Application for Permanent Water Right Transfer



Part 1 of 5 - Minimum Requirements Checklist

attachments are not completed and included. RECEIVED For questions, please call (503) 986-0900, and ask for Transfer Section. NOV 0 5 2020 Check all items included with this application. (N/A = Not Applicable)M Part 1 – Completed Minimum Requirements Checklist. OWRD \boxtimes Part 2 – Completed Transfer Application Map Checklist. Part 3 – Application Fee, payable by check to the Oregon Water Resources Department, and completed Fee Worksheet, page 3. Try the new online fee calculator at: http://apps.wrd.state.or.us/apps/misc/wrd fee calculator. If you have questions, call Customer Service at (503) 986-0801. Part 4 – Completed Applicant Information and Signature. Part 5 – Information about Water Rights to be Transferred: How many water rights are to be transferred? 1 List them here: 90019 (Attachment A) Please include a separate Part 5 for each water right. (See instructions on page 6) Attachments: Completed Transfer Application Map. (Attachment B) Completed Evidence of Use Affidavit and supporting documentation. (Attachment C) Affidavit(s) of Consent from Landowner(s) (if the applicant does not own the land the water right is on.) N/A Supplemental Form D – For water rights served by or issued in the name of an irrigation district. Complete when the transfer applicant is not the irrigation district. Oregon Water Resources Department's Land Use Information Form with approval and signature (or signed land use form receipt stub) from each local land use authority in which water is to be diverted, conveyed, and/or used. Not required if water is to be diverted, conveyed, and/or used only on federal lands or if all of the following apply: a) a change in place of use only, b) no structural changes, c) the use of water is for irrigation only, and d) the use is located within an irrigation district or an exclusive farm use zone. (Attachment D) N/A Water Well Report/Well Log for changes in point(s) of appropriation (well(s)) or additional point(s) of appropriation. (Attachment E) Geologist Report for a change from a surface water point of diversion to a ground water point of appropriation (well), if the proposed well is more than 500' from the surface water source and more than 1000' upstream or downstream from the point of diversion. See OAR 690-380-2130 for requirements and applicability. (For Staff Use Only) WE ARE RETURNING YOUR APPLICATION FOR THE FOLLOWING REASON(S): Application fee not enclosed/insufficient Map not included or incomplete Land Use Form not enclosed or incomplete Evidence of Use Form not enclosed or incomplete Additional signature(s) required ____ Part _____ is incomplete Other/Explanation Staff: 503-986-0 Date:

This transfer application will be returned if Parts 1 through 5 and all required

Your transfer application will be returned if any of the map requirements listed below are not met.

Please be sure that the transfer application map you submit includes all the required items and

matches the existing water right map. Check all boxes that apply. N/A Certified Water Right Examiner (CWRE) Stamp and Original Signature. For a list of CWREs, see http://apps.wrd.state.or.us/apps/wr/cwre_license_view/. CWRE stamp and signature are not required for substitutions. N/A If more than three water rights are involved, separate maps are needed for each water right. \bowtie Permanent quality printed with dark ink on good quality paper. \boxtimes The size of the map can be 8½ x 11 inches, 8½ x 14 inches, 11 x 17 inches, or up to 30 x 30 inches. For 30 x 30 inch maps, one extra copy is required. M A north arrow, a legend, and scale. \boxtimes The scale of the map must be: 1 inch = 400 feet, 1 inch = 1,320 feet, the scale of the Final Proof/Claim of Beneficial Use Map (the map used when the permit was certificated), the scale of the county assessor map if the scale is not smaller than 1 inch = 1,320 feet, or a scale that has been pre-approved by the Department. \bowtie Township, Range, Section, ¼¼, DLC, Government Lot, and other recognized public land survey lines. Tax lot boundaries (property lines) are required. Tax lot numbers are recommended. X M Major physical features including rivers and creeks showing direction of flow, lakes and reservoirs, roads, and railroads. M Major water delivery system features from the point(s) of diversion/appropriation such as main pipelines, canals, and ditches. X Existing place of use that includes separate hachuring for each water right, priority date, and use including number of acres in each quarter-quarter section, government lot, or in each quarter-quarter section as projected within government lots, donation land claims, or other recognized public land survey subdivisions. If less than the entirety of the water right is being changed, a separate hachuring is needed for lands left unchanged. N/A Proposed place of use that includes separate hachuring for each water right, priority date, and use including number of acres in each quarter-quarter section, government lot, or in each quarter-quarter section as projected within government lots, donation land claims, or other recognized public land survey subdivisions. \boxtimes Existing point(s) of diversion or well(s) with distance and bearing or coordinates from a recognized survey corner. This information can be found in your water right certificate or permit. X N/A If you are proposing a change in point(s) of diversion or well(s), show the proposed location and label it clearly with distance and bearing or coordinates. If GPS coordinates are used, latitude-longitude coordinates may be expressed as either degrees-minutes-seconds with at least one digit after the decimal (example - 42°32'15.5") or degrees-decimal with five or more digits after the decimal (example – 42.53764°).

Part 4 of 5 – Applicant Information and Signature

Applicant Information

APPLICANT/BUSINESS NAME	Ε	PHONE NO.	ADDITIONAL CONTACT NO.	
Port of Morrow, Attn:	Miff Devin	541-481-7467		
ADDRESS			,	FAX NO.
2 Marine Drive				
CITY	STATE	ZIP	E-MAIL	
Boardman	OR	97818	MiffD@portofmo	orrow.com
BY PROVIDING AN E-MA	AIL ADDRESS, CONSEI	NT IS GIVEN TO RE	CEIVE ALL CORRESPONDEN	NCE FROM THE DEPARTMENT
ELECTRONICALLY. COPI				

Agent Information – The agent is authorized to represent the applicant in all matters relating to this application.

•	•		• • • • • • • • • • • • • • • • • • • •	
AGENT/BUSINESS NAME			PHONE NO.	ADDITIONAL CONTACT NO.
GSI Water Solutions, Att	n: Bruce Brody-He	eine	971-200-8519	RECEIVED
ADDRESS				FAX NO.
147 Shevlin Hixon Drive,	Suite 201			NOV 0 5 2020
CITY	STATE	ZIP	E-MAIL	
Bend	OR	97702	bbheine@gsiws.com	014100
BY PROVIDING AN E-MAIL	L ADDRESS, CONSE	NT IS GIVEN TO R	ECEIVE ALL CORRESPONDENCE F	ROM THE DEPARTMENT OWRD
ELECTRONICALLY. COPIES	OF THE FINAL ORD	ER DOCUMENTS	WILL ALSO BE MAILED.	

Explain in your own words what you propose to accomplish with this transfer application, and why:
The Port has 2 production wells located within the same building (Port Well 2 & Well 3). Port Well 2 is a basalt well and
Port Well 3 is an alluvial well. Certificate 90019 was issued to supersede Certificate 47191 following transfer T-6965.
The point of appropriation for Certificate 47191 was Port Well 2 (MORR 756), which is completed in the Umatilla
Member of the Columbia River Basalt Group (CRBG). Due to an error introduced during the transfer T-6965 certification
process, the point of appropriation location description on Certificate 90019 pointed to Port Well 3 (MORR 757) (inside
the same building) instead of Port Well 2. This transfer corrects the point of appropriation location description and
well name to be Port Well 2 (MORR 756) as originally intended, as well as adding four proposed additional points of
appropriation to allow for more flexibility and efficiency in delivering water.

If you need additional space, continue on a separate piece of paper and attach to the application as "Attachment 1".

Check One Box

	By signing this application, I understand that, upon receipt of the draft preliminary determination and prior to
	Department approval of the transfer, I will be required to provide landownership information and evidence that I an
	authorized to pursue the transfer as identified in OAR 690-380-4010(5); OR
\boxtimes	I affirm the applicant is a municipality as defined in ORS 540.510(3)(b) and that the right is in the
	name of the municipality or a predecessor; OR
	I affirm the applicant is an entity with the authority to condemn property and is acquiring by
	condemnation the property to which the water right proposed for transfer is appurtenant and
	have supporting documentation.

By my signature below, I confirm that I understand:

- Prior to Department approval of the transfer application, I may be required to submit payment to the
 Department for publication of a notice in a newspaper with general circulation in the area where the water right
 is located, once per week for two consecutive weeks. If more than one qualifying newspaper is available, I suggest
 publishing the notice in the following newspaper: Heppper Gazette-Times.
- Amendments to the application may only be made in response to the Department's Draft Preliminary
 Determination (DPD). The applicant will have a period of at least 30 days to amend the application to address any
 issues identified by the Department in the DPD, or to withdraw the application. Note that amendments may be
 subject to additional fees, pursuant to ORS 536.050.
- Failure to complete an approved change in place of use and/or change in character of use, will result in loss of the water right (OAR 690-380-6010).

Part 3 of 5 - Fee Worksheet

	FEE WORKSHEET for PERMANENT TRANSFER (except Substitution)		
1	Base Fee (includes one type of change to one water right for up to 1 cfs)	1	\$1,160
	Types of change proposed:		
	Place of Use RECEIVED		
	Character of Use NOV 0 5 2020		
	Point of Diversion/Appropriation		
	Number of above boxes checked = $\frac{1(2a)}{a}$		
	Subtract 1 from the number in line $2a = \frac{0(2b)}{0(2b)}$ If only one change, this will be 0		
2	Multiply line 2b by \$930 and enter » » » » » » » » » » » » » »	2	0
	Number of water rights included in transfer <u>1 (3a)</u>		
	Subtract 1 from the number in 3a above: 0 (3b) If only one water right this will be 0		
3	Multiply line 3b by \$520 and enter » » » » » » » » » » » » »	3	0
	Do you propose to add or change a well, or change from a surface water POD to a		
	well?		
	No: enter 0 » » » » » » » » » » » » » » » » » »		
4		4	\$410
	Do you propose to change the place of use or character of use?		
	No: enter 0 on line 5 » » » » » » » » » » » » » » » »		
	Yes: enter the cfs for the portions of the rights to be transferred (see		
	example below*):(5a)		
	Subtract 1.0 from the number in 5a above:(5b)		
	If 5b is 0 or less, enter 0 on line 5 » » » » » » » » » » » » » » »		
	If 5b is greater than 0, round up to the nearest whole number:(5c) and		
5	multiply 5c by \$350, then enter on line 5 » » » » » » » »	5	0
6	Add entries on lines 1 through 5 above » » » » » » » » » Subtotal:	6	\$1,570
	Is this transfer:		
	necessary to complete a project funded by the Oregon Watershed		
	Enhancement Board (OWEB) under ORS 541.932?		
	endorsed in writing by ODFW as a change that will result in a net benefit to		
	fish and wildlife habitat?		
	If one or more boxes is checked, multiply line 6 by 0.5 and enter on line 7 »		
7	If no box is applicable, enter 0 on line 7» » » » » » » » » » » » » »	7	0
8	Subtract line 7 from line 6 » » » » » » » » » » » » » Transfer Fee:	8	\$1,570

- 1. For irrigation calculate cfs for each water right involved as follows:
 - a. Divide total authorized cfs by total acres in the water right (for C12345, 1.25 cfs ÷100 ac); then multiply by the number of acres to be transferred to get the transfer cfs (x 45 ac= 0.56 cfs).
 - b. If the water right certificate does not list total cfs, but identifies the allowable use as 1/40 or 1/80 of a cfs per acre; multiply number of acres proposed for change by either 0.025 (1/40) or 0.0125 (1/80). (For C87654, 45.0 ac x 0.0125 cfs/ac = 0.56 cfs)
- 2. Add cfs for the portions of water rights on all the land included in the transfer; however do not count cfs for supplemental rights on acreage for which you have already calculated the cfs fee for the primary right on the same land. The fee should be assessed only once for each "on the ground" acre included in the transfer. (In this example, blank 5a would be only 0.56 cfs, since both rights serve the same 45.0 acres. Blank 5b would be 0 and Line 5 would then also become 0).

	FEE WORKSHEET for SUBSTITUTION		
1	Base Fee (includes change to one well)	1	\$840.00
	Number of wells included in substitution(2a)		
	Subtract 1 from the number in 2a above:(2b) If only one well this will be 0		
2	Multiply line 2b by \$410 and enter » » » » » » » » » » » » » »	2	
3.	Add entries on lines 1 through 2 above » » » » Fee for Substitution:	3	\$0

^{*}Example for Line 5a calculation to transfer 45.0 acres of Primary Certificate 12345 (total 1.25 cfs for 100 acres) and 45.0 acres of Supplemental Certificate 87654 (1/80 cfs per acre) on the same land:

Applicant signature	Miff Devin, Port of Morrow Print Name (and Title if applicable)	10 6 20 Date
Applicant signature	Print Name (and Title if applicable)	Date
located? \boxtimes Yes \sqsubseteq addresses if different	of the land on which the water right, or po No If NO, include signatures of all deeded to than the applicant's) or attach affidavits of con ndowners or individuals/entities to which the v	andowners (and mailing and, nsent (and mailing and/or e-

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Check the following boxes t	that apply	<i>'</i> :				
The applicant is responding to be sent			etion of	change(s). Notices a	nd correspoi	ndence should
				r completing the pro espondence should		J , ,
				ill be responsible for be sent to this lando		
At this time, are the lands i	n this trar	nsfer app	lication i	n the process of beir	ng sold? 🗌 \	res 🛛 No
If YES, and you know w information table below assignment will have to	w. If you d	lo not kno	ow who	the new landowner v		
If a property sells, the cunless a sale agreemen https://www.oregon.go	t or other	docume	nt states	otherwise. For more	e informatio	n see:
RECEIVING LANDOWNER NAME				PHONE NO.	ADDITIONAL COI	NTACT NO.
ADDRESS		-			FAX NO.	RECEIVED
CITY	STATE	ZIP		E-MAIL		NOV 0 5 2020
5 11 1.1			1			
Describe any special owner Check here if any of the an irrigation or other w	water rig	ghts propo	osed for	transfer are or will b		
Check here if any of the	water rig	ghts propo	osed for Complet	transfer are or will b		thin or served by
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A	e water rig	ghts propo ict. (Tip: (e rights su	osed for Complet ADDRESS STATE	transfer are or will be and attach Supple	zip	thin or served by
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A CITY Check here if water for contract for stored wat	e water rig	ghts propo ict. (Tip: (e rights su	osed for Complet ADDRESS STATE	transfer are or will be and attach Supple	zip	thin or served by
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A CITY Check here if water for contract for stored wat	e water rig	ghts propo ict. (Tip: (e rights su	osed for Complet ADDRESS STATE	transfer are or will be and attach Supple	zip	thin or served by
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A CITY Check here if water for contract for stored wat ENTITY NAME N/A	any of the er with a	ghts propo ict. (Tip: C e rights su federal ag	ADDRESS STATE ADDRESS STATE ADDRESS STATE ADDRESS STATE	transfer are or will be and attach Supplement a water service other entity.	zip e agreement zip	or other
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A CITY Check here if water for contract for stored wat ENTITY NAME N/A CITY To meet State Land Use Co	any of the er with a	ghts propo ict. (Tip: C e rights su federal ag	ADDRESS STATE ADDRESS STATE ADDRESS STATE ADDRESS ADDRESS ADDRESS	transfer are or will be and attach Supplement a water service other entity.	zIP agreement zip y, city, muni diverted, co	or other
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A CITY Check here if water for contract for stored wat ENTITY NAME N/A CITY To meet State Land Use Co corporation, or tribal government	any of the er with a	ghts propo ict. (Tip: C e rights su federal ag	ADDRESS STATE ADDRESS STATE ADDRESS STATE ADDRESS ADDRESS ADDRESS	transfer are or will be and attach Supplemental water services other entity.	zIP agreement zip y, city, muni diverted, co	or other
Check here if any of the an irrigation or other w IRRIGATION DISTRICT NAME N/A CITY Check here if water for contract for stored wat ENTITY NAME N/A CITY To meet State Land Use Co corporation, or tribal government of the contract o	any of the er with a	ghts propo ict. (Tip: C e rights su federal ag	ADDRESS STATE ADDRESS STATE ADDRESS STATE ADDRESS P.O. BOSTATE	transfer are or will be and attach Supplemental and at	zip zip zip y, city, muni diverted, co	or other

Part 5 of 5 – Water Right Information

Please use a separate Part 5 for each water right being changed. See instructions on page 6, to copy and paste additional Part 5s, or to add additional rows to tables within the form.

	CERTIFICATE # <u>90019</u>	RECEIVED
Description of Wa	ater Delivery System	NOV 0 5 2020
System capacity:	2.0 cubic feet per second (cfs) OR	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	gallons per minute (gpm)	OWRD

Describe the current water delivery system or the system that was in place at some time within the last five years. Include information on the pumps, canals, pipelines, and sprinklers used to divert, convey, and apply the water at the authorized place of use. Water is pumped from the well into the Port's municipal water distribution system.

Table 1. Location of Authorized and Proposed Point(s) of Diversion (POD) or Appropriation (POA) (Note: If the POD/POA name is not specified on the certificate, assign it a name or number here.)

POD/POA Name or Number	Is this POD/POA Authorized on the Certificate or is it Proposed?	If POA, OWRD Well Log ID# (or Well ID Tag # L)	Twp		Twp		Twp		Rı	Rng		ии		Tax Lot, DLC or Gov't Lot	Measured Distances (from a recognized survey corner)	
Port Well 3	Authorized Proposed	MORR 757	4	N	25	E	10	NE	NW	Road	1073 feet South and 1348 feet East from NW corner of Section 10					
Port Well 2	Authorized Proposed	MORR 756	4	N	25	E	10	NE	NW	Road	1069 feet South and 1378 feet East from NW corner of Section 10					
Well A1	Authorized Proposed	N/A	4	N	25	E	12	NW	NE	103	100 feet South and 2700 feet East from NW corner of Section 12					
Well B1	☐ Authorized ☐ Proposed	N/A	4	N	25	E	1	sw	NE	100	2390 feet South and 2100 feet West from NE corner of Section 1					
Well C1	☐ Authorized ☐ Proposed	N/A	4	N	25	E	2	SE	NW	GL 8	1410 feet South and 3450 feet West from NE corner of Section 2					
Well D1	☐ Authorized ☐ Proposed	N/A	4	N	25	E	2	NE	SE	100	2950 feet South and 600 feet West from NE corner of Section 2					

NOTE: Certificate 90019 was issued to supersede Certificate 47191 following transfer T-6965. The point of appropriation for Certificate 47191 was Port Well 2 (MORR 756), which is completed in the Umatilla Member of the Columbia River Basalt Group (CRBG). Due to an error introduced during the transfer T-6965 certification process, the point of appropriation location description on Certificate 90019 pointed to Port Well 3 (MORR 757) (inside the same building) instead of Port Well 2.

This transfer corrects the point of appropriation location description and well name to be Port Well 2 (MORR 756) as originally intended, as well as adding four proposed additional points of appropriation. Proposed Wells A1, B1, C1, and D1 would all be completed in the Umatilla Member of the CRBG, the same aquifer as Port Well 2. Please see <u>Attachment F</u> for a review of the basalt geology associated with the wells in the vicinity of the Port of Morrow.

Check al	I type(s) of change(s) proposed below (cha	ange '	'CODES" are provided in parentheses):				
	Place of Use (POU)		Supplemental Use to Primary Use (S to P)				
	☐ Character of Use (USE) ☐ Point of Appropriation/Well (POA)						
	Point of Diversion (POD)		Additional Point of Appropriation (APOA)				
	Additional Point of Diversion (APOD)		Substitution (SUB)				
	Surface Water POD to Ground Water POA (SW/GW)		Government Action POD (GOV)				
Will all o	of the proposed changes affect the entire	water	right?				
Yes	Complete only the Proposed ("to" or "on" "CODES" listed above to describe the pro		s) section of Table 2 on the next page. Use the changes.				
☐ No	Complete all of Table 2 to describe the po	rtion	of the water right to be changed.				
			RECEIVED NOV 0 5 2020				
			OWRD				

Please use and attach additional pages of Table 2 as needed. See page 6 for instructions.

Contact the Department at 503-986-0900 and ask for Transfer Staff. Do you have questions about how to fill-out the tables?

Table 2. Description of Changes to Water Right Certificate # 90019

List the change proposed for the acreage in each % %. If more than one change is proposed, specify the acreage associated with each change. If there is more than one POD/POA involved in the proposed changes, specify the acreage associated with each POD/POA.

		Priority Date		1901	1901	5/31/1974			
	CHANGES	POD(s)/ POA(s) to be used (from Table 1)		POD #5	9# QOd	Port Well 2, Well A1, Well C1, Well D1			
PROPOSED (the "to" or "on" lands)	The listing as it would appear AFTER PROPOSED CHANGES are made.	New Type of be used (from Table 1)			.	Port Well 2, Well A1, Well B1, Well D1 Well D1			
" or "o	FTER P	Gvt Tax Lot Lot or Acres DLC		10.0	5.0				
he "to	opear AFTE are made.	Gvt tLot or DLC		1		Area			RES:
SED (t	e ablu	Tax Loi		200	200	The Port of Morrow Service Area			TOTAL ACRES:
ROPO	it wo	×		MN	N.	rrow S			TOT
Ь	ng as			N.	NS.	of Mo			
	e listi	Sec		н	7	Port o			
	Ļ	Rng		9 E	9 E	The			
		Twp		S	S				
				2	7			SI SI	
	Proposed Changes (see	"CODES" from previous page)	EXAMPLE	POU/POD		POA			
	NGES	Priority Date		1901					
(s	The listing that appears on the certificate BEFORE PROPOSED CHANGES List only that part or portion of the water right that will be changed.	POD(s) or POA(s) (name or number from Table 1)		POD #1 POD #2					
AUTHORIZED (the "from" or "off" lands)	isting that appears on the certificate BEFORE PROPOSED CHA List only that part or portion of the water right that will be changed	Type of USE listed on Certificate		Irrigation					
'from"	ificate ne water	Acres		15.0					
(the '	e cert n of th	Gvt Lot or DLC							ES:
RIZED	on the	Gvt Tax Lot Lot or Acres DLC		100					TOTAL ACRES:
UTHO	ppears part or	. %		Ž					T0T
A	hat a that			뷜					
	ting t	Sec		E 15					-
	ne list Lis	Rng		6					
	Ė	dwL		2 S					

Additional remarks: The new POAs will serve water to the existing POU – "the Port of Morrow Service Area." Although not modified by this transter application, the existing POU map is included in Attachment B.

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For Place of Use or Character of Use Changes

Are there other water right certificates, water use permits or ground water registrations associated with the "from" or the "to" lands?

Yes No N/A – The authorized use is municipal use, so water rights are not 'layered.'

If YES, list the certificate, water use permit, or ground water registration numbers: No change is proposed for the place of use or character of use.



Pursuant to ORS 540.510, any "layered" water use such as an irrigation right that is supplemental to a primary right proposed for transfer must be included in the transfer or be cancelled. Any change to a ground water registration must be filed separately in a ground water registration modification application.

For Substitution (ground water supplemental irrigation will be substituted for surface water primary irrigation)

Ground water supplemental Permit or Certificate # N/A; Surface water primary Certificate # N/A.

For a change from Supplemental Irrigation Use to Primary Irrigation Use

Identify the primary certificate to be cancelled. Certificate # N/A

For a change in point(s) of appropriation (well(s)) or additional point(s) of appropriation:

Well log(s) are attached for each authorized and proposed well(s) that are clearly labeled and associated with the corresponding well(s) in Table 1 above and on the accompanying application map.

Tip: You may search for well logs on the Department's web page at:

http://apps.wrd.state.or.us/apps/gw/well-log/Default.aspx

AND/OR

Describe the construction of the authorized and proposed well(s) in Table 3 for any wells that do not have a well log. For *proposed wells not yet constructed or built*, provide "a best estimate" for each requested information element in the table. The Department recommends you consult a licensed well driller, geologist, or certified water right examiner to assist with assembling the information necessary to complete Table 3.

Table 3. Construction of Point(s) of Appropriation

Any well(s) in this listing must be clearly tied to corresponding well(s) described in Table 1 and shown on the accompanying application map. Failure to provide the information will delay the processing of your transfer application until it is received. The information is necessary for the department to assess whether the proposed well(s) will access the same source aquifer as the authorized point(s) of appropriation (POA). The Department is prohibited by law from approving POA changes that do not access the same source aquifer.



Proposed or Authorized POA Name or Number	Is well already built? (Yes or No)	If an existing well: OWRD Well ID Tag No. L	Total well depth	Casing Diameter	Casing Intervals (feet) *	Seal depth(s) (intervals)	Perforated or screened intervals (in feet)	Static water level of completed well (in feet)	Source aquifer (sand, gravel, basalt, etc.)	Well-specific rate (cfs or gpm). If less than full rate of water right
Port Well 3	Yes	MORR 757	46.5 ft	16-in	0-47	0-20'	35.5-42.5'	5.5 ' bgs		
Port Well 2	Yes	MORR 756	560 ft	16-in 12-in	0-72 ft +2-487 ft	0-86' 427-435'	12-in open 487-560	150' bgs		
Well A1	No	N/A	400 ft	16-inch 12-inch	+3-325 ft 315-400 ft	0-325 ft*	~ 350 - 560′		Umatilla	
Well B1	No	N/A	400 ft	16-inch 12-inch	+3-325 ft 315-400 ft	0-325 ft*	Targeting the CRBG		Member (CRBG)	
Well C1	No	N/A	400 ft	16-inch 12-inch	+3-325 ft 315-400 ft	0-325 ft*	Member at each			
Well D1	No	N/A	400 ft	16-inch 12-inch	+3-325 ft 315-400 ft	0-325 ft*	location			

Notes:

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^{*} the geologic cross section shown in Attachment F shows that the basalt layers dip beneath the Port. The proposed casing and seal depths are estimated depths at these future drilling location that will allow for the sealing and construction of the well to target production from the CRBG Umatilla member that will match the Port's Well #2 current source of water.

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Attachment A Water Right Certificate 90019
Application for a Water Right Transfer – Port of Morrow

13552

STATE OF OREGON

COUNTY OF MORROW

CERTIFICATE OF WATER RIGHT

THIS CERTIFICATE ISSUED TO

PORT OF MORROW PO BOX 200 BOARDMAN OR 97818

confirms the right to use the waters of A WELL, tributary to COLUMBIA RIVER for MUNICIPAL USES.

This right was perfected under Permit G-5332. The date of priority is May 31, 1974. The amount of water to which this right is entitled is limited to an amount actually used beneficially, and shall not exceed 2.0 CUBIC FEET PER SECOND (CFS); or its equivalent in case of rotation, measured at the well.

The well is located as follows:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances	
4 N	25 E	WM	10	NE NW	PORT WELL NO. 3 – 1073 FEET SOUTH AND 1348 FEET EAST	
				-	FROM NW CORNER, SECTION 10	

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

A description of the place of use is as follows:

THE PORT OF MORROW SERVICE AREA NEAR BOARDMAN, OREGON

The use of water transferred for municipal use shall not exceed in any one year the peak amount of water actually used by the industry in any one of the five years prior to January 5, 1994.

When required by the Department the water user shall install an in-line flow meter or other suitable device for measuring and recording the quantity of water used. The type and plans of the measuring device must be approved by the Department prior to beginning construction and shall be installed under the general supervision of the Department.

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

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NOTICE OF RIGHT TO PETITION FOR RECONSIDERATION OR JUDICIAL REVIEW

This is an order in other than a contested case. This order is subject to judicial review under ORS 183.482. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.482. Pursuant to ORS 183.482, ORS 536.075 and OAR 137-003-0675, you may petition for judicial review and 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.

T-6965-cf-47191.gc

Page 1 of 2

Certificate 90019

This certificate is issued to confirm a change in PLACE OF USE AND CHARACTER OF USE approved by an order of the Water Resources Director entered JANUARY 5, 1994, at Special Order Volume 48, Page 34, approving Transfer Application 6965, and supercedes Certificate 47191, State record of Water Right Certificates.

MAR 2 7 2015

Issued

Dwight French
Water Right Services Division Administrator, for

Thomas M. Byler, Director Oregon Water Resources Department

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T-6965-cf-47191.gc

Page 2 of 2

Recorded in State Record of Water Right Certificates numbered 90019.

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Attachment B

Application Maps
Application for a Water Right Transfer – Port of Morrow

Leah Cogan

From:

STARNES Patrick K * WRD < Patrick.K.Starnes@oregon.gov>

Sent:

Thursday, October 8, 2020 11:43 AM

To:

Leah Cogan

Subject:

Re: Map scale waiver question

Hi Leah.

Yes, you will need a map scale waiver for that attached map. To that end, the Department has reviewed the map and grants a map scale waiver.

Please include a printed copy of this e-mail with the application and maps when you submit them.

Sincerely,

Kelly

Kelly Starnes, Transfer Program Analyst Oregon Water Resources Department 725 Summer St NE Suite A Salem OR 97301-1271

Telephone: 503-986-0886 Fax: 503-986-0903

E-mail: patrick.k.starnes@oregon.gov

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Please Note: Under Oregon Law, messages to and from this e-mail address may be available to the public.

OWRD

From: Leah Cogan
Cogan@gsiws.com
Sent: Thursday, October 8, 2020 11:28:11 AM

To: STARNES Patrick K * WRD < Patrick.K.Starnes@oregon.gov>

Subject: Map scale waiver question

Good morning,

GSI is submitting a transfer application to add new POAs to an existing certificate 90019. Although the POU is not being changed, we are including a map of the authorized POU as part of the application package. This map shows the POU on an 8.5x11 sheet of paper (the existing POU map is on a 24x36 inch oversized sheet). I've attached the new map we're planning to submit for your reference.

Do we need a map scale waiver to accompany this re-scaled authorized POU map?

Thank you,

Leah Cogan

Water Resources Analyst mobile: 541.272.9888 1600 SW Western Boulevard, Suite 240, Corvallis, OR 97333 GSI Water Solutions, Inc. | www.gsiws.com pronouns: she, her

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Attachment C Evidence of Use Affidavit and Documentation Application for a Water Right Transfer – Port of Morrow

Application for Water Right Transfer

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

Evidence of Use Affidavit

Please print legibly or type. Be as specific as possible. Attach additional pages if you need more spacing. Supporting documentation must be attached.

State	of Oregon)	_					
Coun	ty of Morrow)) s	S					
Ι, <u>Μ</u> Α	rk Patton, in n	ny capacity	as CHIEF OPE	RATING O	FFICER,			R	ECEIVE
maili	ng address POR	T OF MORROV	v. 2 MARINE I	DRIVE, BOA	ARDMAN, C	OR 97818		N	OV 05 202
telep	hone number (541)481-7678	, being firs	t duly sw	orn depo	se and say	:		
	Water was u Certificate #	onal observations during 90019; OR	ation the previou	s five year	Profess	sional expensional expension	rtise		OWRD
	My knowled	lge is specif	Range	e of wate	Sec Sec	following lo	Gov't Lot or DLC	Acres (if applicable)	
			10 A 20						
				1					
OR	Confirming	Certificate #	# has	been issu	l l	n the past f	ive years; OF	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	Part or all of the water right was leased instream at some time within the last five years. The instream lease number is: (Note: If the entire right proposed for transfer was not leased, additional evidence of use is needed for the portion not leased instream.); OR								
		ght is not su	bject to for	feiture ar	nd docum	nentation th		tion of forfeitu	
	Water has be							for more than	
			(continues	on revers	e side)			

3. The water right was used for: (e.g., crops, pasture, etc.): MUNICIPAL USES

4. I understand that if I do not attach one or more of the documents shown in the table below to support the above statements, my application will be considered incomplete.

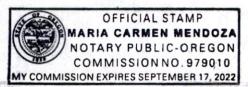
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Signed and sworn to (or affirmed) before me this Uth day of October, 2020.

10/6/20



Signature of Affiant

Notary Public for Oregon

My Commission Expires: Sept. 17, 2022

Supporting Documents	Examples
Copy of a water right certificate that has been issued within the last five years. (not a remaining right certificate)	Copy of confirming water right certificate that shows issue date
Copies of receipts from sales of irrigated crops or for expenditures related to use of water	 Power usage records for pumps associated with irrigation use Fertilizer or seed bills related to irrigated crops Farmers Co-op sales receipt
Records such as FSA crop reports, irrigation district records, NRCS farm management plan, or records of other water suppliers	 District assessment records for water delivered Crop reports submitted under a federal loan agreement Beneficial use reports from district IRS Farm Usage Deduction Report Agricultural Stabilization Plan CREP Report
Aerial photos containing sufficient detail to establish location and date of photograph	Multiple photos can be submitted to resolve different areas of a water right. If the photograph does not print with a "date stamp" or without the source being identified, the date of the photograph and source should be added.
	Sources for aerial photos: OSU –www.oregonexplorer.info/imagery OWRD – www.wrd.state.or.us Google Earth – earth.google.com TerraServer – www.terraserver.com
Approved Lease establishing beneficial use within the last 5 years	Copy of instream lease or lease number
Water use reported to OWRD for Certificate 90019	Water use reporting data for the last 2 years is attached.

Water Use Report Based on Water Right output Output Description:



Cert:90019 CF * PORT OF MORROW PO BOX 200 BOARDMAN, OR 97818

Records per page: 2

View All

Acre-feet (AF) of Water Used

Water Year*	Report ID	Facility	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total Water Used	Irrigated Acres
2019	35153	MORR 756 (BASALT)	86.84	88.92	98.09	86.91	85.87	91.43	88.18	88.02	89.81	83.36	83.92	92.35	1063.70	
2018	<u>35153</u>	MORR 756 (BASALT)	85.12	86.32	92.05	45.81	0.00	46.16	81.03	92.97	87.44	91.80	89.99	90.70	889.40	

12345678910...

- · The Water Resources Department makes reasonable efforts to screen the data for quality control; however, the Department cannot accept responsibility for errors, omissions, or accuracy of the information. Notification of any errors is appreciated. Send notifications to wateruse@wrd.state.or.us or call (503) 986-0905.
- · Water use is reported by point of diversion (POD), rather than by water right.
- · If a POD is shared with multiple water rights, it is not feasible to separate out the amount used under the water right being queried from water used by other rights using this same POD.
- · Monthly amounts indicate:
 - · For diverted rights, the total amount diverted during the month;
 - o For storage rights, the amount generally stored in the reservoir/pond during the month, as represented by the volume of water impounded on approximately the same day each month.
- · Water use amounts have all been converted to "acre-feet" (AF), regardless of the original measurement unit reported. One AF is the volume of water that will cover an acre of ground one foot deep = 325,850 gallons.
- Zeroes indicate that a report was received stating that no water was used during those months; if a year is not listed, no report of water use was received for that year.

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^{*}The water year is named for the calendar year in which it ends. Example: the 2018 water year begins Oct. 1, 2017 and ends Sep. 30, 2018.

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Attachment E
Well Logs for MORR 756 and MORR 757
Application for a Water Right Transfer – Port of Morrow

TO WAT. L. CONTRACTOR The original set copy f this republe filed with the

WATER WELL REPORT

STATE OF OREGONAN 91975

.,	***-11	3 T-	4N/25E-10ba
State	Well	No.	111/202 1000

dineer, Salem, Oregon 97310
Athin 30 days from the date of well completion.

(Please type or priSTATE ENGINEER (Do not write above this ALEM, OREGON

State	WEII IVO	, .	 	
State	Permit	No.	 	

1) OWNER:	(10) LOCATION OF WELL: County MORROW Driller's well number 5489
Name PORT OF MORROW	
BURROMAN ORE. 97818	Bearing and distance from section or subdivision corner
(2) TYPE OF WORK (check):	
New Well Deepening □ Reconditioning □ Abandon □	
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 443 ft.
	Depth do which was
Cable Jetted Domestic Industrial Municipal	Static level 8 ft. below land surface. Date /2/20/74
Dug Bored Irrigation Test Well Other	Artesian pressure lbs. per square inch. Date
CASING INSTALLED: Threaded Welded 3/2 1/2 Diam. from O ft. to 7/2 ft. Gage 3/2 1/2 Diam. from + 2 ft. to +3/1 ft. Gage 3/3 O ft. to ft. Gage PERFORATIONS: Perforated? Yes No.	Depth drilled 560 ft. Depth of completed well 560 ft. Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.
• · · · · · · · · · · · · · · · · · · ·	MATERIAL From To SWL
of perforator used	SEE ATTACHED SHEET
Size of perforations in. by in.	JEL IIIII JIII
perforations from	
perforations fromft. toft.	
perforations from ft. to ft.	
(7) SCREENS: Well screen installed? ☐ Yes X No	RECEIVED
Manufacturer's Name	ILOLIVED
Type Model No.	NOV 0.5 2000
Diam. Slot size Set from ft. to ft.	140 4 0 9 7070
Diam Slot size Set from ft. to ft.	
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	OWRD
Was a pump test made? Yes \(\subseteq No \) If yes, by whom? STRASSER	
Yield: 970 gal./min. with 177 ft. drawdown after 24 hrs.	
" " "	
" " " "	
Bailer test gal./min. with ft. drawdown after hrs.	
Artesian flow g.p.m.	
perature of water 70 Depth artesian flow encountered ft.	Work started SEPT 10 1974 Completed DEc 20 1974
(9) CONSTRUCTION: TO 40 FT.	Date well drilling machine moved off of well DEC 2-3 1974
Wall seed Material used CEMERT CIROUT	Drilling Machine Operator's Certification: This well was constructed under my direct supervision.
Well sealed from land surface to 40 to 86 AND 427-433 ft.	Materials used and information reported above are true to my
Diameter of well bore to bottom of seal	best knowledge and belief.
Diameter of well bore below sealin.	[Signed] Date 12/30, 1974
Number of sacks of cement used in well seal sacks	Time Marking Mantage License No.
Number of sacks of bentonite used in well seal 9 sacks Brand name of bentonite PATIONAL	V
Number of rounds of hontonite non 100 cellons	Water Well Contractor's Certification:
Number of pounds of bentonite per 100 gallons of water PUT IN DRY GRAPULAR 1bs./100 gals.	
Was a drive shoe used? X Yes No Plugs Size: location ft.	Name RISTRASSER DRILLING CO
Did any strata contain unusable water? Yes No	(Person, firm or corporation) Address \$110 SE SUNSET LANE TORTZAND OR
Type of water? ALKALI depth of strata 42	Address And San South Control of the
Method of sealing strata off CASILG AND CEMENT	[Signed] Rabby I Massey
Was well gravel packed? ☐ Yes XNo Size of gravel:	(Water Well Contractor)
Gravel placed from ft. to ft.	Contractor's License No. 10 Date DEC 30 , 1974
	Charles III

R. J. Strasser Drilling Co.

8110 S. E. Sunset Lane Portland, Oregon 97206 January 1, 1974

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Log of well for Port of Morrow

0 - 5
5 - 20
20 - 42
42 - 44
44 - 50
50 - 98
98 - 108
108 - 142
142 - 154
154 - 175
175 - 190
190 - 201
201 - 311
311 - 320
320 - 402
402 - 422
422 - 426
426 - 432
432 - 443
443 - 475
475 - 483
483 - 501
501 - 533
533 - 550
550 - 560

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER WELL REPORT CEIVED
STATE OF OREGON JUN 1 3 1973 State Well No. 4N 25E-10

STATE	ENGINEER,	SALEM,	OREGON	97310	-
	within 30 da	ys from t	he date		_

(Please type or pSTATE ENGINE Fermit No.

of well completion. May 15 1 (100 not write ab	ove this line LEM. OREGON
(1) OWNER:	(10) LOCATION OF WELL:
Name Port of Morrow Comm.	County Morrow Driller's well number 54
Address City Hall, Board man, eregon 97818	N.E 14 NW4 Section 10 T. 4N R. 25 E. W.M.
(2) TYPE OF WORK (check):	Bearing and distance from section or subdivision corner
	270 due worth of S.W. corner of the
New Well Deepening Reconditioning Abandon If abandonment, describe material and procedure in Item 12.	14 14 0 g the 14.W. /4 . 75.EC. 10.
	(11) WATER LEVEL: Completed well.
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found / ft.
Rotary Driven Domestic Industrial Municipal Domestic Municipal	Static level 5, 5 ft. below land surface. Date 4ne.11/
Dug Bored Irrigation Test Well Other	Artesian pressure NONE lbs. per square inch. Date June 11/7
CASING INSTALLED: Threaded Welded Welded Welded Welded Welded Welded Welded Threaded Welded Welded	Depth drilled 46.0 Chi. Bepth of completed well \$46.5 ft.
" Diam. from ft. to ft. Gage PERFORATIONS: Perforated? Yes No.	Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.
Type of perforator used Mills Knife	MATERIAL From To SWL
Size of perforations $\frac{1}{2}$ in. by $\frac{3}{2}$ in.	Hard sendy Silt, Tops oil 0.5 20
240 perforations from 35.5 ft. to 42.5 ft.	Sent grave / cepbles & 20
perforations fromft. toft.	Boulders 28.5 7.0
perforations fromft. toft.	Course send & grove/ 28.5 42.5 7.5
(7) SCREENS.	med grained send 425 44: 5.3
(7) SCREENS: Well screen installed? ☐ Yes ▼ No	Boulder, Sygrounded 44.5
Manufacturer's Name	Med. Orain brown Sand. 45.2 5.2 Med. Orain brown Sand. 45.2 48.5 5.5
Type Model No. Diam. Slot size Set from ft. to ft.	Med. grain prown sond. 4214 48 2.2
Diam. Slot size Set from ft. to ft.	Comented hale back
(8) WELL TESTS: Drawdown is amount water level is lowered below static level time.	From 48. 4046.5 3, sax. Coment #1
Was a pump test made? \(\text{Yes } \(\text{No II yes, by whom of } \(Pasco. \)	to trevent pumping
Yield: gal./min. with ft. drawdown after hrs.	San a. NOV 015 2020
" " "	10102020
" " "	
Bailer test 60 gal./min. with 7. tt. drawdown after //2 hrs.	OWRD
Artesian flow NONE g.p.m.	
terature of water 55 Depth artesian flow encountered NoN Ett.	Work started May 29 1973 Completed June 1/ 1973
(9) CONSTRUCTION:	Date well drilling machine moved off of well June // 1973
Well seal-Material used Bon form te	Drilling Machine Operator's Certification:
Well sealed from land surface to 20.5	This well was constructed under my direct supervision. Materials used and information reported above are true to my
Diameter of well bore to bottom of seal	best knowledge and belief.
Diameter of well bore below seal	[Signed] Hohm La James Date June 11, 19.7.3
Number of sacks of cement used in well seal	Drilling Machine Operator's License No. 48/
Number of sacks of bentonite used in well seal sacks	
Brand name of bentonite	Water Well Contractor's Certification:
of water Not Metered, Well M. Xed. lbs./100 gals. Was a drive shoe used? X Yes \(\sigma \text{No Plugs} \) Size: location ft.	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Did any strata contain unusable water? Yes No	Name 2. (Type or print) (Person, firm or corporation) (Type or print)
	Address P. O. Bax 124 Hermiston, Ore 978
	0148
Method of sealing strata off Was well gravel packed? ☐ Yes ☑ No Size of gravel:	[Signed] (Water Well Contractor)
Gravel placed from ft. to ft.	Contractor's License No. 5/6 Date June 1/, 1973
	HERTS IF NECESSARV) SD-45556-110

NOV 0 5 2020 OWRD

Attachment F
Port of Morrow Regional Basalt Geology
Application for a Water Right Transfer – Port of Morrow

OWRD

Basalt Geology – Port of Morrow and Vicinity

Geology and Hydrogeology

The water supply wells completed in the Columbia River Basalt Group (CRBG) flows associated with the Port of Morrow and surrounding areas encounter multiple basalt flows. The water-bearing basalt units that are encountered from ground surface downward include the 3 separate flows from the Saddle Mountain Basalt (Elephant Mountain, Pomona, and Umatilla Members) and several Wanapum Basalt flows (Priest Rapids and Frenchman Springs Sentinel Gap Flow and Frenchman Springs Sand Hollow Flow Members). To better understand the basalt system and the water-bearing units, a cross-section was prepared in the vicinity of the Port of Morrow. Figure 1 presents the location of the cross-section and the wells used in its development, and Figure 2 presents the basalt units within the cross-section.

Historically, water supply wells were constructed across multiple water-bearing zones found within the basalt system. However, current practices consider this to be comingling of the individual water-bearing units and can cause unintended impacts. To eliminate these impacts, current well construction standards for CRBG wells require new wells be completed in only one water-bearing zone.

Points of Appropriation

The Port of Morrow's existing Port Well 2 (MORR 756) has a completed depth of 560 feet below ground surface (bgs) and appropriates groundwater from only the Umatilla Member of the Saddle Mountain Basalt, as shown in Figure 2. Due to an error during the certification of Certificate 90019 and multiple other Port rights at the same time, the location description for the Port Well 2 on Certificate 90019 is not accurate. This transfer application corrects the location description for the existing POA to reflect the actual Port Well 2 (which has always been at this location). Port Well 3 (MORR 757 – located 30 feet west and inside the same building) has a completed depth of 47 feet bgs and appropriates water from Quaternary-Tertiary Sediments, and because it produces water from a different aquifer, it should not be included as a point of appropriation on this water right.

The Port of Morrow is proposing to also add four (4) additional points of appropriation (APOA) to this right. The Port has identified 4 locations where they may potentially drill new wells into the basalt aquifer system, well cluster locations A, B, C, and D (refer to Transfer map). Although there may be up to 3 completed basalt wells at each of the proposed new locations (associated with "other" Port water rights), this transfer identifies only the well within these clusters that will be completed in the Umatilla Member as proposed APOAs, ensuring that the proposed APOAs are producing water from the same aquifer.

Wells A1, B1, C1, and D1 will be the first wells in clusters A, B, C, and D, and will all be completed in the Umatilla Member. This transfer is proposing to add as APOA to Certificate 90019 wells A1, B1, C1, and D1.

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ATTACHMENT
Geologic Summary and Geologic Logs

13552

Geologic Summary Evaluation of MORR 777

Well Completed: December 30, 1969

Total Depth: 335 ft bgs

OWRD

REPORTED WELL CONSTRUCTION (from State of Oregon Water Well Report form):

16 inch-diameter steel casing from 0 ft to 51 ft bgs; drilled with bentonite/cement seal 0 ft to 45 ft. 12 inch-diameter steel casing from 0 ft to 162 ft bgs; cement & bentonite grout seal from 0 ft to 162 ft bgs.

8 inch-diameter open-borehole from 162 ft to 335 ft bgs.

Open Interval In Well: 162 ft to 335 ft bgs.

STRATIGRAPHIC UNITS PENETRATED IN WELL

Note: Interpretation of stratigraphic units (and unit contacts) penetrated in the MORR 777 well are based on (1)information from the MORR 777 Driller's Log, (2) a 08 November 2003 downhole video log of this well, and (3) information from the adjacent MORR 51714 well.

Depth (ft bgs)	Thickness (ft)	Unit	Comments
0 to 45	45	Suprabasalt sediments	Cataclysmic Flood/Alkali Canyon Fm.
45 to 90	45	Elephant Mtn. Member, Saddle Mtns. Basalt	
90 to 120	30	Rattlesnake Ridge Member, Ellensburg Fm.	Described as green & blue clay.
120 to 254	134	Pomona Member, Saddle Mtns. Basalt	Lower contact from video well log.
254 to 320	66	Selah Member, Ellensburg Fm.	Described as blue, green clay.
320 to 335	+15	Umatilla Member, Saddle Mtns. Basalt	

Potential Water-Bearing Stratigraphic Units in the Well's Open Borehole Interval (162 to 335 ft bgs):

Bottom of the Pomona Member, Saddle Mtns. Basalt Selah Member, Ellensburg Formation Upper portion of the Umatilla Member, Saddle Mtns. Basalt



Expires 01/01/2021

Geologic Summary Evaluation of MORR 776

OWRD

Well Completed: January 17, 1975

Total Depth: 555 ft bgs

REPORTED WELL CONSTRUCTION (from State of Oregon Water Well Report form):

10 inch-diameter steel casing from 0 ft to 120 ft bgs with cement grout seal from 0 ft to 120 ft bgs;

10 inch-diameter open borehole from 120 ft to 220 ft bgs; 8 inch-diameter open borehole from 220 ft to 555 ft bgs.

Open Interval In Well: 120 ft to 555 ft bgs.

STRATIGRAPHIC UNITS PENETRATED IN WELL

Note: Due to the "uneven quality" of descriptions on the original Driller's Log, interpretation of stratigraphic units (and unit contacts) penetrated the MORR 776 well are based on (1)information from the MORR 776 Driller's Log, (2) a 16 February 2004 downhole video log of this well, and (3) information from nearby wells MORR 777 and MORR 51714.

Depth (ft bgs)	Thickness (ft)	<u>Unit</u>	Comments
0 to 30	30	Suprabasalt sediments	Cataclysmic Flood/Alkali Canyon Fm.
30 to 120	90	Elephant Mtn. Member, Saddle Mtns. Basalt	Estimated – water-bearing at 93 ft bgs.
120 to 162	42	Rattlesnake Ridge Member, Ellensburg Fm.	No sediments noted on log; likely includes top of the Pomona Member.
162 to 256	94	Pomona Member, Saddle Mtns. Basalt	No contact on well log; from video log.
256 to 327	71	Selah Member, Ellensburg Fm.	No contact on well log; from video log.
327 to 392	65	Umatilla Member, Saddle Mtns. Basalt	No contact on well log; from video log.
392 to 433	41	Mabton Member, Ellensburg Fm.	"claystone, green" on well log; contacts from video log.
433 to 533	100	Priest Rapids Member, Wanapum Basalt	
533 to 555*	+22	Quincy/Squaw Cr. Member, Ellensburg Fm.	"claystone, blue" noted on well log.

^{*}Given the depth of this well and the resulting artesian pressure of the completed well (4 psi listed on log) there is a strong likelihood that it is also open to the top of the Frenchman Springs Member, Wanapum Basalt

Potential Water-Bearing Stratigraphic Units in the Well's Open Borehole Interval (120 to 555 ft bgs):

Rattlesnake Ridge Member, Ellensburg Formation
Pomona Member, Saddle Mtns. Basalt
Selah Member, Ellensburg Formation
Umatilla Member, Saddle Mtns. Basalt
Mabton Member, Ellensburg Formation
Priest Rapids Member, Wanapum Basalt
Quincy/Squaw Creek Member, Ellensburg Formation
Top of the Frenchman Springs Member, Wanapum Basalt



Expires 01/01/2021

NOV 05 2020

Geologic Summary Evaluation of MORR 51714

Well Completed: March 9, 2009

Total Depth: 571 ft bgs

OWRD

REPORTED WELL CONSTRUCTION (from State of Oregon Water Well Report form):

20 inch-diameter steel casing from -8 ft to 40 ft bgs;

16 inch-diameter steel casing 0 ft to 60 ft bgs; cement grout seal 0 ft to 60 ft bgs;

12 inch-diameter steel casing from +1 ft to 320 ft bgs; cement grout seal 0 ft to 320 ft bgs;

16 inch-diameter open borehole from 320 ft to 565 ft bgs;

12 inch-diameter open borehole from 565 ft to 571 ft bgs.

Open Interval In Well: 320 ft to 571 ft bgs.

STRATIGRAPHIC UNITS PENETRATED IN WELL

Note: Interpretation of stratigraphic units (and unit contacts) penetrated in the MORR 51714 well are based on (1)information from the MORR 51714 Driller's Log, (2) a 16 February 2004 downhole video log of the adjacent MORR 776 well, and (3) information from the adjacent MORR 776 Driller's log.

Depth (ft bgs)	Thickness (ft)	Unit	Comments
0 to 49	49	Suprabasalt sediments	Cataclysmic Flood/Alkali Canyon Fm.
49 to 118	69	Elephant Mtn. Member, Saddle Mtns. Basalt	
118 to 162	44	Rattlesnake Ridge Member, Ellensburg Fm.	Described as "blue clay".
162 to 257	95	Pomona Member, Saddle Mtns. Basalt	
257 to 327	70	Selah Member, Ellensburg Fm.	Described as "blue clay".
327 to 392	65	Umatilla Member, Saddle Mtns. Basalt	No contact on well log; from video log.
392 to 433	41	Mabton Member, Ellensburg Fm.	No sediments on well log; from video log.
433 to 534	101	Priest Rapids Member, Wanapum Basalt	
534 to 555	21	Quincy/Squaw Cr. Member, Ellensburg Fm.	No sediments on well log; from video log.
555 to 571*	+16	Frenchman Springs Member, Wanapum Basalt	No contact noted on log – estimated.

^{*}Given the depth of this well there is a strong likelihood that it is also open to the top of the Frenchman Springs Member, Wanapum Basalt

Potential Water-Bearing Stratigraphic Units in the Well's Open Borehole Interval (320 to 571 ft bgs):

Middle to Bottom of the Umatilla Member, Saddle Mtns. Basalt

Mabton Member, Ellensburg Formation

Priest Rapids Member, Wanapum Basalt

Quincy/Squaw Creek Member, Ellensburg Formation

Top of the Frenchman Springs Member, Wanapum Basalt



Expires 01/01/2021

Log of Borehole: Port of Morrow No. 1 Also known as:

Project: Port of Morrow

Well ID: MORR 752

Location: SW SW, sec. 10, T4N, R25E

Geologist: Terry L. Tolan, R.G.

Kennedy/Jenks Consultants

Engineers & Scientists

Kennedy/Jenks Consultants 1020 N. Center Parkway, Suite F Kennewick, Washington 99336 509-734-9763 FAX 509-734-9764 www.kennedyjenks.com

Depth	Symbol	Lithologic Description	Elevation	Water Bearing Zones	Geochem Sample	Remarks
0-		Ground Surface	0			
		Pleistocene Cataclysmic Flood Deposits				1
=			-39			
=		Elephant Mountain Member				
-		Saddle Mountains Basalt				
			-91			
100-	Samuel Samuel	Rattlesnake Ridge Member	-121			
=	THE RESERVE	Ellensburg Formation	-			
1		Pomona Member Saddle Mountains Basall	1			
=		Saude Wouldens Dason				DEOENTER
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200-						
-						NOV 0 5 2020
-						1107 00 2020
=			0.75			
-		Selah Member	-275			OWRD
300-		Ellensburg Formation				00000
		Literature g 1 Constitution				
=			-341			
-		Umatilla Member				
3		Saddle Mountains Basalt				
400						
400 -			1			
=						
=						
1			1			
-		V	-496			
500		Mabton Member				
		Ellensburg Formation	1			
=			-550			
-		Priest Rapids Member				
=		Wanapum Basalt				
600-						
=						
_			-650			
=		Quincy / Squaw Creek Member	-670	1		
=		Ellensburg Formation	-685	1		
700		Frenchman Springs Member				
100		Frenchman Springs Member Wanapum Basak	_/			
-		TD 685 ft.				
=		0.000				
=						
=						
800 -	i					

Drilled By: Stadeli Drilling Co. **Drill Method: Rotary and Cable**

Drill Date: 2/9/1978

Total Depth: 685

Page: 1 of 1

13552

Geologic Log For Site MORR 1526

NWIS Site ID: 455048119400701 OWRD Log ID: MORR 1526 Well location: 04N/25E-10ADB

Depth drilled, in feet below land surface: 900

Land surface altitude, in feet above Nation Geodetic Vertical Datum of 1929: 272

Logged by: T. L. Tolan Date drilled: 02/01/1991

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						OM/DI
Depth	Symbol	Lithologic Description	Elevation	Water Bearing Zones	Geochem Sample	Remarks
0-	0800	Cataclysmic Flood Deposits	0			
-		Alkali Canyon Formation conglomerate / sandstone	-20			
-		Elephant Mountain Member - Saddle Mountains Basa dense interior - colonnade	-60		70	
100 -		Rattlesnake Ridge Member - Ellensburg Formation sandstone, pebbly sandstone, claystone	-90			
-	0.0.0	Pomona Member - Saddle Mountains Basalt	-120			
200		dense interior - entablature	-150			
	\$\$\$\$\$\$	dense interior - colonnade	-250 -270		250	275 - 283ft. fused tuff
300 -		Selah Member - Ellensburg Formation tuff, sandstone, paleosols				
400		Umatilla Member - Saddle Mountains Basalt normal flow top dense interior - entablature	-345			
500	8888 	dense interior - colonnade Mabton Member - Ellensburg Formation	-470 -500		440	
-		siltstone / claystone				
600 -		Priest Rapids Member - Wanapum Basalt normal flow top dense interior - colonnade	-555		615	
	0.0000	Quincy / Squaw Creek Member - Ellensburg Formatic diatomite, siltstone	-650 -67	355	2 670	

Geologic Log For Site MORR 1526

NWIS Site ID: 455048119400701 OWRD Log ID: MORR 1526 Well location: 04N/25E-10ADB

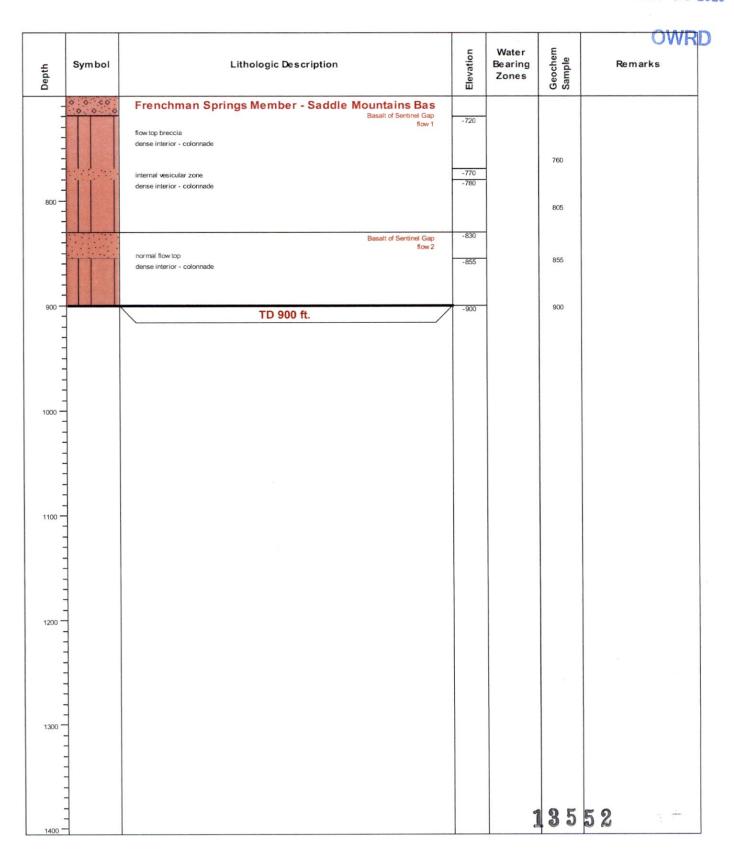
Depth drilled, in feet below land surface: 900

Land surface altitude, in feet above Nation Geodetic Vertical Datum of 1929: 272

Logged by: T. L. Tolan Date drilled: 02/01/1991

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NOV 05 2020 Port of Morrow **Generalized Basalt OWRD** Deep Basalt Well 5A Stratigraphy Well Tag #L128849 24" Casing FLOOD SEDIMENTS Cement 30" Borehole ALKALI FORMATION 24" Borehole 200 POMONA MEMBER Cement Seal SELAH MEMBER (TUFF/SILTSTONE) 400 UMATILLA MEMBER 408 Feet Below Ground Surface MABTON MEMBER (SANDSTONE/SILTSTONE) 20" Borehole PRIEST RAPIDS MEMBER BASALT OF LOLO 600 QUINCY/SQUAW CREEK MEMBER COLUMBIA RIVER 16" Casing FRENCHMAN SPRINGS MEMBER BASALT OF SENTINAL GAP FLOW 1 BASALT OF SENTINAL GAP FLOW 2 800 BASALT OF SENTINAL GAP FLOW 3 16" Borehole FRENCHMAN SPRINGS MEMBER BASALT OF SAND HOLLOW FLOW 1 BASALT OF SAND HOLLOW FLOW 2 BASALT OF SAND HOLLOW FLOW 3 1000 -BASALT OF SAND HOLLOW FLOW 4 1200

FIGURE 2 Well 5A As-Built Port of Morrow

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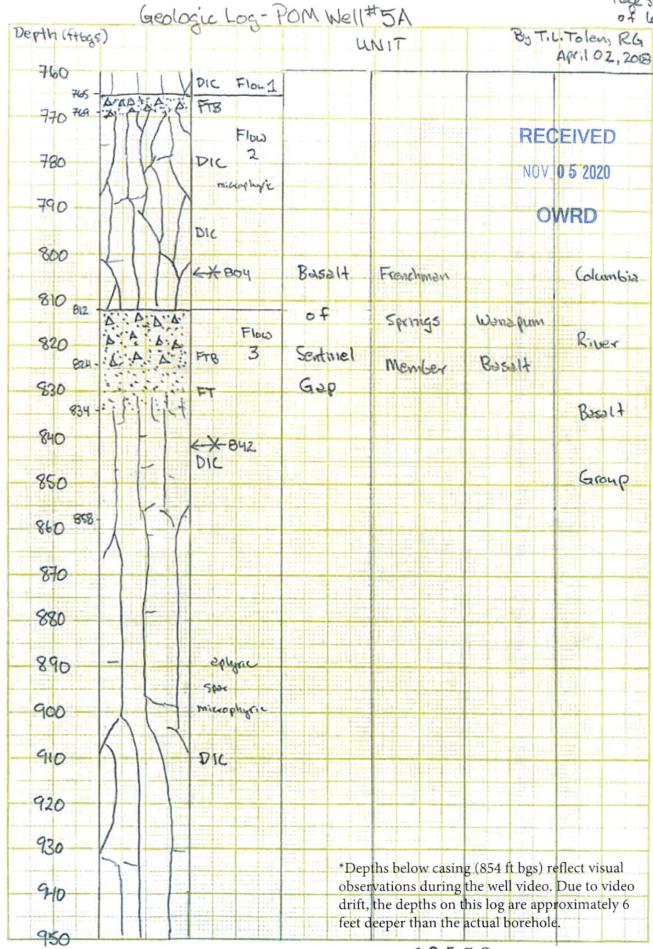
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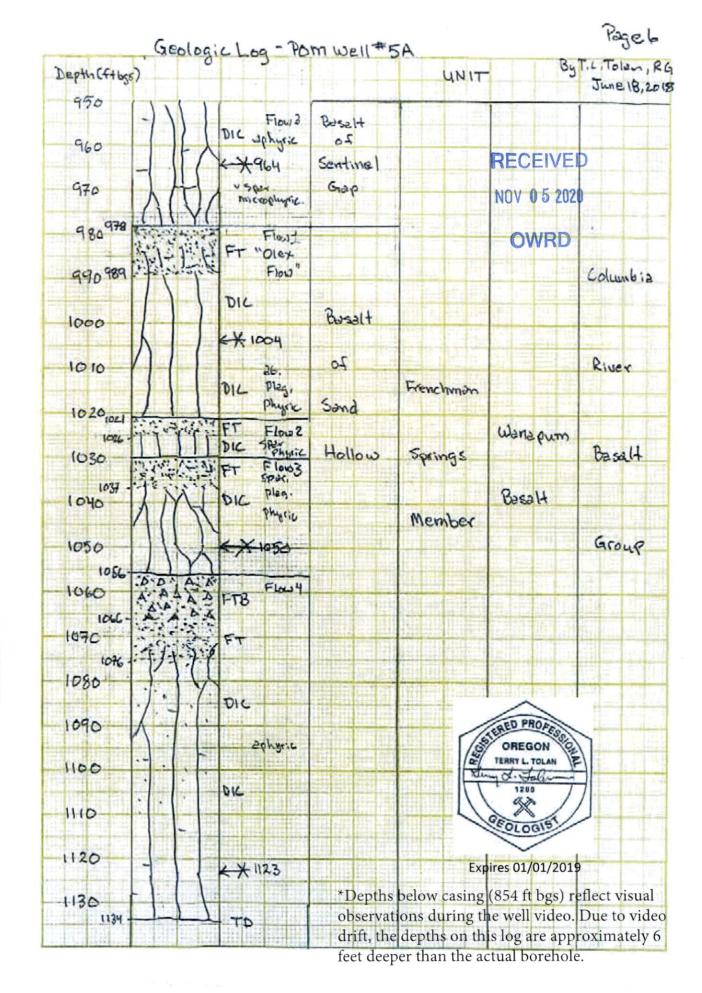
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ATTACHMENT
Cross-Section Well Logs

NOV - 5 1993/

WATER WELL REPORTER RESOURCES DEPT.

(as required by ORS 537.765)

SALEM, OREGON

(START CARD) #

(1) OWNER: Well Number	(9) LOCATION OF WELL by legal description:						
Name Larry Chastagner	County Morrow Latitude L						
Address 7.0. Box //23	Township 4N N or S. Range 26						
City // ma + i//a State OR Zip 97882	Section						
(2) TYPE OF WORK:	Tax Lot 4704 Lot Block Street Address of Well (or nearest address)	Subdivision					
New Well Deepen Recondition Abandon  (3) DRILL METHOD:	mile post /68. Umatill						
Rotary Air Rotary Mud Cable	(10) STATIC WATER LEVEL:	a,010 1000					
Other Rotary Air Cable	ft. below land surface.	Date 9-30-93					
(4) PROPOSED USE:	Artesian pressurelb. per square inch.						
Domestic Community Industrial Irrigation	(11) WATER BEARING ZONES:	Date					
☐ Thermal ☐ Injection ☐ Other	(II) WATER BEARING ZOILES.						
(5) BORE HOLE CONSTRUCTION:	Depth at which water was first found	!					
Special Construction approval Yes PNo Depth of Completed Well 200 ft.							
Explosives used Yes No Type Amount	From To Estima	ated Flow Rate SWL					
	152 177 1	000+ 4					
HOLE SEAL Amount Diameter From To Material From To sacks or pounds	, ,	,					
15" 0 76 Cement 0 76 16/ sacks							
10" 76 200		0					
	(12) WELL LOG:						
	Ground elevation						
How was seal placed: Method A A B B C D D E							
Other	Material	From To SWL					
Backfill placed from ft, to ft. Material	and	0 2					
Gravel placed from ft, to ft. Size of gravel	Sandy Clay	2 38					
(6) CASING/LINER:	Black sand	38 67					
Diameter From To Gauge Steel Plastic Welded Threaded	Vellow sand	67 71					
Casing: 10" +2 76 375 P	Gray basalt	71 121					
	Brown basalt	121 133					
	Brown clay	/33 /39					
	Green clay	139 152					
Liner: 8" 1/7 200 .250 D	Black & brown basalt	152 177 WB					
	with green						
Final location of shoe(s)	Spapstone						
(7) PEREORATIONS/SCREENS:	Gray basalt	177200					
Perforations Method Torchcut							
Screens Type Material							
Slot Tele/pipe	RECEIVED						
From To size Number Diameter size Casing Liner  140 200 14x3 5rows	t						
140 200 14x3 5rows	NOV 0 5 2020						
	NO 4 0 5050						
	OWRD						
	911112						
(8) WELL TESTS: Minimum testing time is 1 hour	0-2/02	9-31-92					
Flowing	Date started 7-24-73 Completed	9-30-93					
Pump Bailer Air Artesian	(unbonded) Water Well Constructor Certification:	des alteration on chandes.					
Yield gal/min Drawdown Drill stem at Time	I certify that the work I performed on the construct ment of this well is in compliance with Oregon well const						
1.000 t 200 1 hr.	used and information reported above are true to my bes						
1,000 t 200 1 hr.		HWIG M.					
	Signad	WWC Number					
	Signed	Date					
Temperature of Water Depth Artesian Flow Found	(bonded) Water Well Constructor Certification:						
Temperature of Water Depth Artesian Flow Found 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 well construction standards. This report							
Did any strata contain water not suitable for intended use?   Too little  Salty Muddy Odor Colored Other	is true to the best of my knowledge and belief.	WWC Number 12/8					
Depth of strata: Signed atrick // allace Date 10-15-9:							
	ND COPY - CONSTRUCTOR THIRD COPY) CO	SPOMER 9809C 10/91					
ORIGINAL GLINDI COLL - MALEN RESOURCES DEPARTMENT SECC	TIP COLIT COURTHOCION ILINEA COL	3009C 10/91					

	I. all as An
	This well canot go
	Deeper then 400 or until
	we hit the basalt
	So all intend to more
	a caple tool onit
	and dive it to the
	hard rock be intends
	to Check (Pryt Test)
	again at that time
-	cogum con proving
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-	JUL 16 1968
	STATE ENGINEER
	SALEM CRESON
	1

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT. SALEM, OREGON 97310 within 30 days from the date

WATER WELL REPORT

State Well No. 4N/25E-1/ch

tate Permit No. .... SEP 14 1978 of well completion. WATER RESOURCES DESTLOCATION OF WELL: (1) OWNER: SALEM, OREGON County Driller's well number & 1/4 Section T. 471. R. 25 E. Bearing and distance from section or subdivision corner (2) TYPE OF WORK (check): Reconditioning [ Abandon [ Deepening [ If abandonment, describe material and procedure in Item 12. (11) WATER LEVEL: Completed well. (3) TYPE OF WELL: (4) PROPOSED USE (check): Depth at which water was first found 20 Rotary Driven 🗆 Domestic Industrial | Municipal | Static level 72 ft. below land surface. Cable Jetted Irrigation | Test Well | Other Bored [7] Artesian pressure lbs. per square inch. Date CASING INSTALLED: Threaded | Welded (12) WELL LOG: Diameter of well below casing 6 " Diam from C ft. to 144" ft. Gage 250 Depth drilled 304 ft. Depth of completed well 304 ..... ft. to ..... Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata. PERFORATIONS: Perforated? Tyes No. MATERIAL pe of perforator used Size of perforations in. by and Censules 4 .... perforations from ...... ft. to ..... 28 ..... perforations from ...... ft. to ..... ..... perforations from ...... ft. to .... (7) SCREENS: 70 Well screen installed? Yes No 48 Manufacturer's Name ..... 70 82 WB ..... Model No. .. 82 104 ...... Slot size ...... Set from ...... cystone greet 9 104 1110 Diam. ...... Slot size ....... Set from ..... ft. to ..... ft. 110 121 121 130 (8) WELL TESTS: Drawdown is amount water level is lowered below static level 130 142 salk med asalt, hard, Ilack 142 246 Was a pump test made? 
Yes XNo If yes, by whom? 246 263 Yield: gal./min. with ft. drawdown after hrs. 263 276 W.B. 276 302 " gal./min. with /32ft. drawdown after / Artesian flow 19 78 Completed pperature of water Depth artesian flow encountered Work started Date well drilling machine moved off of well 19 7 9) CONSTRUCTION: Well seal-Material used Cement Drilling Machine Operator's Certification: This well was constructed under my direct supervision. Well sealed from land surface to ..... Materials used and information reported above are true to my best knowledge and belief Diameter of well bore to bottom of seal ..................... in. Date 8-25 19 78 Diameter of well bore below seal ............................ in. Number of sacks of cement used in well seal ... 25 Drilling Machine Operator's License No. 1210 How was cement grout placed? .... Water Well Contractor's Certification: to 144" (coment pressure 4 This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. Was a drive shoe used? X Yes □ No Plugs ...... Size: location ....... ft. Name TRIY GRIFFIH Did any strata contain unusable water? 🗋 Yes 🙀 No depth of strata Type of water? Method of sealing strata off Was well gravel packed? ☐ Yes X No Size of gravel: ...... Contractor's License No. ...65 Date ...

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

#### RECEIVED WATER WELL REP

STATE OF OREGON

APR 1 1 1977 State Well No.

2/1	125	-L-	11	-1
/./	100	۸		-a

WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date

(Please type or print ATER RESOURCESst DEPFmit No. ... (Do not write above this line) SALEM, OREGON of well completion. (10) LOCATION OF WELL: (1) OWNER: Driller's well number SW4 Section 11 T. 47. R. 25E. Bearing and distance from section or subdivision corner (2) TYPE OF WORK (check) Reconditioning [ Deepening [ New Well If abandonment, describe material and procedure in Item 12. (11) WATER LEVEL: Completed well. (3) TYPE OF WELL: (4) PROPOSED USE (check): Depth at which water was first found 90 Rotary Driven 🗆 ft. below land surface. Date 3-31-77 Domestic A Industrial D Municipal D Static level Irrigation 🗌 Test Well 🗌 Other Dug Bored [ Artesian pressure lbs. per square inch. Date CASING INSTALLED: Threaded | Welded (12) WELL LOG: Diameter of well below casing 6 " Diam. from 0 ft. to 26 ft. Gage . 257 Depth drilled ft. Depth of completed well .... ft. to ..... ft. Gage .. " Diam. from ..... Formation: Describe color, texture, grain size and structure of materials; ... ft. to ...... ft. Gage ...... and show thickness and nature of each stratum and aquifer penetrated. with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata. PERFORATIONS: Perforated? Tyes T No. MATERIAL SWI. of perforator used Size of perforations in. by ..... perforations from ...... perforations from ...... ft. to ... perforations from ..... 80 120 (7) SCREENS: Well screen installed? Tyes K. No Manufacturer's Name ...... Model No. ..... Diam. Slot size ...... Set from ...... ft. to ..... Diam. ..... Slot size ...... ... Set from ...... ft. to ..... ft. Drawdown is amount water level is lowered below static level (8) WELL TESTS: Was a pump test made? 

Yes No If yes, by whom? ft. drawdown after gal./min. with hrs. gal./min. with 80 ft. drawdown after / g.p.m. 3-31 perature of water Depth artesian flow encountered .. 19 77 Completed Work started 1977 Date well drilling machine moved off of well 1977 (9) CONSTRUCTION: Drilling Machine Operator's Certification: Well seal-Material used This well was constructed under my direct supervision.

Materials used and information reported above are true to my best knowledge and belief.

[Signed]

Date ###..., 19.77 Well sealed from land surface to Diameter of well bore to bottom of seal Diameter of well bore below seal Number of sacks of cement used in well seal .... Drilling Machine Operator's License No. ..... How was cement grout placed? .. Water Well Contractor's Certification: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. Was a drive shoe used? Tyes No Plugs ...... Size: location ...... ft. Name TROY GRIFFIH (Type or print) Did any strata contain unusable water? 🗌 Yes 🖎 No depth of strata Type of water? Method of sealing strata off Was well gravel packed? [] Yes No Size of gravel: . Contractor's License No. 65 ... Date ... ....., 19.7.7 Gravel placed from ..... ft. to ..... ft. to

	Moke 5246			
. MORR 52				
STATE OF OREGON	WELL I.D. LABEL# L 128849			
WATER SUPPLY WELL REPORT	START CARD# 212565			
(as required by ORS 537.765 & OAR 690-205-0210)	ORIGINAL LOG#			
(1) LAND OWNER Owner Well I.D. 5A				
First Name Last Name	(9) LOCATION OF WELL (legal description)			
Company Port of Morrow	County Morrow Twp 4 N N/S Range 25 E E/W WM			
Address PO Box 200  City Boardman State OR Zip 97818	Sec 10 SW 1/4 of the NE 1/4 Tax Lot 100			
	Tax Map Number 04N25E10 Lot			
	Lat ° ' "or DMS or DD			
2a) PRE-ALTERATION Abandonment(complete 5a)	Long o or DMS or DD			
Dia + From To Gauge Stl Plstc Wld Thrd	Street address of well Nearest address			
Casing:	750 Columbia Ave NE, Boardman, OR 97818			
Material From To Amt sacks/lbs	To dominative rici podranian, drivere			
Seal:	(10) STATIC WATER LEVEL			
3) DRILL METHOD  ** Rotary Air Rotary Mud ** Cable Auger Cable Mud	Date SWL(psi) + SWL(ft)			
	Existing Well / Pre-Alteration			
Reverse Rotary Other	Completed Well 6/15/18 20			
4) PROPOSED USE Domestic Irrigation Community	Flowing Artesian? Dry Hole?			
▼ Industrial/ Commercial  Livestock  Dewatering	WATER BEARING ZONES Depth water was first found 10			
Thermal Injection Other	SWL Date From To Est Flow SWL(psi) + SWL(ft)			
5) BORE HOLE CONSTRUCTION Special Standard (Attach copy				
Depth of Completed Well 1126 ft.	6/15/18 976 1108 see (8) 20			
BORE HOLE SEAL sacks/	2.0.10 0.0 1100 000 (0)			
Dia From To Material From To Amt lbs				
30 0 60 Cement 0 854 2543 sacks				
28         60         79         Calculated         667           24         79         408         Cement         0*         68*         178         sacks				
20 408 856 Calculated 104	(11) WELL LOG Ground Elevation			
How was seal placed: Method X A B X C D E	Glodild Elevation			
Other	Material From To See Attached Formation Log			
Backfill placed from 1126 ft. to 1128 ft. Material slough				
Filter pack from ft. to ft. Material Size				
5a) ABANDONMENT USING UNHYDRATED BENTONITE	RECEIVED			
Proposed Amount Pounds Actual Amount Pounds	U t last O ten I V ten las			
(6) CASING/LINER Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd	NOV 0.5 2020 RECEIVED			
Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd  24 + 1 68 .375	NOV 0 5 2020 RECEIVED			
<ul> <li>○ C 24 + 1 68 .375</li> <li>○ C 16 + 3 854 .375</li> <li>○ C X</li> </ul>	JUL 0 5 2018			
8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	JOE 00 FOID			
	OWED			
	OWRD			
Shoe Inside X Outside Other Location of shoe(s) 854				
Temp casing Yes Dia From To				
7) PERFORATIONS/SCREENS				
Perforations Method				
Screens Type Material	Date Started 11/8/19 17 Completed 6/18/18			
Perf/ Casing/ Screen Scrn/slot Slot # of Tele/				
Screen Liner Dia From To width length slots pipe size	(unbonded) Water Well Constructor Certification			
	I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply wel			
	construction standards. Materials used and information reported above are true to			
	the best of my knowledge and belief.			
	License Number 1991 Date 6/29/18			
8) WELL TESTS: Minimum testing time is 1 hour	Q Tal			
Pump Bailer Air Flowing Artesian	Signed Jan Jak			
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)	(bonded) Water Well Constructor Certification			
2275 85 65	1 accept responsibility for the construction, deepening, alteration, or abandonme			
	work performed on this well during the construction dates reported above. All wo			
	performed during this time is in compliance with Oregon water supply we			
Temperature 79 °F Lab analysis Yes By	construction standards. This report is true to the best of my knowledge and belief.			
Water quality concerns? Yes (describe below) TDS amount 182	License Number 649 Date 6/29/18			
From To Description Amount Units	Simul State / Shearing			
	Signed Sligher Literaries			
	Contact Info (optional)			

## **MORR 52462**

WATER SUPPLY WELL REPORT - continuation page

WELL I.D. LABEL# L	128849
START CARD #	212565
ORIGINAL LOG#	

(2a) PRE-ALTERATION	Water Quality Concerns	
Dia + From To Gauge Sil Plstc Wld Thrd	From To Description Amount	Units
Material From To Amt sacks/lbs		
Material From To Amt sacks/lbs		+
	(10) CTATIC WATER LEVEL	
(5) BORE HOLE CONSTRUCTION	(10) STATIC WATER LEVEL SWL Date From To Est Flow SWL(psi) +	SWL(fi)
BORE HOLE SEAL sacks/	SWL Date From To Est Flow SWL(psî) +	SWL(II)
Dia From To Material From To Amt lbs		
16 856 1128		
Calculated		
Calculated		1
Cucauco		
Calculated		
Calculated		-
FILTER PACK From To Material Size	(11) WELL LOG	
	Material From	To
6) CASING/LINER		
Casing Liner Dia + From To Gauge Stl Plste Wld Thrd	RECEIVED	
	NOV <b>0</b> 5 2020	
88 8 8 8 8	OWDD	
	- OWRD	
(7) PERFORATIONS/SCREENS	RECEIVED	
Perf/ Casing/Screen Scm/slot Slot # of Tele/	RECEIVED	
Screen Liner Dia From To width length slots pipe size	JUL <b>0 5</b> 2018	
	JOE 6.9 5010	
	OWDD	
	OWRD	
	1	
	1	
	Comments/Remarks	
(8) WELL TESTS, Minimum tenting time in 1 have	*grout outside 24" casing	
(8) WELL TESTS: Minimum testing time is 1 hour		
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)		İ
	11	

## **MORR 52462**

## Port of Morrow Well 5A SC #212565 - Well Tag ID # L128849 Formation Log by Schneider Water Services

RECEIVED NOV 0 5 2020

FM	TO	DESCRIPTION	OWRD
0	9	Soil, brown, sandy, silty	
9	35	Gravel, 8" minus & sand, brown, coarse	
35	45	Clay, brown, medium w/gravel, 6" minus	
45	59	Clay, grey, medium w/gravel, 6" minus	
59	78	Basalt, grey, medium w/claystone lenses, green & grey, soft-medium	
78	82	Basalt, black, medium soft	
82	83	Basalt, black, soft w/claystone, green, soft	
83	93	Basalt, medium soft, fractured w/claystone, green, medium-soft & gravel, multi	colored
93	122	Basalt, soft-hard, fractured w/claystone, green, medium-soft & gravel, multicold	ored
122	139	Basalt, multicolored, broken, vesicular	
139	275	Basalt, grey, hard	
275	285	Basalt, grey, black-brown-green, fractured, broken	
285	290	Claystone, green w/basalt, grey, black & green, broken	
290	338	Claystone, green	
338	355	Claystone, green, soft w/basalt, black	
355	470	Basalt, black & dark grey, hard	
470	483	Clay, blue green, hard, w/basalt, black, medium	
483	488	Basalt, dark grey, hard, occasional pyrite	
488	489	Basalt, black, medium-soft	
489	492	Sand, black, medium	
492	496	Clay, green, soft, silty	
496	505	Claystone, green, hard w/basalt, black, weathered, broken	RECEIVED
505	532	Sandstone, grey & green	
532	542	Claystone, green, medium-hard	JUL 0 5 2018
542	545	Basalt, black, medium, fractured, broken, vesicular	OWRD
545	552	Basalt, dark grey, medium-hard, fractured	00000
552	643	Basalt, grey, hard, some fractures	
643	647	Basalt, black, fractured & broken, some vesicles & clay green, medium-hard	
647	650	Basalt, black, fractured, broken w/wood, hard, semi-petrified w/clay, brown, so	ft & claystone, tan, hard
650	651	Clay, multicolored, medium	
651	660	Clay, green, medium, soft	
660	667	Clay, green, hard	
667	675	Clay, whitish green, soft w/basalt, black, broken	
675	712	Basalt, black & brown, broken & fractured w/colored minerals (brown and gree	en), some vesicles
712	718	Basalt, brown & some grey, broken, fractured, weathered, some vesicles	)
		Page 1 of 2 2 1 3 5 5 2	

### **MORR 52462**

## Port of Morrow Well 5A SC #212565 - Well Tag ID # L128849 Formation Log by Schneider Water Services

$\underline{\mathbf{FM}}$	TO	DESCRIPTION	
718	721	Basalt, grey & some brown, medium, fractured, broken w/brown mineral	stain, some vesicules
721	760	Basalt, dark grey, fractured, hard	
760	765	Basalt, dark grey to black, medium hard, some fractures	
765	769	Basalt, black & red, medium-soft, fractured, broken, some vesicles	
769	775	Basalt, black, medium, fractured	
775	812	Basalt, grey, medium-hard, some fractures	
812	818	Basalt, greenish grey, medium, fractured, vesicular, some brown and red	stains
818	824	Basalt, dark grey, and brown, medium, vesicular, fractured, weathered	
824	834	Basalt, dark grey, medium vesicular, fractured, some weathered	
834	837	Basalt, dark grey, medium hard, occ fractures	
837	976	Basalt, dark grey, hard, some fractures	
976	984	Basalt, black, medium, vesicular	
984	989	Basalt, black, medium, some fractures	
989	1017	Basalt, grey, hard	
1017	1021	Basalt, black, med, fractured, broken, some vesicles	
1021	1026	Basalt, dark grey, hard	RECEIVED
1026	1031	Basalt, black, broken, vesicular	
1031	1039	Basalt, dark grey, hard, some fractures	NOV 0 5 2020
1039	1051	Basalt, dark grey, hard	
1051	1069	Basalt, black, weathered, broken, vesicular	OWRD
1069	1078	Basalt, grey, hard, fractured	
1078	1089	Basalt, grey, hard	والمعقور والمعادر المعادر المع
1089	1108	Basalt, black w/brown, fractured, broken, occ vesicles, some weathered	
1108	1114	Basalt, grey, hard, occ fractures	
1114	1128	Basalt, dark grey, medium hard, some fractures	

RECEIVED

JUL 0 5 2018

**OWRD** 

STATE OF OREGON MODEL	6 1991 70/25 21/10 acc
WATER WELL REPORT (as required by ORS 537.765) WATER BESO	URCES DEPT. (START CARD) # 19829
(1) OWNER: Well Number: 4 SALEM,	99599CATION OF WELL by legal description:
Name Port of Morrow	County Latitude Longitude
Address PO Box 200	Township 4N Nor S, Range 25E E or W, WM.
City Boardman State OR Zip 97818	Section 10 Ne 4 NE 4
(2) TYPE OF WORK:	Tax Lot Block Subdivision
A Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comm	Street Address of Well (or nearest address)
	Street Address of Well (of hearest address)
(3) DRILL METHOD	(10) CHARLOWATER LEVEL
□ Rotary Air □ Rotary Mud □ Cable □ Other Reverse Circulation Air Rotary	(10) STATIC WATER LEVEL:
	ft. below land surface. Date
(4) PROPOSED USE:	Artesian pressure 18 lb. per square inch. Date $\frac{2/1/91}{}$
□ Domestic □ Community ☒ Industrial □ Irrigation	(11) WATER BEARING ZONES:
☐ Thermal ☐ Injection ☐ Other	Depth at which water was first found
(5) BORE HOLE CONSTRUCTION:	From To Estimated Flow Rate SWL
Special Construction approval Yes No Depth of Completed Well 900 ft.	677 900 see (8) see(10)
Explosives used	7 33 unknown 7
	May be others between above zones
HOLE SEAL Amount Diameter From To Material From To sacks or pounds	May be others between above zones
24 0 57 cement 0 650 270 sacks	(10) WELL LOC.
20+ 57 650	(12) WELL LOG: Ground elevation _approx. 272
16 650 682	Material From To SWL
15-682 900	See attached sheet
How was seal placed: Method 🔯 A 🗌 B 🗎 C 🔲 D 🗎 E	
Other	Step Test:
Backfill placed from ft. to ft. Material	1675 gpm 60'DD after 2.3 hrs
Gravel placed from ft. to ft. Size of gravel	1970 gpm 76'DD after 5.0 hrs (incl. above)
(6) CASING/LINER:	2360 gpm 102 DD after 7.5 hrs (incl.above)
Diameter From To Gauge Steel Plastic Welded Threaded Casing: 18 +4.5   650   .375   XXX   XXX	2930 gpm 149 DD after 9.5 hrs (incl.above)
	3490 gpm 197'DD after 11.5 hrs(incl.above)
	DD includes 18 psi shut in plus pumping level.
01 00 000	
104 607 000 075	
*except at screens and top 5'bells out to 15'	
Final location of shoe(s) 24" @ 57; 18" @ 650	RECEIVED
	NECE IVE
(7) PERFORATIONS/SCREENS:	NOV 0 5 2020
X Perforations Method <u>factory mill cut</u>	NUV U 3 ZUZU
X Screens * Type Material	
Slot Tele/pipe From To size Number Diameter size Casing Liner	OWRD
677   692   .2x3   360   \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	OWIND .
*692 717 .150 cont 12 PS	
717 774 .2x3 1368	
*774 784 .150 cont 12 PS	
784 818 .2x3 816 D	Date started 7/23/90 Completed 2/1/91
*818 843 .150 cont 12 PS	(unbonded) Water Well Constructor Certification:
(8) WELL TESTS: Minimum testing time is 1 hour	I certify that the work I performed on the construction, alteration, or
X Pump Bailer Air X Artesian	abandonment of this well is in compliance with Oregon well construction
	standards. Materials used and information reported above are true to my best knowledge and belief.
Yield gal/min Drawdown Drill stem at Time	WWC Number 806
-step test reported in (12) 1hr.	Signed Jases Downey Date 2/1/91
-24 hour constant rate test on attached graph	
-well flows 1500 gpm with approx 2 psi back press	
Temperature of water Depti fixesian Flow 1 out a	work performed on this well during the construction dates reported above. all
Was a water analysis done? X Yes By whom OWNET	work performed during this time is in compliance with Oregon well
Did any strata contain water not suitable for intended use?  Too little	construction et and decision is true to the best of my knowledge and belief.
Salty Muddy Odor Colored Other	WWC Number 2/1/91
Depth of strata:	Signed Date 2/1/91

SEI 9104 CONSTRUCTOR 3 ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT

9809C 3/88

### Port of Morrow Well #4

# RECEIVED

Start Card No. 19829 by Schneider Drilling Co. FEB - 6 1991

		by Schmerder Diffing oo.	
	m -	Description WATER RESO	URCES DEPT.
From	To	Description SALEM, (	PHEGON
0	3	Sand, brown, med w/some gravel	
3	8	Gravel 4" minus & sand, med-coarse	
8	18	Gravel 10" minus & sand, coarse, some cemente	d
18	33	Gravel 10" minus & sand, med-coarse, tan	
33	39	Gravel 8" minus w/clay, brown	
39	56	Gravel 3" minus w/clay, binder, brown	DEACHIED
56	57	Basalt, brown, fractured	RECEIVED
57	62	Basalt, black, hard	
62	80	Basalt, black & grey, hard	NOV 0 5 2020
80	83	Basalt, black & grey, hard, some fractures	
83	88	Basalt, brown, med	OLLUND.
88	91	Basalt, brown, soft	OWRD
91	101	Clay, brown, soft	
101	111	Clay, grey-blue, soft	
111	128	Clay, greenish blue w/brown rock & claystone	
128	133	Basalt, black & grey, vesicular	
133	136	Basalt, red & brown, vesicular	
136	139	Basalt, grey & brown, med	
139	150	Basalt, grey, hard	
150	153	Basalt, multi-color: brown, black, grey, hard	1
153	182	Basalt, grey, hard	
182	188	Basalt, mostly grey, some brown & red, hard	
188	278	Basalt, grey, hard	
278	283	Basalt, grey & black, med	
283	290	Basalt, green & purple, soft	
290	339	Clay, green w/black rock	
339	345	Claystone, blueish green Basalt, black w/blue clay & claystone	
345	371	Basalt, black	
371	381 499	Basalt, grey, hard	
381 499	514	Clay, green w/some rock, black	
514	521	Clay, greyish brown	
521	552	Clay, blueish green w/claystone, blueish gre	en
552	569	Basalt, grey, med	
569	571	Basalt, grey, med to hard	
571	622	Basalt, grey, hard	
622	652	Basalt, grey, hard, fractured	
652	677	Clay, multi-color, green, brown w/some basal	t, black
677	696	Basalt, black, vesicular w/green clay	
696	706	Basalt, black, vesicular w/quartz	
706	712	Basalt, multi-color, broken, vesicular	
712	716	Basalt, black fractures w/vesicular basalt	
716	724	Basalt, grey & black, fractures	
724	766	Basalt, grey, very fractured, hard	
766	775	Basalt, black, med, fractured Basalt, black & red, vesicular, soft	
775 782	782 785	Basalt, black, fractured	
785	807	Basalt, red, fractured, stained & black basa	ilt
807	822	Basalt, black, fractured	
822	835	Basalt, red & black vesicular, very, very so	oft
835	845	Basalt, black & red, much harder, fractured	
845	867	Basalt, black, some fractures, med	
867	885	Basalt, black, fractured	
885	900	Basalt, gray, some fractures	

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report

Method of sealing strata off

Was well gravel packed? [ Yes X No

## WATER WELL REPORT SE VED

are to be fred with the	TE OF OPECON 11:11 - 4073 State Well No	INF	255	-1000
SALEM OREGON 97310	TE OF OREGON MAN 2 1378 State Well No. 2			E
within 30 days from the day WOVL 752 on not of well completion.	write above this line)	o		***************************************
of well completion.	Line Line 1 - 1 - 1 - 1 - 1 - 1	Port	Well 1	
(1) OWNED.			#2	,
(1) OWNER: Name Port Of Morrow	(10) LOCATION OF WELL:		4. 2	£
Name Boardman Onecon	County Morrow Driller's well, nu			
Address Boardman, Oregon July 1973	5. W 35 W section 10 T. 4/V	R. 25	E	W.M.
	Bearing and distance from section or subdivision	on corn	er	
(2) TYPE OF WORK (check):	PT. Bearing and distance from section of subdivision			
New Well Deepening Reconditioning Abandon				
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed w	all		
(3) TYPE OF WELL: (4) PROPOSED USE (chec	1.	CII.		
To Datasan In	, Deput at which was and found		2/	/0/28
Cable Detted Demestic Lindustrial Munici				
Dug   Bored   Irrigation   Test Well   Other	☐ Artesian pressure 35 lbs. per squar	e inch.	Date 2/	9/78
CASING INSTALLED: Threaded C Welded X	(10) ****** * 0.0		10	)"
Diam from +1 ft. to 75 ft. Gage 250	(12) WELL LOG: Diameter of well b		sing	
CASING INSTALLED: Threaded Welded 5 Gage 250  12 "Diam. from 41-6" ft. to 535 ft. Gage 330	Depth drilled 685 ft. Depth of comple	eted we	n 685	ft.
" Diam. from		nd stru	cture of	materials;
The Wast	and show thickness and nature of each stratus with at least one entry for each change of format			
PERFORATIONS: Perforated?  Yes X No.	position of Static Wester Years and indicate main	cipal w	ater-beari	ing strata.
Type of perforator used	MATERIAL	From	То	SWL
Size of perforations in. by in.	Sand& gravel grey	0	3	
	Sand? &Roulders gray	3	39	-
perforations from ft. to	MedHand brooken Hagalt men	39	41	
perforations from	Hard Racalt gray	41	140	
perforations fromft. to	Med Basalt brn.	140	151	
(7) SCREENS: Well screen installed?   Yes   No	Hard Basalt grey	151	186	-
Manufacturer's Name	Med Basalt porous brn.	186	198	<del> </del>
Type Model No.		198	309	
Diam Slot size Set from ft. to			322	<del> </del>
Diam Slot size Set from ft. to		322	474	<del> </del>
	Med Porous Basalt blk.	474	529	-
(8) WELL TESTS: Drawdown is amount water level is lowered below static level or the lowered below static level or the lowered below the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the level of the	Hard Basalt grey	529	670	<del> </del>
Was a numn test made? A Vec   No If wee hy whom?	Med Sandstone brn W.B.	670	685	-
2000+ 3 6±	44.4	010	1005	bear"
	hrs. Test pumping wasdelayed so lor	D.	-	KECEI
H II	by Faremore Pump because of an		m	-
" "	conditions. Completed 4/19/78	00020	Ŧ-	NOV 05
Bailer test gal./min. with ft. drawdown after	hrs.		<del>                                     </del>	
Artesian flow 1500 g.p.m.			1	-
78	ft. Work started 7/27/77 19 Complete	. 2/9	/78	<del>' QW</del> R
		2/9/	78	19
(9) CONSTRUCTION:	Date well drilling machine moved off of well	6/7/	10	19
Well seal—Material used Cement Grout	Drilling Machine Operator's Certification:	3		
Well sealed from land surface to 75	This well was constructed under my	direc	t super	rvision.
Diameter of well bore to bottom of seal 120	Materials used and information reported best knowledge and belief.	apove	are tru	e to my
Diameter of well bore below seal 16"t0 535,10"t0 685	[Signed] Charles C Tall	1 4	/29/78	10
Number of sacks of cement used in well seal	sacks (Drilling Machine Overator)	ou		, 19
How was cement grout placed? Western Power Grouter	Drilling Machine Operator's License No.	84		
	Water Well Contractor's Certification:			
the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	This well was drilled under my jurisdi	ction a	nd this	report is
Was a drive shoe used? 🗌 Yes ื No Plugs Size: location	true to the best of my knowledge and beli	ef.		
Did any strata contain unusable water? 🔲 Yes 💆 No	Name		ype or pri	(nt)
Type of water? depth of strata	Address Address	0,"	ope or pri	/

depth of strata

_ft. to .....

Size of gravel:

Address

[Signed]

(Water Well Contractor)

#### TO WAT L CONTRACTOR st copy ne origina f this rep

## WATER WELL B

STATE OF OREGONAN 9 1975

4N/25E-10ba State Well No.

#1

State Permit No. ..

Port Well 2

filed with the (Please type or priSTATE ENGINEER GINEER, SALEM, OREGON 97314 thin 30 days from the date (Do not write above this ALEM, OREGON of well completion. 1) OWNER Name (2) TYPE OF WORK (check): Abandon [ Deepening [ Reconditioning [ New Well If abandonment, describe material and procedure in Item 12. (4) PROPOSED USE (check): (3) TYPE OF WELL: Driven [ Rotary Domestic 🗌 Industrial 🗶 Municipal 🗌 Jetted Cable Irrigation 
Test Well Other Bored Dug CASING INSTALLED: Threaded | Welded ft. to 72 ft. Gage ft. to ..... " Diam, from Perforated? Tyes No. PERFORATIONS: e of perforator used in. by in. Size of perforations .... perforations from .... perforations from ...... perforations from ..... ft. to . (7) SCREENS: Well screen installed? | Yes | No Manufacturer's Name . Model No. ft. to . Set from . Slot size ____ ft. to ..... Diam. ..... Slot size .... Drawdown is amount water level is (8) WELL TESTS: Was a pump test made? Yes 
No If yes, by whom? gal./min. with /77 ft. drawdown after Yield: ft. drawdown after gal./min. with Bailer test Artesian flow 70 Depth artesian flow encountered ..... perature of water GRANULAR BENTONITE CEMERT GIROUT Well sealed from land surface to 40 to 86 AND 421-435 ft. Diameter of well bore to bottom of seal ..... Diameter of well bore below seal _________in. Number of sacks of cement used in well seal . Number of sacks of bentonite used in well seal Brand name of bentonite ...... Number of pounds of bentonite per 100 gallons of water PUTIN DRY GRADULAR lbs./100 gals .... Size: location ..... ft.

Was a drive shoe used? X Yes \( \subseteq \text{No Plugs} \)

Method of sealing strata off (#15 Was well gravel packed? 

Yes No

Gravel placed from ....

Did any strata contain unusable water? XYes \( \square\) No

_									
(	10) LOCATION OF WELL:		-1	a					
C	ounty MORROW Driller's well nur	mber	5 40	7					
NE 1/4 NW 1/4 Section 10 T. YN R. 25E W.M.									
B	searing and distance from section or subdivision	n corner							
-									
(11) WATER LEVEL: Completed well.									
	Depth at which water was instituted								
-	Static level 8 ft. below land surface. Date /2/30/74								
Artesian pressure lbs. per square inch. Date									
(	(12) WELL LOG: Diameter of well b	elow cas	ing	12					
	Depth drilled 560 ft. Depth of comple			60 ft.					
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.									
	MATERIAL	From	То	SWL					
-	SEE ATTACHED SHE	ET							
-									
-									
	RECEIVED								
	NOV 0 5 2020								
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1.	OWRD			-					
	OWIND	-	-						
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1									
	Work started SEPT 10 1974 Complete	ted $\mathcal D$	Ec 2	0 1974					
	Date well drilling machine moved off of well	DEC	2 2-3	1974					
	Drilling Machine Operator's Certification:  This well was constructed under my direct supervision.  Materials used and information reported above are true to my best knowledge and belief.								
	[Signed] / M allower	_Date _/	12/3	0, 1974					
	Drilling Machine Operator)  Drilling Machine Operator's License No.	5	7						
				-					
	Water Well Contractor's Certification:	diation	nd thin	report is					
.	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.								
	Name RYSTRASSER DA	PILLI	A'C7	rint)					
-	Address \$110 SE SUNSET LA	NE T	BETZ	ALW ORE					
-	0 14-1-1-11	- N	_	, , , , , , , , , , , , , , , , , , , ,					

10 Date DEC

Contractor's License No.

# R. J. Strasser Drilling Co.

8110 S. E. Sunset Lane Portland, Oregon 97206 January 1, 1974 RECEIVED
NOV 0 5 2020

OWRD

Log of well for Port of Morrow

sand and gravel	0 - 5
sand and boulders, some binder	5 - 20
loose sand and gravel	20 - 42
broken rock	42 - 44
medium hard black basalt	44 - 50
hard grey basalt	50 - 98
porous black basalt	98 - 108
green clay	108 - 142
porous brown basalt	142 - 154
porous black basalt	154 - 175
medium hard grey basalt	175 - 190
porous brown basalt	190 - 201
hard grey basalt	201 - 311
broken black basalt	311 - 320
green clay	320 - 402
green sandy clay	402 - 422
medium hard black basalt	422 - 426
broken black basalt	426 - 432
meium hard black basalt	432 - 443
porous black basalt	443 - 475
medium hard black basalt	475 - 483
porous black and brown basalt	483 - 501
medium hard black basalt	501 - 533
porous black basalt	533 - 550
green clay and shale	550 - 560



NOV 0 5 2020

OWRD

October 30, 2020

Kelly Starnes Oregon Water Resources Department 725 Summer Street NE, Suite A Salem, OR 97301

Re: Transfer Application for Certificate 90019

Dear Mr. Starnes:

GSI Water Solutions, Inc. (GSI), is submitting the enclosed transfer application on behalf of the Port of Morrow. Due to an error during the certification of Certificate 90019 and multiple other Port water rights at the same time, the point of appropriation location description on the certificate points to Port Well 3 (MORR 757) instead of Port Well 2 (MORR 756). Both of these wells are located within the same building, and are separated by only 30 feet. This transfer application corrects the name and location description for the existing point of appropriation to reflect the actual Port Well 2, which has always been at this location. The Port of Morrow is also proposing to add four (4) additional points of appropriation to this right which would all be completed in the same aquifer as Port Well 2.

The Port requests that the C-date for this transfer application be made October 1, 2029, which will allow the Port sufficient time to finalize the future well locations, develop the funding through their master planning process, and then drill the well (takes up to 7 months per well – depending upon the depth).

The transfer application and a check in the amount of \$1,570.00 for the application fee are enclosed. If you have any questions regarding this application, please contact me at 971-200-8519.

Sincerely,

Bruce Brody-Heine

CC: Miff Devin, Port of Morrow

**Enclosures: Transfer Application** 

Bence Brody - Heine

Check in the amount of \$1,570