STATE OF OREGON

COUNTY OF MULTNOMAH

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

NRI INC 19004 NE SAN RAFAEL PORTLAND, OR 97230

PYXIS LABS 12423 NE WHITAKER WAY PORTLAND, OR 97230

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

APPLICATION FILE NUMBER: G-17454

SOURCE OF WATER: WELL 1 (MULT 105704) IN COLUMBIA SLOUGH BASIN

PURPOSE OR USE: INDUSTRIAL USE (GEOTHERMAL HEATING & COOLING)

MAXIMUM RATE/VOLUME: 0.123 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: MARCH 16, 2011

WELL LOCATIONS:

PRODUCTION WELL 1 (MULT 105704) - NW 1/4 NW 1/4, SECTION 23, T1N, R2E, W.M.; 155 FEET SOUTH AND 870 FEET EAST FROM NW CORNER, SECTION 23

INJECTION WELL 2 (MULT 106416) - NW 1/4 NW 1/4, SECTION 23, T1N, R2E, W.M.; 120 FEET SOUTH AND 765 FEET EAST FROM NW CORNER, SECTION 23

THE PLACE OF USE IS LOCATED AS FOLLOWS:

NW 1/4 NW 1/4 SECTION 23 TOWNSHIP 1 NORTH, RANGE 2 EAST, W.M.

Measurement, recording and reporting conditions:

- Α. Before water use may begin under this permit, the permittee shall install a totalizing flow meter at each production well and injection well. The permittee shall maintain the meters in good working order.
- В. The permittee shall keep a complete record of the amount of water diverted each month, and shall submit a report which includes the recorded report water-use measurements to the Department annually or more frequently as may be required by

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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 meters; provided however, where any meter 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.

Use of water under this permit shall be non-consumptive; all pumped water shall be injected into the same (originating) aquifer.

Prior to use of water under this permit, the permit holder must register the injection activity with the Oregon Department of Environmental Quality's Underground Injection Control Program, which can be contacted at 2020 SW 4th Ave, Ste 400, Portland OR 97201, or 503-229-5263.

Prior to receiving a certificate of water right, the permit holder shall submit documentation affirming that any applicable additional requirements of the Department's Division 230 rules have been met.

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.

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 within five years of the date of permit issuance. 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 April /8 , 2013

2. Timothy Wallin, Water Rights Program Manager

for Phillip C. Ward, Director