

TO: Water Rights Section Date 7/28/2003

FROM: Ground Water/Hydrology Section Marc A. Norton

Reviewer's Name

SUBJECT: Application G- 16014 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: Mel Omeg

A1. Applicant(s) seek(s) 0.891 cfs from 1 well(s) in the Hood Basin, Threemile Creek subbasin Quad Map: The Dalles South

A2. Proposed use: Irrigation Seasonality: 3/1 to 10/31

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

Well	Logid	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, example: 2250' N, 1200' E fr NW cor S 36
1	WASC 51102	CRB	0.891	01N/13E-33 NW/NW	528' S & 70' E from the NW corner sec.33
	WASC 51165	CRB			Deepening Log
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	Casing Intervals	Liner Intervals	Perforations Or Screens	Well Yield	Draw Down	Test Type
1	1310	417	110	8/24/02	575	0 - 18.5	+2 - 301			80		Air
		670	240	3/13/02	704	? 575 ?				210		Air

Use data from application for proposed wells.

A4. Comments: Lower seal was set at 575 by pulling up the casing, installing a plug, and adding 5 yards of sand cement. The deepening log was not submitted to the Department at the time of review. I called the constructor and they faxed a copy of the log to me. I don't believe that the well meets well construction standards.

Well #1 is Owner's Well #2

A5. Provisions of the Hood 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: The well is located about 1.5 miles south of The Dalles Critical Ground Water Area

B. GROUND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070

B1. Based upon available data, I have determined that ground water* for the proposed use:

- a. is over appropriated, is not over appropriated, or cannot be determined to be over appropriated during any period of the proposed use. * This finding is limited to the ground water portion of the over-appropriation determination as prescribed in OAR 690-310-130;
- b. will not or will likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the ground water portion of the injury determination as prescribed in OAR 690-310-130;
- c. will not or will likely to be available within the capacity of the ground water resource; or
- d. will, if properly conditioned, avoid injury to existing ground water rights or to the ground water resource:
 - i. The permit should contain condition #(s) **7B - Interference & 7I - decline condition + large monitoring** ;
 - ii. The permit should be conditioned as indicated in item 2 below.
 - iii. The permit should contain special condition(s) as indicated in item 3 below;

- B2.
- a. Condition to allow ground water production from no deeper than _____ ft. below land surface;
 - b. Condition to allow ground water production from no shallower than _____ ft. below land surface;
 - c. Condition to allow ground water production only from the _____ ground water reservoir between approximately _____ ft. and _____ ft. below land surface;
 - d. Well reconstruction is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Ground Water Section.

Describe injury –as related to water availability– that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc): _____

B3. Ground water availability remarks: **This land has an existing ground water application, G-14607, from a different well located nearby. A short aquifer test was conducted by Larry Toll and myself on 5/13/2003. The pump in the well for this application was turned on for about 60 minutes. Water levels were measured in both wells. The data showed a very weak connection. There is considerable difference in water temperatures between the two wells. It was determined that the new well (WASC 51102) was in a different aquifer than the initial well (WASC 50496). The existing water right could not be transferred to the new well.**

B1(d)(iii) The reference level shall be 216 feet below land surface

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	CRB	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: Hydrogeologic setting.

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 ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected?			Potential for Subst. Interfer. Assumed?	
						YES	NO	ASSUMED	YES	NO
1	1	Threemile Creek	1070	960	3000	<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"/>	<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: Hydrogeologic setting. According to the deepening log, the well is developing water from an interflow zone at 670 feet below land surface. That would be a water level elevation of 640 above seal level, well below the nearby stream. The probable discharge point for the aquifer is the Columbia River, 5.4 miles to the north.

Identify the Water Availability Sub-Basin the well(s) are located within: Threemile Creek, tributary to Columbia River

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"/>

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: The well in not hydraulically connected to Threemile Creek.

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), (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													
(A) = Total Interf.													
(B) = 80 % Nat. Q													
(C) = 1 % Nat. Q													
(D) = (A) / (B)		%	%	%	%	%	%	%	%	%	%	%	%
(E) = (A) / (C)		%	%	%	%	%	%	%	%	%	%	%	%

(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) = total interference divided by 80% flow as a percentage (e.g., 22%, not 0.22), (E) = total interference divided by 1% flow as percentage.

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: WASC 51102 Logid: _____
51168

D2. 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: insufficient seal

W/3/03
WAT

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.

THIS SECTION TO BE COMPLETED BY ENFORCEMENT PERSONNEL

D7. Well construction deficiency has been corrected by the following actions: _____

_____, 200_____
(Enforcement Section Signature)

D8. Route to Water Rights Section (attach well reconstruction logs to this page).

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Water Availability as of 7/28/2003 for

THREEMILE CR > COLUMBIA R - AT MOUTH

Watershed ID #: 30410534 Basin: HOOD Exceedance Level: 80

Time: 10:32 Date: 07/28/2003

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	0.74	0.23	0.00	0.51	0.00	0.00	0.51
2	2.50	0.41	0.00	2.09	0.00	0.00	2.09
3	2.57	0.54	0.00	2.03	0.00	0.00	2.03
4	1.09	2.08	0.00	-0.99	0.00	0.00	-0.99
5	0.82	5.34	0.00	-4.52	0.00	0.00	-4.52
6	0.51	4.42	0.00	-3.91	0.00	0.00	-3.91
7	0.40	1.33	0.00	-0.93	0.00	0.00	-0.93
8	0.30	0.68	0.00	-0.38	0.00	0.00	-0.38
9	0.40	0.72	0.00	-0.32	0.00	0.00	-0.32
10	0.30	0.09	0.00	0.21	0.00	0.00	0.21
11	0.40	0.10	0.00	0.30	0.00	0.00	0.30
12	0.55	0.15	0.00	0.40	0.00	0.00	0.40
Stor	1290	973	0	935	0	0	935

STATE OF OREGON
WATER SUPPLY WELL REPORT

WELL ID # L 56330
(START CARD) # 101405

(As required by ORS 537.765)

Instructions for completing this report are on the last page of this form

(1) OWNER: Well Number:
Name **Mel Omeg**
Address **2965 Dry Hollow Road**
City **The Dalles** State **OR** Zip **97058**

(2) TYPE OF WORK:
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well **575** ft.
Explosives used Yes No Type Amount

HOLE		SEAL		Amount	
Diameter	From To	Material	From To	sacks or pounds	
12"	0 18.5	Bentonite	0 18.5	13 Bags	
10"	18.5 301				
8"	301 575				

How was seal placed: Method A B C D E
 Other **Poured In Dry**
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

Diameter	From To	Gauge	Steel	Plastic	Welded	Threaded
Casing: 8"	+2 301	.250	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Liner:						

Final location of shoe(s) **None**

(7) PERFORATIONS/SCREENS:

Perforations Screens	Method Type	Material	From To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner

(8) WELL TESTS: Minimum testing time is 1 hour

Pump	Bailer	<input checked="" type="checkbox"/> Air	Flowing Artesian
Yield gal/min	Drawdown	Drill stem at	Time
80		575	1 hr.

Temperature of Water **71** Depth Artesian Flow found
Was a water analysis done? Yes By whom
Did any strata contain water not suitable for intended use? Too little
Salty Muddy Odor Colored Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County **Wasco** Latitude Longitude
Township **1N** N or S. Range **13E** E or W. of WM.
Section **33** NW 1/4 NW 1/4
Tax lot **4200** Lot Block Subdivision
Street Address of Well (or nearest address) **3465 Three Mile Rd., The Dalles, Or. 97058**

(10) STATIC WATER LEVEL:
110 ft. below land surface Date **08/24/2002**
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found **417**

From	To	Estimated Flow Rate	SWL
417	493	80	100

(12) WELL LOG:

Material	From	To	SWL
Sandstone Hard Tan	0	24	
Cemented Gravel Multi Color	24	36	
Sandstone Fine Hard Tan	36	77	
Sandstone Med Hard Brown	77	115	
Sandstone Fine Hard Tan	115	140	
Basalt Fract. Med Brown	140	244	
Basalt Fract. Hard Gray	244	248	
Clay Yellow (Caving)	248	263	
Basalt Fract. Soft W/Green	263		
Claystone		274	
Basalt Vas. Soft Reddish	274	281	
Basalt Fract. Hard Gray	281	292	
Basalt Vas Med Reddish	292	298	
Basalt Fract. Med. Black	298	312	
Basalt Frac. Med Black W/yellow	312		
Claystone		337	
Basalt Fract. Hard Gray	337	341	
Basalt Brown Hard Black W/Green	341		
Claystone		347	
Basalt Fract. Hard Black	347	355	
Basalt Fract. Med Black W/Green	355		
Claystone		388	
Basalt Fract. Hard Black	388	404	

Continued on next page
Date started **07/25/2002** Completed **08/24/2002**

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to my best knowledge and belief.
Signed _____ WWC Number _____
Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
Signed *Charles Austin* WWC Number **790**
Date **08/29/1902**

STATE OF OREGON
WATER SUPPLY WELL REPORT

WELL ID # L 56330

(as required by ORS 537.765)

(START CARD) # 101405

Instructions for completing this report are on the last page of this form

Page 2

(1) OWNER: Well Number: _____
Name Mel Omeg
Address 2965 Dry Hollow Road
City The Dalles State OR Zip 97058

(9) LOCATION OF WELL by legal description:
County Wasco Latitude Longitude
Township 1N N or S. Range 13E E or W. of WM.
Section 33 NW 1/4 NW 1/4
Tax lot 4200 Lot Block Subdivision
Street Address of Well (or nearest address) 3465 Three Mile Rd.,
The Dalles, Or. 97058

(2) TYPE OF WORK:
 New Well Deepening Alteration (repair/recondition) Abandonment

(10) STATIC WATER LEVEL:
ft. below land surface. Date
Artesian pressure lb. per square inch. Date

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other

(11) WATER BEARING ZONES:
Depth at which water was first found

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

From	To	Estimated Flow Rate	SWL

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well ft.
Explosives used Yes No Type Amount
HOLE SEAL Amount
Diameter From To Material From To sacks or pounds
How was seal placed: Method A B C D E
 Other
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(12) WELL LOG:

Material	From	To	SWL
Basalt Fract. Vas Med. Reddish W/Green Claystone	404	417	
Basalt Fract. Hard Black W/B	417	493	
Basalt Med Black	493	575	110

Date started 07/25/2002 Completed 08/24/2002

(6) CASING/LINER:
Diameter From To Gauge Steel Plastic Welded Threaded
Casing:
Liner:
Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
 Perforations Method
 Screens Type
Material
From To Slot size Number Diameter Tele/pipe size Casing Liner

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to my best knowledge and belief.
Signed _____ WWC Number _____
Date _____

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min Drawdown Drift stem at Time
Temperature of Water Depth Artesian Flow found
Was a water analysis done? Yes By whom
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other
Depth of strata

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
Signed *Charles Austin* WWC Number 790
Date 08/29/1902

STATE OF OREGON
WATER SUPPLY WELL REPORT

(as required by ORS 537.765)
Instructions for completing this report are on the last page of this form

WASC 51165

WELL ID # L 56330

(START CARD) # 148846

(1) OWNER: Well Number: _____

Name Mel Omega & Gary & Ann Copper
Address 2965 Dry Hollow Rd.
City The Dalles State OR Zip 97058

(2) TYPE OF WORK:

New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:

Rotary Air Rotary Mud Cable Auger
 Other

(4) PROPOSED USE:

Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval Yes No Depth of Completed Well 704 ft.
Explosives used Yes No Type _____ Amount _____

HOLE		SEAL		Amount	
Diameter	From To	Material	From To	secks	pounds
8"	575 704				

How was seal placed: Method A B C D E

Other N/A

Backfill placed from _____ ft. to _____ ft. Material _____

Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Casing/Liner	Diameter	From To	Gauge	Material			
				Steel	Plastic	Welded	Threaded
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Baller Air Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
210		575	2 hr.

Temperature of Water 78 Depth Artesian Flow found _____

Was a water analysis done? Yes By whom _____

Did any strata contain water not suitable for intended use? Too little

Salty Muddy Odor Colored Other

Depth of strata: _____

(9) LOCATION OF WELL by legal description:

County Wasco Latitude 31.896 Longitude 12.544
Township 1N N or S. Range 13E E or W. of WM.
Section 33 NW 1/4 NW 1/4
Tax lot 4200 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 3465 Three Mile Rd.
The Dalles, Or.

(10) STATIC WATER LEVEL:

240 ft. below land surface. Date 03/13/2003
Artesian pressure _____ lb. per square inch Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found 670

From	To	Estimated Flow Rate	SWL
670	699	210	240

(12) WELL LOG:

Ground elevation 1334

Material	From	To	SWL
Basalt Med. Black	575	594	
Basalt Soft Black	594	670	
Basalt Broken Soft Black	670	699	
Basalt Hard Gray	699	704	240

We started with about 25 GPM @ 71 deg. SWL @ 73 Ft. Hole 575 Ft. 8". We drilled 6" down to 704 ft. and increased the flow, we pulled out set an 8" plug to 575 ft. put in 5 yds. of sand cement let set for three days drilled out cement and with the upper water shut off. We drilled out the 8" wooden plug. Flow was air tested for 2 hrs. @ 210 GPM and 78 deg.

Date started 02/18/2003 Completed 03/11/2003

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to my best knowledge and belief.

Signed _____ WWC Number _____
Date _____

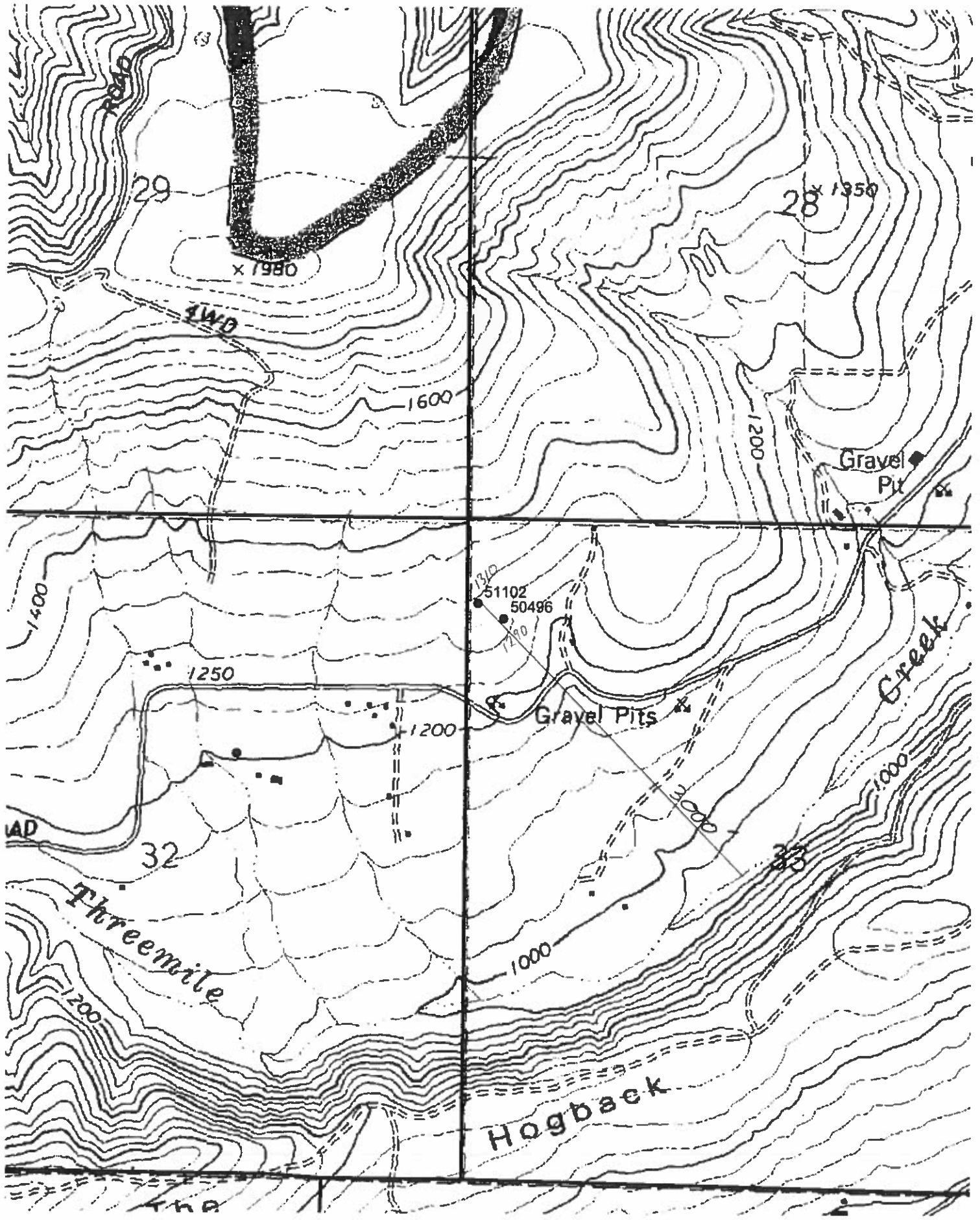
(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is to the best of my knowledge and belief.

Signed Charles Austin WWC Number 790
Date 03/13/2003

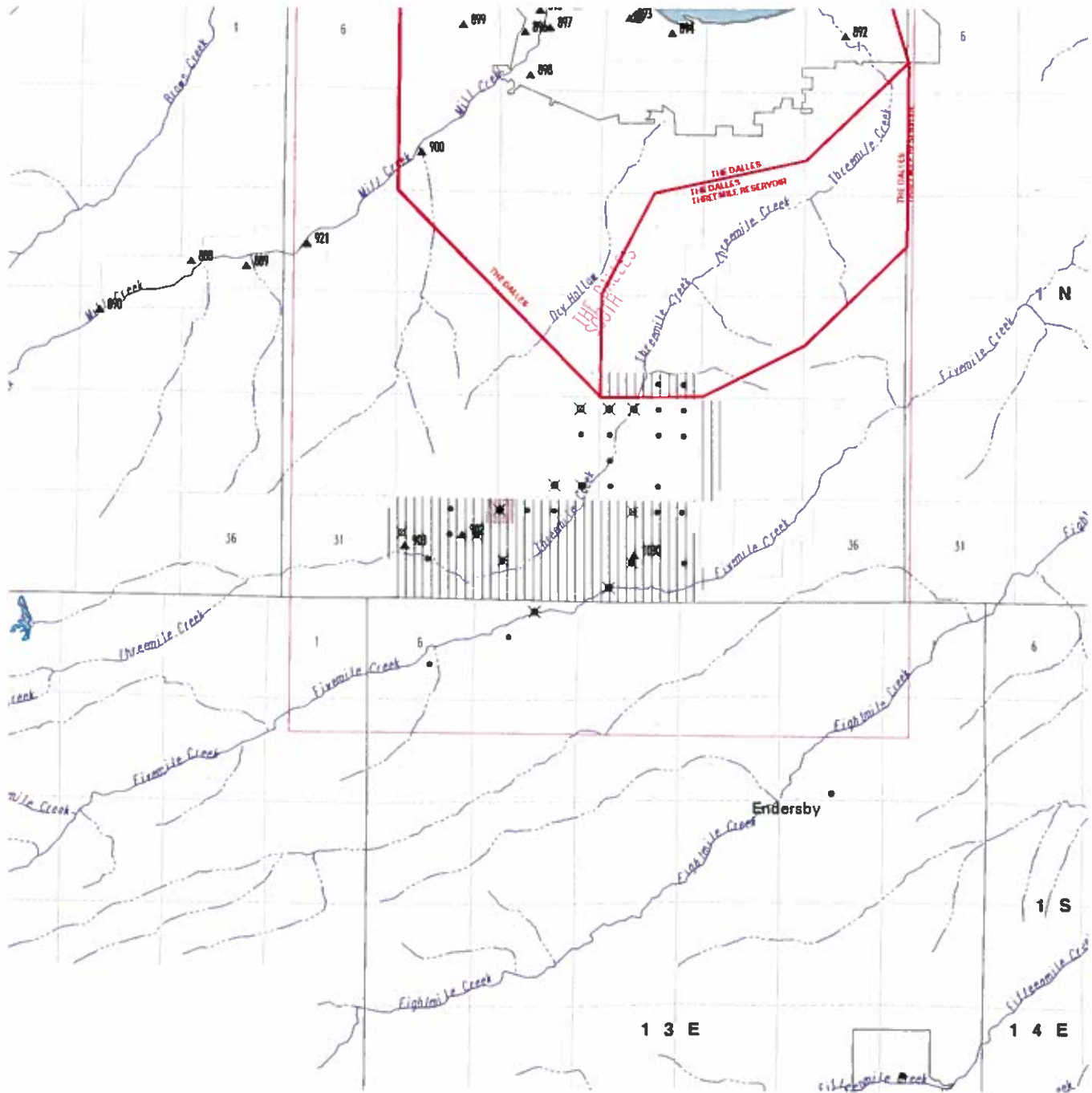
- Wellsgto.shp
- Wells.shp

Omeg Wells 01N/13E-33
 (Scale: 1 inch = 1000 feet)



Wells in the vicinity of application G 16014

- 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)
- Well(s) identified in this 1/4-1/4 section from OWRD's well log database within 5 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)
- Permitted well(s) in this 1/4-1/4 section within 1 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



WELL LOGS WITHIN 1 MILE OF APPLICATION G 16014

ABANDON: 0
 RECONDITIONED: 11
 REPAIRED: 3
 CONVERSION: 0
 DEEPENINGS: 14
 NEW CONSTRUCT: 76

 COMMUNITY USE: 2
 DOMESTIC USE: 65
 INDUSTRIAL USE: 1
 INJECTION USE: 0
 IRRIGATION USE: 40
 THERMAL USE: 0
 LIVESTOCK USE: 0

PERMITTED WELLS WITHIN 1 MILE OF APPLICATION G 16014

\$RECNO	APPLICATION	PERMIT	CLAIM	LOC-QQ	USE_CODE
1	G	15254	G 15184	0 1.00N13.00E28NENE	IS
1	G	15254	G 15184	0 1.00N13.00E28NENE	DN
2	G	13673	G 12708	0 1.00N13.00E27NWNW	IC
2	G	13690	G 12929	0 1.00N13.00E27NWNW	IC
2	G	15254	G 15184	0 1.00N13.00E27NWNW	IS
2	G	15254	G 15184	0 1.00N13.00E27NWNW	DN
2	S	22295	S 17580	0 1.00N13.00E27NWNW	IR
2	S	39834	S 29656	0 1.00N13.00E27NWNW	IR
3	G	8638	G 8294	0 1.00N13.00E27NENW	FR
3	G	8638	G 8294	0 1.00N13.00E27NENW	IC
3	G	7186	G 6618	0 1.00N13.00E27NENW	IS
4	G	15719	0	0 1.00N13.00E28SWSE	IR
5	U	869	U 756	0 1.00N13.00E28SESE	IR
5	G	10912	G 10127	0 1.00N13.00E28SESE	IR
5	G	10912	G 10127	0 1.00N13.00E28SESE	IS
6	G	14607	G 13512	0 1.00N13.00E33NWNW	IR
7	G	10667	G 9762	0 1.00N13.00E34NENW	IR
8	G	712	G 620	0 1.00N13.00E32SWNW	IR
8	G	161	G 233	0 1.00N13.00E32SWNW	IR
8	G	161	G 233	0 1.00N13.00E32SWNW	IR
9	U	176	U 188	0 1.00N13.00E32SENE	IR
9	U	215	U 194	0 1.00N13.00E32SENE	IR
10	G	8639	G 8293	0 1.00N13.00E33NWSW	IR
10	G	1600	G 1466	0 1.00N13.00E33NWSW	IR
10	G	7916	G 8540	0 1.00N13.00E33NWSW	IS
11	G	1354	G 1233	0 1.00N13.00E34NESW	IR
12	G	6620	G 6198	0 1.00N13.00E34SWSW	IR
13	G	11014	G 10183	0 1.00S13.00E 5NWN	IR

NO CONDITIONED WELLS WITHIN 1 MILE OF APPLICATION G 16014

APPLICATION G 16014 FALLS WITHIN THESE QUAD(S)

THE DALLES SOUTH

The following OWRD Groundwater Management Areas are within the map extent:

\$RECNO	NAME1	NAME2	SUB-AREA	STATUS
1	THE DALLES			CRIT
2	THE DALLES	THREEMILE RESERVOIR		CRIT
