STATE OF OREGON

COUNTY OF HARNEY

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

BO THORENFELDT 885 HILLSBOROUGH BLVD HILLSBOROUGH, CA 94010

This superseding permit is issued to describe an amendment for a point of appropriation proposed under Permit Amendment Application T-11863 and approved by Special Order Vol. 93, Page 1105, entered 15,2015. This permit supersedes Permit G-17037.

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-17562

SOURCE OF WATER: WELL 3, WELL 4, WELL 5, WELL 6, WELL 7, WELL 8, WELL 9, WELL 10, WELL 11, WELL 12, WELL 13, WELL 14, AND WELL 16 IN ROCK CREEK BASIN

PURPOSE OR USE: IRRIGATION OF 2416.0 ACRES; SUPPLEMENTAL IRRIGATION OF 511.3 ACRES

MAXIMUM RATE: 20.0 CUBIC FEET PER SECOND (CFS), FURTHER LIMITED TO 6.39 CFS FOR SUPPLEMENTAL IRRIGATION OF 511.3 ACRES

PERIOD OF USE: SEE TABLES BELOW

DATE OF PRIORITY: JUNE 11, 2012

WELL LOCATIONS:

Well	Twp	Rng	Mer	Sec	Q-Q	Measured Distances
Well 3	22 S	33 E	WM	29	NE NE	4150 FEET NORTH AND 640 FEET WEST FROM THE SE CORNER OF SECTION 29
Well 4	22 S	33 E	WM	20	NE SE	6940 FEET NORTH AND 680 FEET WEST FROM THE SE CORNER OF SECTION 29
Well 5	22 S	33 E	WM	20	NE NE	9560 FEET NORTH AND 620 FEET WEST FROM THE SE CORNER OF SECTION 29
Well 6	22 S	33 E	WM	30	SW NE	3900 FEET NORTH AND 6700 FEET WEST FROM THE SE CORNER OF SECTION 29
Well 7	22 S	33 E	WM	30	NW SE	1420 FEET NORTH AND 6720 FEET WEST FROM THE SE CORNER OF SECTION 29

Well	Twp	Rng	Mer	Sec	Q-Q	Measured Distances		
Well 8	22 S	33 E	WM	29	NW SW	1420 FEET NORTH AND 4050 FEET WEST		
Well 6	22 3	33 E	VV 1V1	29	NW SW	FROM THE SE CORNER OF SECTION 29		
Well 9	22 S	33 E	WM	31	SW NE	1920 FEET SOUTH AND 7850 FEET WEST		
Well 9	22 3	33 E	VV IVI	31	SWILE	FROM THE SE CORNER OF SECTION 29		
Well 10	22 S	33 E	WM	32	SW NW	1950 FEET SOUTH AND 5180 FEET WEST		
Well 10	22.3	33 E	VV IVI	32		FROM THE SE CORNER OF SECTION 29		
Well 11	22 S	33 E	WM	32	SE NW	1960 FEET SOUTH AND 2760 FEET WEST		
Well II						FROM THE SE CORNER OF SECTION 29		
Well 12	22 S	33 E	WM	31	NW SE	3940 FEET SOUTH AND 7800 FEET WEST		
Well 12	22.5	33 6	VV 1V1	31	IVW SE	FROM THE SE CORNER OF SECTION 29		
Well 13	22 S	33 E	WM	32	NWSW	3940 FEET SOUTH AND 5160 FEET WEST		
Well 13	22.3	33 6	VV 1V1	32	14 W 3 W	FROM THE SE CORNER OF SECTION 29		
Well 14	22 S	33 E	WM	32	NW SE	3940 FEET SOUTH AND 2480 FEET WEST		
Well 14	22.3	33 E	VV 1V1	32		FROM THE SE CORNER OF SECTION 29		
Well 16	22 S	22 S 33 E	WM	28	SE SE	148 FEET NORTH AND 73 FEET WEST		
well lo			VV 1V1			FROM THE SE CORNER OF SECTION 28		

The amount of water used for irrigation under this right, together with the amount secured under any other right existing for the same lands, is limited to a diversion of ONE-EIGHTIETH of one cubic foot per second and 3.0 acre-feet for each acre irrigated during the irrigation season of each year.

THE PLACE OF USE IS LOCATED AS FOLLOWS:

PRIMARY IRRIGATION								
Twp	Rng Mer Sec C		Q-Q	Acres	Irrigation Season			
22 S	33 E	WM	20	NE NE	10.4	3/1 through 10/31		
22 S	33 E	WM	20	NE NE	29.6	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	20	SW NE	40.0	3/1 through 10/31		
22 S	33 E	WM	20	SE NE	5.8	3/1 through 10/31		
22 S	33 E	WM	20	SE NE	34.2	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	20	NE SE	38.4	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	20	NE SE	1.6	3/1 through 10/31		
22 S	33 E	WM	20	SE SE	39.9	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	21	NW NW	26.8	3/1 through 3/3 I and 10/2 through 10/31		
22 S	33 E	WM	21	SW NW	19.6	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	21	NW SW	16.4	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	21	SWSW	7.3	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	28	NE NW	40.0	3/1 through 10/3 I		
22 S	33 E	WM	28	NWNW	11.0	3/1 through 10/31		
22 S	33 E	WM	28	NW NW	28.3	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	28	SWNW	35.6			
22 S	33 E	WM	28	SW NW	0.6	3/1 through 10/31		
22 S	33 E	WM	28	SE NW	40.0	3/1 through 10/31		
22 S	33 E	WM	28	NE SW	40.0	3/1 through 10/3 I		
22 S	33 E	WM	28	NW SW	34.4	3/I through 3/3 I and 10/2 through 10/31		
22 S	33 E	WM	28	SW SW	27.6	3/1 through 3/31 and 10/2 through 10/31		
22 S	33 E	WM	28	SW SW	10.0	3/1 through 10/31		
22 S	33 E	WM	28	SE SW	40.0	3/I through 10/31		
22 S	33 E	WM	29	NE NE	0.7	3/1 through 10/31		

PRIMARY IRRIGATION									
Twp	Rng	Mer	Sec	Q-Q	Acres	Irrigation Season			
22 S	33 E	WM	29	NE NE	37.2	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	29	NW NE	40.0	3/1 through 10/31			
22 S	33 E	WM	29	SW NE	39.1	3/1 through 10/31			
22 S	33 E	WM	29	SW NE	0.9	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	29	SE NE	40.0	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	29	NE NW	9.0	3/1 through 10/31			
22 S	33 E	WM	29	SW NW	38.0	3/1 through 10/31			
22 S	33 E	WM	29	SE NW	39.4	3/1 through 10/31			
22 S	33 E	WM	29	NE SW	40.0	3/1 through 10/31			
22 S	33 E	WM	29	NW SW	40.0	3/1 through 10/31			
22 S	33 E	WM	29	SW SW	40.0	3/1 through 10/31			
22 S	33 E	WM	29	SE SW	40.0	3/1 through 10/31			
22 S	33 E	WM	29	NE SE	6.6	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	29	NW SE	0.3	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	29	NW SE	28.0	3/1 through 10/31			
22 S	33 E	WM	29	SW SE	10.8	3/1 through 10/31			
22 S	33 E	WM	30	NE NE	0.4	3/1 through 10/31			
22 S	33 E	WM	30	NW NE	25.7	3/1 through 10/31			
22 S	33 E	WM	30	SW NE	40.0	3/1 through 10/31			
22 S	33 E	WM	30	SE NE	38.2	3/1 through 10/31			
22 S	33 E	WM	30	NE SE	40.0	3/1 through 10/31			
22 S	33 E	WM	30	NW SE	40.0	3/1 through 10/31			
22 S	33 E	WM	30	SW SE	40.0	3/1 through 10/31			
22 S	33 E	WM	30	SE SE	40.0	3/1 through 10/31			
22 S	33 E	WM	31	NE NE	40.0	3/1 through 10/31			
22 S	33 E	WM	31	NW NE	40.0	3/1 through 10/31			
22 S	33 E	WM	31	SW NE	40.0	3/1 through 10/31			
22 S	33 E	WM	31	SE NE	40.0	3/1 through 10/31			
22 S	33 E	WM	31	NE NW	40.0	3/1 through 10/31			
22 S	33 E	WM	31	NW NW	40.0	3/1 through 10/31			
22 S	33 E	WM	31	SW NW	40.0	3/1 through 10/31			
22 S	33 E	WM	31	SE NW	40.0	3/1 through 10/31			
22 S	33 E	WM	31	NE SW	38.0	3/1 through 10/31			
22 S	33 E	WM	31	NW SW	38.0	3/1 through 10/31			
22 S	33 E	WM	31	SW SW	40.0	3/1 through 10/31			
22 S	33 E	WM	31	SE SW	40.0	3/1 through 10/31			
22 S	33 E	WM	31	NE SE	38.0	3/1 through 10/31			
22 S	33 E	WM	31	NW SE	38.0	3/1 through 10/31			
22 S	33 E	WM	31	SW SE	40.0	3/1 through 10/31			
22 S	33 E	WM	31	SE SE	40.0	3/1 through 10/31			
22 S	33 E	WM	32	SW NE	11.0	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	32	SE NE	11.2	3/1 through 3/31 and 10/2 through 10/31			
22 S	33 E	WM	32	NE NW	40.0	3/1 through 10/31			
22 S	33 E	WM	32	NW NW	40.0	3/1 through 10/31			
22 S	33 E	WM	32	SW NW	40.0	3/1 through 10/31			
22 S	33 E	WM	32	SE NW	40.0	3/1 through 10/31			
22 S	33 E	WM	32	NE SW	38.0	3/1 through 10/31			
22 S	33 E	WM	32	NW SW	38.0	3/1 through 10/31			
22 S	33 E	WM	32	SW SW	40.0	3/1 through 10/31			

	PRIMARY IRRIGATION								
Twp	Rng Mer Sec Q-Q Acres Irrigation Seaso								
22 S	22 S 33 E WM 32				40.0 3/1 through 10/31				
22 S	33 E	WM	32	NE SE	4.0	3/1 through 10/31			
22 S	33 E	WM	32	NE SE	34.0	3/1 through 3/31 and 10/2 through 10/31			
22 S	22 S 33 E WM 32 NW SE 32.0 3/1 through 3/31 and 10/2 through 10/3		3/1 through 3/31 and 10/2 through 10/31						
22 S	33 E	WM	32	NW SE	4.0	3/1 through 10/31			
22 S	33 E	WM	32	SW SE	40.0	3/1 through 10/31			
22 S	33 E	WM	32	SE SE	40.0	3/1 through 10/31			

SUPPLEMENTAL IRRIGATION									
(Irrigation Season 4/1 through 10/1)									
Twp	Rng	Mer	Sec	Q-Q	Acres				
22 S	33 E	WM	20	NE NE	29.6				
22 S	33 E	WM	20	SE NE	34.2				
22 S	33 E	WM	20	NE SE	38.4				
22 S	33 E	WM	20	SE SE	39.9				
22 S	33 E	WM	21	NW NW	26.8				
22 S	33 E	WM	21	SW NW	19.6				
22 S	33 E	WM	21	NW SW	16.4				
22 S	33 E	WM	21	SW SW	7.3				
22 S	33 E	WM	28	NWNW	28.3				
22 S	33 E	WM	28	SW NW	35.6				
22 S	33 E	WM	28	NW SW	34.4				
22 S	33 E	WM	28	SW SW	27.6				
22 S	33 E	WM	29	NE NE	37.2				
22 S	33 E	WM	29	SW NE	0.9				
22 S	33 E	WM	29	SE NE	40.0				
22 S	33 E	WM	29	NE SE	6.6				
22 S	33 E	WM	29	NW SE	0.3				
22 S	33 E	WM	32	SW NE	11.0				
22 S	33 E	WM	32	SE NE	11.2				
22 S	33 E	WM	32	NE SE	34.0				
22 S	33 E	WM	32	NW SE	32.0				

Permit Amendment T-11863 Conditions

Water shall be acquired from the same aquifer as the original point of appropriation.

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on the permit, then use of water from the wells shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

If the number, location, source, or construction of any well deviates from that proposed in the permit application or required by permit conditions, this permit may be subject to cancellation, unless the Department authorizes the change in writing.

Prior to using water from any well listed on this permit, the permittee shall ensure that the well has been assigned an OWRD Well Identification Number (Well ID tag), which shall be permanently attached to the well. The Well ID shall be used as a reference in any correspondence regarding the well, including any reports of water use, water level, or pump test data.

Dedicated Measuring Tube: Wells with pumps shall be equipped with a minimum 3/4-inch diameter, unobstructed, dedicated measuring tube pursuant to figure 200-5 in OAR 690-200. If a pump has been installed prior to the issuance of this permit, and if static water levels and pumping levels can be measured using an electrical tape, then the installation of the measuring tube can be delayed until such time that water levels cannot be measured or the pump is repaired or replaced.

Existing Permit Conditions

Measurement, recording and reporting conditions:

- A. Before water use may begin under this permit, the permittee shall install a totalizing flow meter or other suitable measuring device as approved by the Director at each point of appropriation. The permittee shall maintain the meter or measuring device in good working order.
- B. The permittee shall keep a complete record of the amount of water diverted each month, and shall submit a report which includes the recorded water-use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water-use information, including the place and nature of use of water under the permit.
- C. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where any meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.
- D. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.

The Department requires the water user to obtain, from a qualified individual (see below), and report annual static water levels for each well on the permit. The static water level shall be measured in the month of March. Reports shall be submitted to the Department within 30 days of measurement.

The permittee shall report an initial March static water-level measurement once well construction is complete and annual measurements thereafter. Annual measurements are required whether or not the well is used. The first annual measurement will establish a reference level against which future measurements will be compared. However, the Director may establish the reference level based on an analysis of other water-level data. The Director may require the user to obtain and report additional water levels each year if more data are needed to evaluate the aquifer system.

All measurements shall be made by a certified water rights examiner, registered professional geologist, registered professional engineer, licensed well constructor or pump installer licensed by the Construction Contractors Board. Measurements shall be submitted on forms provided by, or specified by, the Department. Measurements shall be made with equipment that is accurate to at least the standards specified in OAR 690-217-0045. The Department requires the individual performing the measurement to:

- A. Associate each measurement with an owner's well name or number and a Department well log ID; and
- B. Report water levels to at least the nearest tenth of a foot as depth-to-water below ground surface; and
- C. Specify the method of measurement; and
- D. Certify the accuracy of all measurements and calculations reported to the Department.

The water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s) if any of the following events occur:

- A. Annual water-level measurements reveal an average water-level decline of three or more feet per year for five consecutive years; or
- B. Annual water-level measurements reveal a water-level decline of 15 or more feet in fewer than five consecutive years; or
- C. Annual water-level measurements reveal a water-level decline of 25 or more feet; or
- D. Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.

The period of restricted use shall continue until the water level rises above the decline level which triggered the action or the Department determines, based on the permittee's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or causing substantial interference with senior water rights. The water user shall not allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit. If more than one well is involved, the water user may submit an alternative measurement and reporting plan for review and approval by the Department.

The well(s) shall be continuously cased and continuously sealed to a minimum depth of 100 feet below land surface. The well(s) may not be completed in such a manner to allow ground water to be developed from shallower water-bearing zones. If during well construction, it becomes apparent that the well can be constructed to eliminate interference with nearby shallow wells or hydraulically connected streams in a manner other than specified in this permit, the permittee can contact the Department Hydro-geologist for this permit or the Ground Water/Hydrology Section Manager to request approval of such construction. The request shall be in writing, and shall include a rough well log and a proposed construction design for approval by the Department. The

request can be approved only if it is received and reviewed prior to placement of any permanent casing and sealing material. If the well is constructed first and then the request made, the requested modification will not be approved. If approved, the new well depth and construction specifications will be incorporated into any certificate issued for this permit.

The permittee shall construct one minimum six-inch diameter observation well to penetrate the same aquifer as the production wells. The observation well shall meet the Department's minimum well construction standards, and shall be cased and sealed to the same depth as the production wells. The observation well shall be constructed at a location approved by the Department prior to construction. The landowner or permittee shall provide Department staff access to the observation well to install and maintain continuous water-level monitoring equipment. The observation well shall not be used for any other purpose while the Department is monitoring water levels. The observation well shall be completed prior to any groundwater use under the terms of any groundwater permit issued. The Department may consider the use of an existing well that meets all the criteria described above.

Prior to using water from any well listed on this permit, the permittee shall ensure that the well has been assigned an OWRD Well Identification Number (Well ID tag), which shall be permanently attached to the well. The Well ID shall be used as a reference in any correspondence regarding the well, including any reports of water use, water level, or pump test data.

Dedicated Measuring Tube: Wells with pumps shall be equipped with an unobstructed, dedicated measuring tube pursuant to figure 200-5 in OAR 690-200.

STANDARD CONDITIONS

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

If the number, location, source, or construction of any well deviates from that proposed in the permit application or required by permit conditions, this permit may be subject to cancellation, unless the Department authorizes the change in writing.

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on this permit, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The well(s) shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

If the riparian area is disturbed in the process of developing a point of appropriation, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. For purposes of mitigation, the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.

The use may be restricted if the quality of downstream waters decreases to the point that those waters no longer meet state or federal water quality standards due to reduced flows.

Where two or more water users agree among themselves as to the manner of rotation in the use of water and such agreement is placed in writing and filed by such water users with the watermaster, and such rotation system does not infringe upon such prior rights of any water user not a party to such rotation plan, the watermaster shall distribute the water according to such agreement.

Prior to receiving a certificate of water right, the permit holder shall submit to the Water Resources Department the results of a pump test meeting the Department's standards for each point of appropriation (well), unless an exemption has been obtained in writing under OAR 690-217. The Director may require water-level or pump-test data every ten years thereafter.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

Completion of construction and application of the water shall be made by May 2, 2018. If beneficial use of permitted water has not been made before this date, the permittee may submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after making beneficial use of water, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner.

Issued JAN 15, 2015

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Dwight French, Water Right Services Division Administrator, for

Thomas M. Byler, Director

Oregon Water Resources Department