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**(2a) PRE-ALTERATION**

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## **(5) BORE HOLE CONSTRUCTION**

BORE HOLE			Material	SEAL		sacks/ lbs	
Dia	From	To		From	To	Amt	
			Cement				
						Calculated	
			Cement				
						Calculated	
						Calculated	
						Calculated	
						Calculated	

## FILTER PACK

From	To	Material	Size

## (6) CASING/LINER

## (7) PERFORATIONS/SCREENS

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

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

## Water Quality Concerns

## (10) STATIC WATER LEVEL

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**(11) WELL LOG**

### Comments/Remarks

8-inch temporary casing was also placed from + 2 to 645 with shoe cut and left at 645.

Pea gravel backfill/filter pack placed below sump from 697.3 to 702 Pump test was performed in the test borehole prior to 4" well installation. Remnant of synthetic tag line and SS bar broke off and lost in annulus below seal depth.



10621 Todd Road East  
Edgewood, WA 98372  
253 604-4878

Well Name: Port of Morrow Well #6 Test/Observation Well

Start Card/Permit #: 1056580

Label #: 149372

Material Description	From:	To:
Sand and Gravel Med	0	15
Course Gravel up to 3"	15	17.5
Course Cobbles	17.5	20.5
Course gravels up to 1" and sand (Water)	20.5	48.6
Basalt Black	48.6	94.5
Basalt Weathered W/Brown Claystone some Quartz and Sand	94.5	115
Brown Clay W/Some Pumice	115	116.5
Blue Clay	116.5	137
Weathered Basalt and Pumice (Water)	137	147
Cinders Red and Blue (Water)	147	150
Weathered Basalt (Water)	150	160
Basalt Black	160	172
Basalt Fractured/Loose	172	180
Basalt Black Fractured	180	212
Basalt Black Hard (Water)	212	257
Basalt Black Med	257	297
Claystone Green with Sands and Clay	297	372
Heavily Fractured Basalt	372	417
Fractured Basalt with Soft Clay	417	517
Fractured Basalt Highly Fractured and Water at 540	517	597
Basalt Black Medium Hard	597	672
Basalt Med Black Course and Grainy	672	687
Basalt Black Heavily Fractured	687	689
Basalt Black Hard	689	701
Brown Clay Soft	701	702

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APR 5 2023

OWRD



# Oregon

Tina Kotek, Governor

**Oregon Water Resources Dept**

725 Summer St NE, Ste A Salem, OR 97301

Ph (503) 986-0900, Fax (503) 986-0904

[www.oregon.gov/owrd](http://www.oregon.gov/owrd)

March 27, 2023

ROBERT STADELI WWC/MWC #1523  
HOLT SERVICES  
12305 NW 56<sup>TH</sup> STREET  
VANCOUVER, WA 98682

**RECEIVED****APR 5 2023****OWRD****FINAL ORDER**

Dear Mr. Stadeli:

The Special Standards Request Form you submitted for owner: Port of Morrow, Start Card number 1056580, is hereby approved for the following: You may construct this well, using sand and crushed rock to fill the void space, as described on your Special Standards Request Form dated March 24, 2023, with a couple of stipulations as described below:

*-If no clay interval is found, the upper seal shall be placed according Oregon Administrative Rule (OAR) 690-210-0130. If a clay interval is found the upper seal shall be placed according to OAR 690-210-0150 (1)(c) Method 3 (Under-Reaming).*

*-The lower split seal shall be placed according to OAR 690-210-0150 (1)(c) Method 3 (Under-Reaming).*

All other well construction standards must be adhered to. A copy of your Special Standards Request Form is enclosed.

Verbal approval of this Special Standards Request was provided on March 14, 2023.

The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

If you have any questions regarding this letter, I may be contacted at (503) 302-8618, or by e-mail at [tommy.k.laird@water.oregon.gov](mailto:tommy.k.laird@water.oregon.gov).

Sincerely,

Tommy Laird  
Well Construction Program Coordinator  
Oregon Water Resources Department

enclosure

cc: Shaun Finn, Well Inspector, North Central Region

**This is a FINAL ORDER other than contested case. This final order is subject to judicial review under ORS 183.484. Any petition for judicial review of the final order must be filed within the time specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.**



**Oregon Water Resources Department**  
725 Summer Street NE, Suite A  
Salem Oregon 97301-1266  
(503) 986-0900  
www.wrd.state.or.us

# Special Standards

## Request Form

### REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before the request can be considered, this form must be completed. Requests shall be submitted to the Well Construction Program Coordinator, Water Resources Department, 725 Summer Street NE, Suite A, Salem OR 97301-1266. Requests may also be considered by the appropriate Regional Manager.

**Date of request:** 3/24/2023 **Oral approval date (if applicable):** 3/14/2023

**Bonded Well Constructor (name, license #, and mailing address):** Robert Stadeli

1523 12305 NE 56th St Vancouver, WA 98682

(1) Location of Well: SW 1/4 SW 1/4 Tax lot 100 Section 2,  
Township 4 N, Range 25 E, Morrow County  
Address at well site: 71449 Rail Loop Ave

(2) Start Card Number(s)(for work to be done): 1056580

(3) Name and Address of Land Owner: Port of Morrow 2 Marine Drive Boardman, OR 97818

(4) Distance to the nearest septic tank, drainfield, closed sewage line (if water supply well)

N/A Observation Well

(5) The unusual site conditions which necessitate this request:

Void zone in the Selah inner bed interval requiring split seal, utilizing granular fill in the void zone

(6) The proposed construction methods that the bonded well constructor believes will be adequate for this well: (attach additional pages if needed)

See attached as built for diagram of construction

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# **MORR 52817**

(7) Diagram showing the pertinent features of the proposed well design and construction:  
(attach additional pages if needed)

See Attached Diagram

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**APR 5 2023**

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#### **PLEASE NOTE:**

- (1) The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of oral approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.



Bonded Constructor Signature: \_\_\_\_\_

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**APR 5 2023**

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Port of Morrow Test Well/OWRD Observation Well Special Standard Seal  
Construction Diagram. SC 1056580

