

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765)

WELL ID # L12815 23815 (START CARD) # 102027

DESC 51900

SEP 16 1998

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

(1) OWNER: Well Number: CH1 Name: Cascade Highlands Ltd. Partnership Address: P.O. Box 80054 City: Portland State: OR Zip: 97280

WATER RESOURCES DEPT SALEM, OREGON LOCATION OF WELL by legal description: County: Deschutes Latitude: Longitude: Township: 18S N or S. Range: 11E E or W. of WM. Section: 12 NW 1/4 NW 1/4 Tax Lot: 10R Lot: Block: Subdivision: BroknT Street Address of Well (or nearest address):

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

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

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

(5) BORE HOLE CONSTRUCTION: Special Construction approval [] Yes [X] No Depth of Completed Well: 522 ft. Explosives used [] Yes [X] No Type: Amount:

Table with columns: HOLE Diameter, From, To, SEAL Material, From, To, Amount sacks or pounds. Row 1: 17.5", 0, 546, Cement, 0, 285, 176 Sacks

How was seal placed: Method [] A [] B [X] C [] D [] E [] Other Backfill placed from ft. to ft. Material: Gravel placed from ft. to ft. Size of gravel:

(6) CASING/LINER: Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded. Casing: 12" 362 522 375. Liner: 12" 362 522 375

(7) PERFORATIONS/SCREENS: [X] Perforations Method: Factory [] Screens Type: Material: Table with columns: From, To, Slot size, Number, Diameter, Telepipe size, Casing, Liner. Row 1: 362, 522, 3/16", 3840, [] [] [X] []

(8) WELL TESTS: Minimum testing time is 1 hour [X] Pump [] Sailer [] Air [] Flowing Artesian Yield gal/min: 1000 Drawdown: 22 Drill stem at: Time: 24 hr.

Temperature of Water: 54 Depth Artesian Flow found: Was a water analysis done? [] Yes By whom: Did any strata contain water not suitable for intended use? [X] Too little [] Salty [] Muddy [] Odor [] Colored [] Other: Depth of strata: 266

(10) STATIC WATER LEVEL: 301 ft. below land surface. Date: Artesian pressure lb. per square inch. Date:

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

Table with columns: From, To, Estimated Flow Rate, SW. Row 1: 266, 269, 25+, 266. Row 2: 302, 542, 3000, 302

(12) WELL LOG: Ground elevation:

Table with columns: Material, From, To, SW. Rows: Brown Sandy Soil (0-6), Brown Sand & Ash (6-9), Brown Ash Tuft (9-19), Gray Ash Tuft (19-25), Gray Basalt (25-110), Red Volcanic Conglomerate (110-132), Brown Ash & Basalt (132-180), Hard Gray Basalt (180-191), Brown Ash & Basalt (191-195), Red Cinder Conglomerate (195-226), Black Cinder Rock (226-248), Brown Ash & Basalt (248-266), Broken Gray Basalt WB (266-269), Broken Gray Basalt (269-305), 20 cyds Cement Grout 93' to 302 (306-306), Medium Brown Ash WB (306-324), Red Volcanic Conglomerate WB (324-332), Hard Gray Broken Basalt WB (332-369), Brown & Red Volcanics WB (369-402), Hard Gray Volcanics WB (402-426), Lost Circulation (426-430), Red & Brown Cinders WB (430-443), Hard Gray Broken Basalt WB (443-469), Soft Brown Volcanics WB (469-510)

Date started: 6/29/98 Completed: 7/24/98

(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: Robert Buckler WWC Number: 1385 Date: 9-6-98 Western Water Development Corporation

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 (as required by ORS 537.765)

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 (START CARD) # **102027**

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(1) OWNER: Well Number: **CH1**
 Name **Cascade Highlands Ltd. Partnership**
 Address **P.O. Box 80054**
 City **Portland** State **OR** Zip **97280**

WATER RESOURCES DEPT
SALEM, OREGON
LOCATION OF WELL by legal description:
 County **Deschutes** Latitude _____ Longitude _____
 Township **18S** N or S. Range **11E** E or W. of WM.
 Section **12** NW $\frac{1}{4}$ NW $\frac{1}{4}$
 Tax Lot **10R** Lot _____ Block _____ Subdivision **BroknTop**
 Street Address of Well (or nearest address) _____

(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 **522** ft.
 Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Amount	
Diameter	From	To	Material	From	To	sacks or pounds	
17.5"	0	546	Cement	0	285	176 Sacks	

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 _____

(6) CASING/LINER:

Casing:	Diameter	From	To	Gauge	Material			
					Steel	Plastic	Welded	Threaded
12"	12"	+1	362	.250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12"	12"	362	522	.375	<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"/>

Liner: _____

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

Perforations Method **Factory**
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe		Casing	Liner
					size	size		
362	522	3/16"	3840				<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"/>

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailor Air Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
1000	22		24 hr.

Temperature of Water **54** 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: **266**

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

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

From	To	Estimated Flow Rate	SWL
266	269	25+	266
302	542	3000	302

(12) WELL LOG: Ground elevation _____

Material	From	To	SWL
Brown Sandy Soil	0	6	
Brown Sand & Ash	6	9	
Brown Ash Tuft	9	19	
Gray Ash Tuft	19	25	
Gray Basalt	25	110	
Red Volcanic Conglomerate	110	132	
Brown Ash & Basalt	132	180	
Hard Gray Basalt	180	191	
Brown Ash & Basalt	191	195	
Red Cinder Conglomerate	195	226	
Black Cinder Rock	226	248	
Brown Ash & Basalt	248	266	
Broken Gray Basalt WB	266	269	266
Broken Gray Basalt	269	305	266
20 cyds Cement Grout 93' to 302	306	306	266
Medium Brown Ash WB	306	324	266
Red Volcanic Conglomerate WB	324	332	266
Hard Gray Broken Basalt WB	332	369	266
Brown & Red Volcanics WB	369	402	266
Hard Gray Volcanics WB	402	426	266
Lost Circulation	426	430	266
Red & Brown Cinders WB	430	443	266
Hard Gray Broken Basalt WB	443	469	266
Soft Brown Volcanics WB	469	510	266

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Date started **6/29/98** Completed **7/24/98**

(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 *Robert Buckner* WWC Number **1385**
 Date **9-6-98**
Western Water Development Corporation

