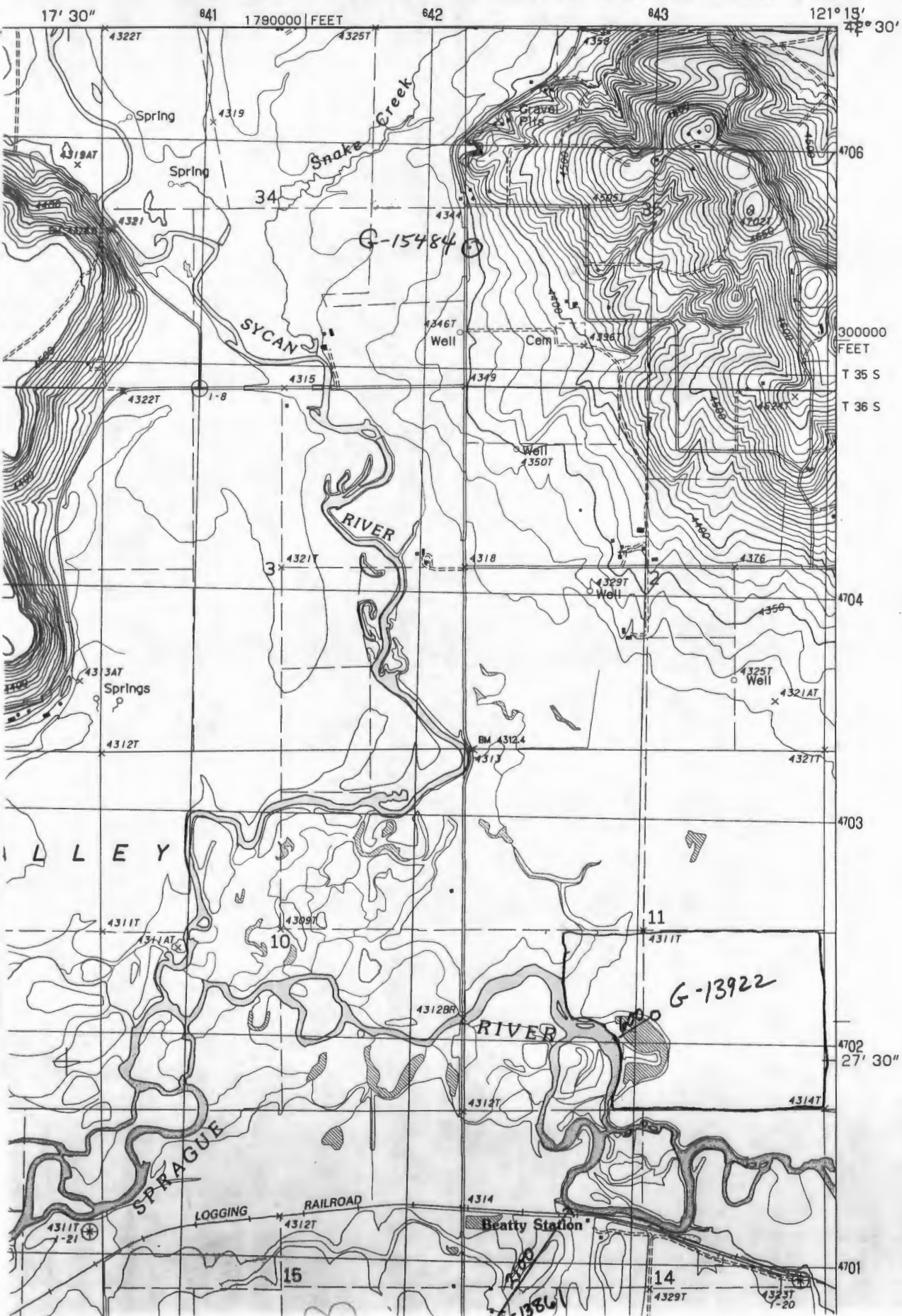
- A. ___ I recommend including the following condition in the permit:
"No water may be appropriated under terms of this permit until the well(s) has been repaired to conform to current well construction standards and proof of such repair is filed with the Enforcement Section of the Water Resources Department."
- 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
_____, 199____.
(Signature)

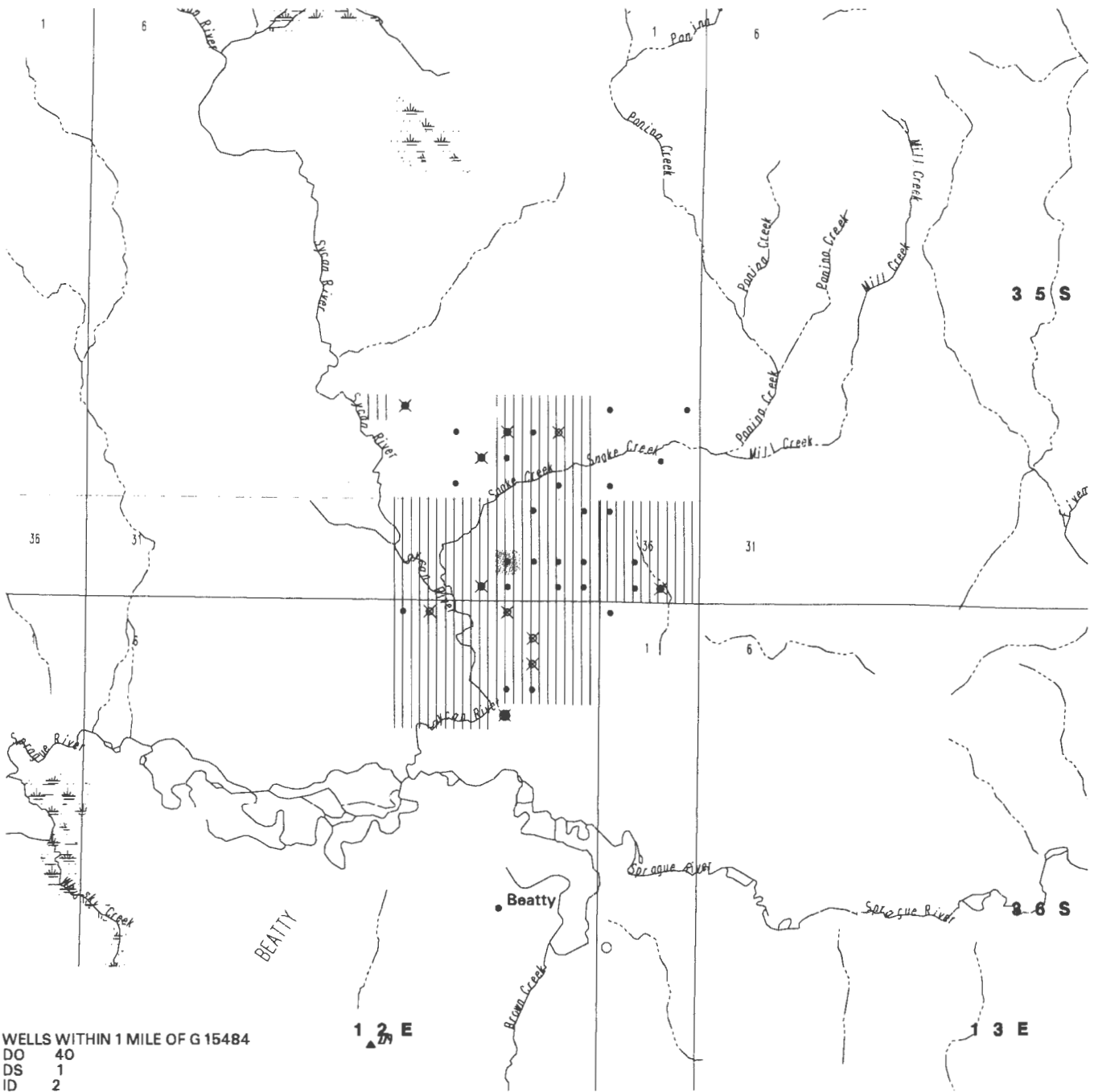
I do not concur in G/H's recommendation A or B above relating to conditioning or withholding the permit for the following reasons: _____
_____, 199____.
(Signature)

BEATTY QUADRANGLE
OREGON-KLAMATH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Wells in the vicinity of application G 15484

- Application well(s) in this 1/4-1/4 section
- 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 15484

| | |
|----|----|
| DO | 40 |
| DS | 1 |
| ID | 2 |
| IR | 15 |

PERMITTED WELLS WITHIN 1 MILE OF APPLICATION G 15484

| \$RECNO | APPLICATION | PERMIT | LOC-QQ | USE | RATE | DIV-UNITS |
|---------|-------------|--------|---------|-----------------------|-----------|-----------|
| 1 | G | 5768 | G 4985 | 35.00S12.00E27NWNW IR | 3.2100 | C |
| 1 | G | 11717 | G 10815 | 35.00S12.00E27NWNW AQ | 1100.0000 | G |
| 2 | G | 2749 | G 2554 | 35.00S12.00E26SWNW IS | 1.4100 | C |
| 2 | G | 5768 | G 4985 | 35.00S12.00E26SWNW IR | 1.8600 | C |
| 2 | G | 11717 | G 10815 | 35.00S12.00E26SWNW AQ | 1700.0000 | G |
| 3 | G | 4146 | G 3893 | 35.00S12.00E26SWNE IR | 0.6300 | C |
| 4 | G | 2108 | G 1946 | 35.00S12.00E27NESE IR | 0.9800 | C |
| 5 | G | 1918 | G 1763 | 35.00S12.00E34SESE IR | 1.7200 | C |
| 6 | G | 13095 | G 12593 | 35.00S12.00E36SWSE IR | 1.9300 | C |
| 7 | G | 1752 | G 1602 | 36.00S12.00E 3NENW IR | 0.6700 | C |
| 8 | G | 2580 | G 2392 | 36.00S12.00E 2NWNW IR | 4.0600 | C |
| 8 | G | 2580 | G 2392 | 36.00S12.00E 2NWNW IR | 4.1000 | C |
| 8 | G | 10624 | G 9733 | 36.00S12.00E 2NWNW IR | 0.7800 | C |
| 9 | G | 11922 | G 11574 | 36.00S12.00E 2SENW IR | 0.9500 | C |
| 10 | G | 9692 | G 9030 | 36.00S12.00E 2NESW IS | 1.1200 | C |
| 11 | G | 12836 | G 11812 | 36.00S12.00E11NWNW IR | 2.1800 | C |

CONDITIONED WELLS WITHIN 5 MILES OF APPLICATION G 15484

| \$RECNO | APPLICATION | PERMIT | LOC-QQ | CONDITION-CODE |
|---------|-------------|--------|---------|------------------------|
| 1 | G | 12836 | G 11812 | 36.00S12.00E11NWNW 4KG |
| 2 | G | 12992 | G 11569 | 36.00S12.00E24SWNW DRF |
| 2 | G | 13503 | G 12912 | 36.00S12.00E24SWNW |

APPLICATION G 15484 FALLS WITHIN THESE QUAD(S)

BEATY