

Water Right Conditions  
Tracking Slip

Groundwater/Hydrology Section

FILE ## G-17299

ROUTED TO: Water Rights

TOWNSHIP/  
RANGE-SECTION: 14S/42E-6dd

CONDITIONS ATTACHED? ☐ yes ☒ no

REMARKS OR FURTHER INSTRUCTIONS:

Reviewer: Mike Zwart

# PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO: Water Rights Section Date **February 2, 2010**

FROM: Ground Water/Hydrology Section **Michael Zwart**  
Reviewer's Name

SUBJECT: Application G- **17299** Supersedes review of \_\_\_\_\_  
Date of Review(s)

## PUBLIC INTEREST PRESUMPTION; GROUNDWATER

**OAR 690-310-130 (1)** The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525. Department staff review ground water applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

**A. GENERAL INFORMATION:** Applicant's Name: **Three Valleys Ranch, LLC** County: **Malheur**

A1. Applicant(s) seek(s) **1.0** cfs from **one** well(s) in the **Malheur** Basin,  
**Willow Creek** subbasin Quad Map: **Becker Creek**

A2. Proposed use: **Mining** Seasonality: **Year round**

A3. Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid):

| Well | Logid          | Applicant's Well # | Proposed Aquifer*      | Proposed Rate(cfs) | Location (T/R-S QQ-Q)  | Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36 |
|------|----------------|--------------------|------------------------|--------------------|------------------------|------------------------------------------------------------------|
| 1    | <b>MALH 56</b> | <b>1</b>           | <b>Sand and gravel</b> | <b>1.0</b>         | <b>14S/42E-6 SE-SE</b> | <b>325' N, 240' W fr SE cor S 6</b>                              |
| 2    |                |                    |                        |                    |                        |                                                                  |
| 3    |                |                    |                        |                    |                        |                                                                  |
| 4    |                |                    |                        |                    |                        |                                                                  |
| 5    |                |                    |                        |                    |                        |                                                                  |

\* Alluvium, CRB, Bedrock

| Well     | Well Elev ft msl | First Water ft bls | SWL ft bls | SWL Date        | Well Depth (ft) | Seal Interval (ft) | Casing Intervals (ft) | Liner Intervals (ft) | Perforations Or Screens (ft) | Well Yield (gpm) | Draw Down (ft) | Test Type |
|----------|------------------|--------------------|------------|-----------------|-----------------|--------------------|-----------------------|----------------------|------------------------------|------------------|----------------|-----------|
| <b>1</b> | <b>3515</b>      | <b>8</b>           | <b>8*</b>  | <b>07/13/80</b> | <b>247</b>      | <b>0-20</b>        | <b>0-141</b>          | <b>None</b>          | <b>117-141</b>               | <b>38</b>        | <b>25</b>      | <b>P</b>  |
|          |                  |                    |            |                 |                 |                    |                       |                      |                              |                  |                |           |
|          |                  |                    |            |                 |                 |                    |                       |                      |                              |                  |                |           |
|          |                  |                    |            |                 |                 |                    |                       |                      |                              |                  |                |           |
|          |                  |                    |            |                 |                 |                    |                       |                      |                              |                  |                |           |

Use data from application for proposed wells.

A4. Comments: **\*The SWL above was taken over one month prior to the completion date of the well. The SWL was reported as 85 feet for the bottom 135 feet of the borehole, but was not reported for the completed well. I suspect the final SWL was 85 feet. Conversation with Steve Jay on 02/02/2010 confirms the deeper SWL. Application reports the well-head elevation to be 3533 feet msl.**

A5. ☒ **Provisions of the Malheur** Basin rules relative to the development, classification and/or management of ground water hydraulically connected to surface water ☐ are, or ☒ are not, activated by this application. (Not all basin rules contain such provisions.)  
Comments: \_\_\_\_\_

A6. ☐ Well(s) # \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, tap(s) an aquifer limited by an administrative restriction.  
Name of administrative area: \_\_\_\_\_  
Comments: \_\_\_\_\_



**C. GROUND WATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040****C1. 690-09-040 (1):** Evaluation of aquifer confinement:

| Well | Aquifer or Proposed Aquifer                 | Confined                            | Unconfined               |
|------|---------------------------------------------|-------------------------------------|--------------------------|
| 1    | Sand and gravel, likely Qtz of Brooks, 1976 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|      |                                             | <input type="checkbox"/>            | <input type="checkbox"/> |
|      |                                             | <input type="checkbox"/>            | <input type="checkbox"/> |
|      |                                             | <input type="checkbox"/>            | <input type="checkbox"/> |
|      |                                             | <input type="checkbox"/>            | <input type="checkbox"/> |

Basis for aquifer confinement evaluation: The static water level is above the depth where groundwater was encountered.

**C2. 690-09-040 (2) (3):** Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

| Well | SW # | Surface Water Name   | GW Elev<br>ft msl | SW Elev<br>ft msl | Distance<br>(ft) | Hydraulically Connected? |                                     |                          | Potential for Subst. Interfer. Assumed? |                                     |
|------|------|----------------------|-------------------|-------------------|------------------|--------------------------|-------------------------------------|--------------------------|-----------------------------------------|-------------------------------------|
|      |      |                      |                   |                   |                  | YES                      | NO                                  | ASSUMED                  | YES                                     | NO                                  |
| 1    | 1    | Basin Creek          | 3430              | 3500              | 2150             | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                | <input checked="" type="checkbox"/> |
| 1    | 2    | Fourth of July Creek | 3430              | 3600              | 3900             | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                | <input checked="" type="checkbox"/> |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |
|      |      |                      |                   |                   |                  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>                | <input type="checkbox"/>            |

Basis for aquifer hydraulic connection evaluation: The nearest reaches of the creeks are not incised into the water-bearing zone developed and the head relationship suggests poor hydraulic connection. However, the stream gradients are steep, such that there may be hydraulic connection with more distant reaches of the creeks. It is not clear that hydraulic connection occurs within one mile of the well due to the complex local geology. Older tuffaceous sedimentary rocks are exposed within one mile downstream in the bed of Basin Creek.

Water Availability Basin the well(s) are located within: Basin Creek > Willow Creek at Mouth (31011917).

**C3a. 690-09-040 (4):** Evaluation of stream impacts for each well that has been determined or assumed to be hydraulically connected and less than 1 mile from a surface water source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% natural flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked ☒ box indicates the well is assumed to have the potential to cause PSI.

| Well | SW # | Well < ¼ mile?           | Qw > 5 cfs?              | Instream Water Right ID | Instream Water Right Q (cfs) | Qw > 1% ISWR?            | 80% Natural Flow (cfs) | Qw > 1% of 80% Natural Flow? | Interference @ 30 days (%) | Potential for Subst. Interfer. Assumed? |
|------|------|--------------------------|--------------------------|-------------------------|------------------------------|--------------------------|------------------------|------------------------------|----------------------------|-----------------------------------------|
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|      |      | <input type="checkbox"/> | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |

C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. **Complete only if Q is distributed among wells.** Otherwise same evaluation and limitations apply as in C3a above.

|  | SW # |  | Qw > 5 cfs?              | Instream Water Right ID | Instream Water Right Q (cfs) | Qw > 1% ISWR?            | 80% Natural Flow (cfs) | Qw > 1% of 80% Natural Flow? | Interference @ 30 days (%) | Potential for Subst. Interfer. Assumed? |
|--|------|--|--------------------------|-------------------------|------------------------------|--------------------------|------------------------|------------------------------|----------------------------|-----------------------------------------|
|  |      |  | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|  |      |  | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|  |      |  | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |
|  |      |  | <input type="checkbox"/> |                         |                              | <input type="checkbox"/> |                        | <input type="checkbox"/>     |                            | <input type="checkbox"/>                |

Comments: This section does not apply.

C4a. **690-09-040 (5):** Estimated impacts on **hydraulically connected surface water sources greater than one mile** as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

| Non-Distributed Wells |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Well                  | SW# | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Distributed Wells     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Well                  | SW# | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                       |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |
| Well Q as CFS         |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Interference CFS      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| (A) = Total Interf.   |     |     |     |     |     |     |     |     |     |     |     |     |     |
| (B) = 80 % Nat. Q     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| (C) = 1 % Nat. Q      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| (D) = (A) > (C)       |     | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| (E) = (A / B) x 100   |     | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   | %   |

(A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed. as CFS; (C) = 1% of calculated natural flow at 80% exceed. as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage.

Basis for impact evaluation:

C4b. **690-09-040 (5) (b)** The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.

- C5. ☐ If properly conditioned, the surface water source(s) can be adequately protected from interference, and/or ground water use under this permit can be regulated if it is found to substantially interfere with surface water:
- i. ☐ The permit should contain condition #(s) \_\_\_\_\_;
  - ii. ☐ The permit should contain special condition(s) as indicated in "Remarks" below;

C6. SW / GW Remarks and Conditions

References Used: Local well logs; file G-14227/Permit G-13450; Geology of the Oregon Part of the Baker 1 by 2 Quadrangle, Map GMS-7, by H. C. Brooks, 1976.

**D. WELL CONSTRUCTION, OAR 690-200**D1. Well #: 1 Logid: MALH 56D2. **THE WELL 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) \_\_\_\_\_

D3. **THE WELL construction deficiency:**

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

D4. **THE WELL construction deficiency is described as follows:** \_\_\_\_\_D5. **THE WELL** a. ☐ was, or ☐ was not constructed according to the standards in effect at the time of original construction or most recent modification.b. ☒ I don't know if it met standards at the time of construction.D6. ☐ **Route to the Enforcement Section.** I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Enforcement Section and the Ground Water Section.

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**THIS SECTION TO BE COMPLETED BY ENFORCEMENT PERSONNEL**D7. ☐ Well construction deficiency has been corrected by the following actions: \_\_\_\_\_

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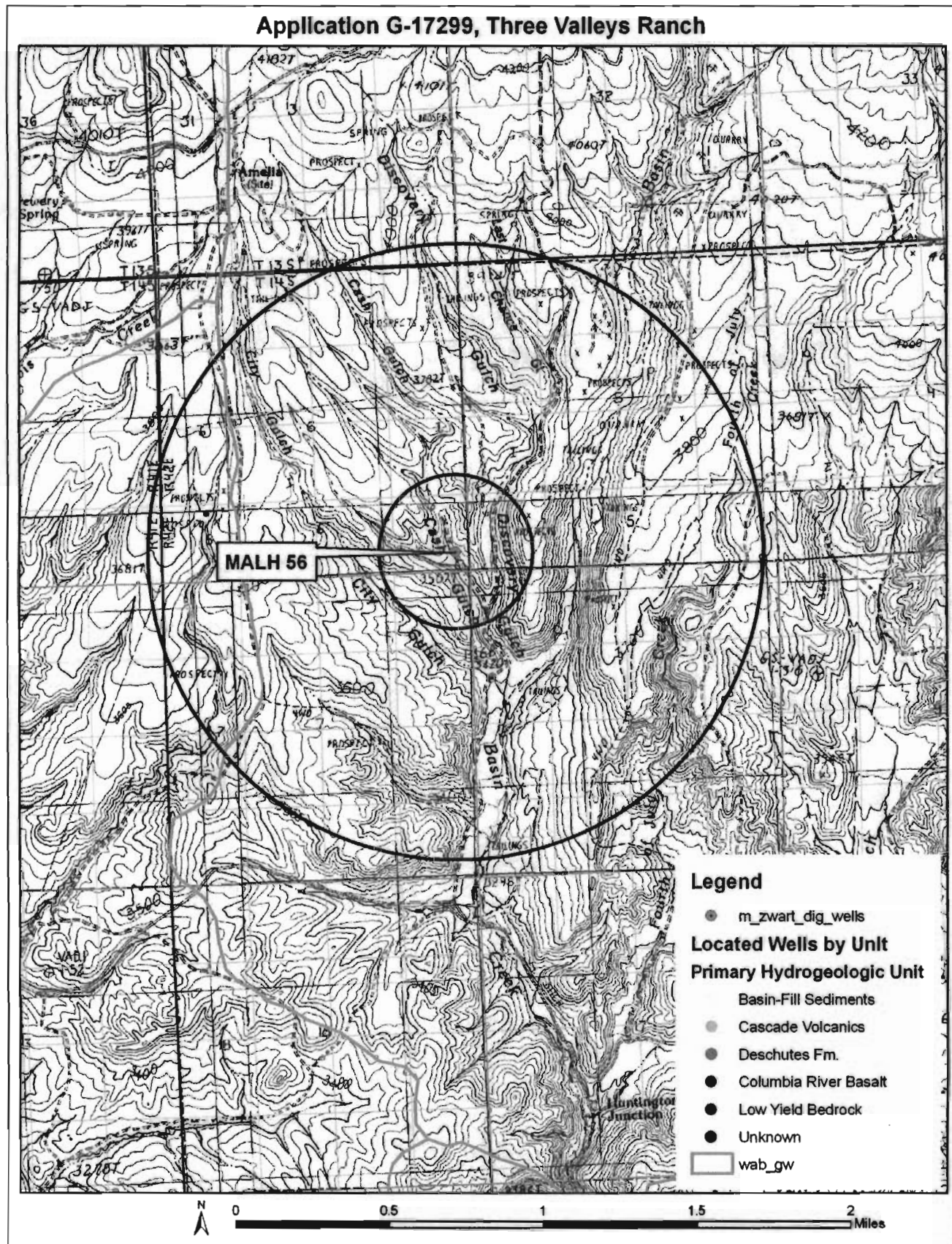
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\_\_\_\_\_, 200\_\_\_\_\_  
(Enforcement Section Signature)D8. ☐ **Route to Water Rights Section (attach well reconstruction logs to this page).**

Well Location Map

## MEMO

February 2, 2000

☐ YES  
☒ NO

The source of appropriation is within or above a Scenic Waterway

☐ YES  
☒ NO

Use the Scenic Waterway condition (Condition 7J)

Per ORS 390.835, the Ground Water Section is **able** to calculate ground water interference with surface water that contributes to a Scenic Waterway. The calculated interference is distributed below.

Per ORS 390.835, the Ground Water Section is **unable** to calculate ground water interference with surface water that contributes to a scenic waterway; **therefore, the Department is unable to find that there is a preponderance of evidence that the proposed use will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway.**

*Calculate the percentage of consumptive use by month and fill in the table below. If interference cannot be calculated, per criteria in 390.835, do not fill in the table but check the "unable" option above, thus informing Water Rights that the Department is unable to make a Preponderance of Evidence finding.*

[illegible]