Oregon
Kate Brown, Governor

Water Resources Department
North Mall Office Building
725 Summer St NE, Ste A
Salem, OR, 97301
Phone: 503-986-0900
Fax: 503-986-0904

August 5, 2020
JIM MACK SR WWC# 1493
BANDON WELL AND PUMP CO
47530 HWY 101
BANDON, OR 97411

FINAL ORDER

Dear Mr. Mack:

The Special Standards Request Form you submitted for owner: City of Brookings, Start Card number 1046865, is hereby approved for the following: You may construct this community well as described on your Special Standards Request Form dated August 5, 2020. All other well construction standards must be met. A copy of your Special Standards Request Form is enclosed.

Please keep in mind that each time you construct a well in this manner, a special standard request must be submitted for consideration. The Department does not issue blanket special standards for a drilling process. Please also keep in mind that the rules do not specify that a two-inch annular space is required for protective steel casing in PVC well completions. The rules only require that the steel casing be sealed at least four feet into the ground within the annular seal. There are more requirements as well, but I wanted to address your comments regarding a twelve-inch borehole.

OAR 690-200-0021 requires the well constructor to request and receive Special Standards approval prior to completion of the well. Please note, in the future, **no Special Standards will be granted for after-the-fact requests.**

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

If you have any questions regarding this letter, I may be contacted at (503) 986-0851, or by e-mail at Kristopher.R.Byrd@oregon.gov.

Sincerely,

Kristopher R Byrd, Manager
Well Construction and Compliance Section

Enclosure

cc: Travis Kelly, Well Construction Program Coordinator, Well Construction and Compliance Section
Ben Thorpe, Well Inspector, Southwest Region

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

Bandon Well & PUMP COMPANY

47530 HWY 101
BANDON OR 97411-8233

PHONE: (541) 347-PUMP (7867)
FAX: (541) 347-9678

DATE: 8/5/2020

FROM: Jim Mack, Sr.

TO: Travis Kelly

COMPANY: WRD

~~FAX #:~~
E.Mail Travis.N.Kelly@oregon.gov

SUBJECT: SPecial Standard

NUMBER OF PAGES INCLUDING COVER: 7

Travis
Attached is the special Standards request for L136502

Thank you
Jane

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

Special Standards
Request Form

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

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

Date of request: 8/5/2020 **Oral approval date (if applicable):** _____

Bonded Well Constructor (name, license #, and mailing address): Jim Mack S.E. WRD #1493

(1) Location of Well: SW 1/4 NE 1/4 Tax lot 101 Section 2, Township 41 S, Range 13 W, Curry County

Address at well site: 99040 S. Bank Chetco River Rd

(2) Start Card Number(s)(for work to be done): 1046865 / ID # 136502

(3) Name and Address of Land Owner: City of Brookings 898 Elk Dr / Salmon Run Golf Course

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

100' +

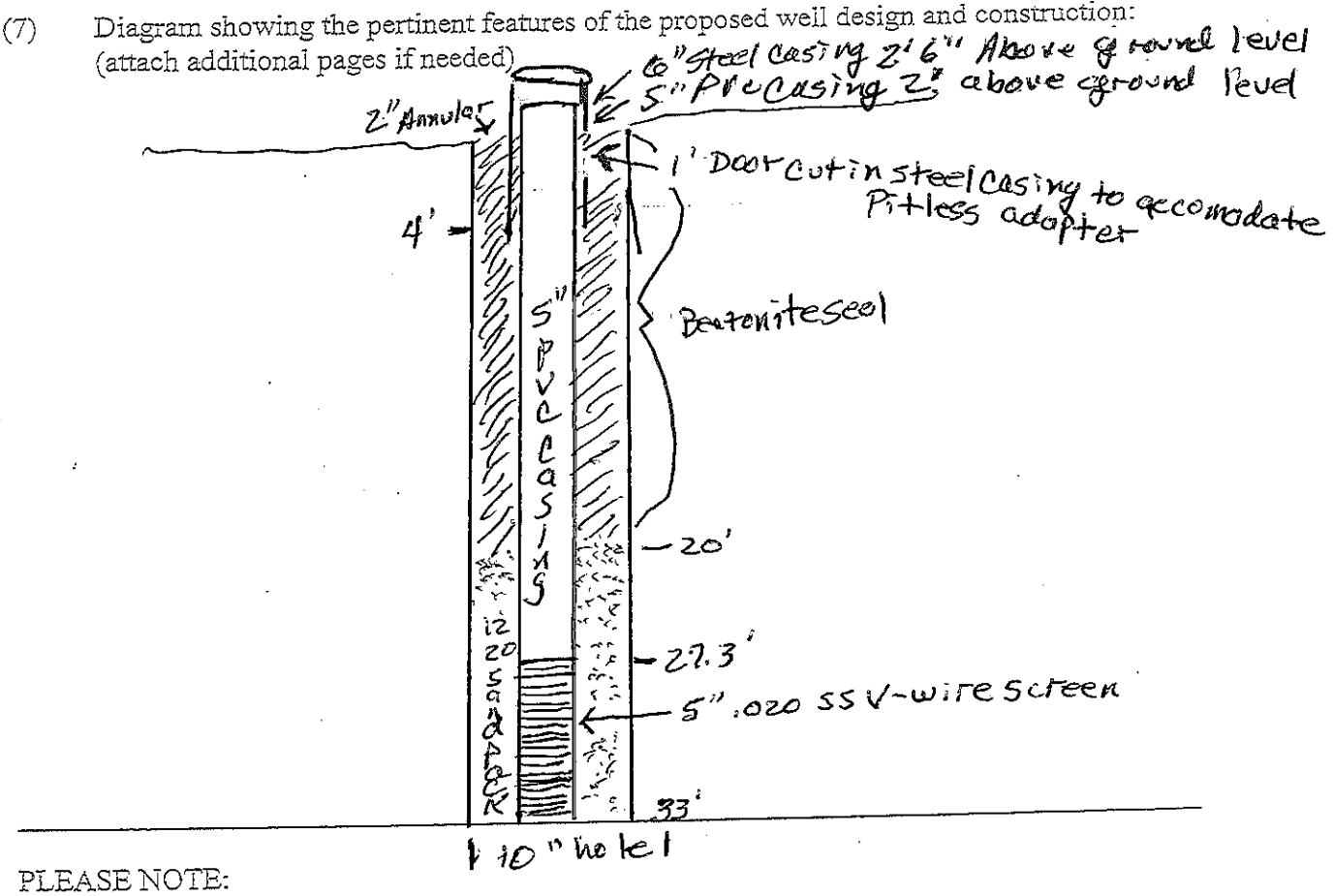
(5) The unusual site conditions which necessitate this request: well is constructed See attached Photos + well log. Site had an existing well ID # L38346 that failed and wouldn't produce water

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

See Attached Sheet
Well is located behind 2 - 3000gal AG holding Tanks

ENF

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



PLEASE NOTE:

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

(2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.

(3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of oral approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral approval.

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

Bonded Constructor Signature: Jon Mach Jr.

Bandon Well & Septic Company, Inc. dba

BANDON WELL & PUMP COMPANY

James A. Mack, Sr., - MGWC
Master Ground Water Contractor
47530 Hwy 101
Bandon OR 97411-8233
(541) 347-PUMP (7867)

From the Bottom of Your Well,
to the bottom of your glass. . .
Complete Service of Water Systems"

Oregon Water Resources Department
725 Summer St. NE, Suite A
Salem OR 97301
Well Construction Program Coordinator

Travis Kelly,

For over a decade, we have been drilling 5 inch PVC sand and gravel wells with an artificial filter pack around the screen. We drill a 10 inch hole with a bentonite slurry to the bottom of the sand and gravel on top of the bedrock. After the well is developed, we usually install the bentonite seal from the top of the sand pack to 2 feet below ground level. We set the 6 inch steel casing on top of the bentonite seal and push it into the bentonite seal to 1.5 feet above the 5 inch PVC casing. The 6 inch steel casing has a 6 inch by 12 inch door cut in the steel casing 2 to 3 feet below ground level to accommodate a pitless adapter to access the PVC casing if necessary.

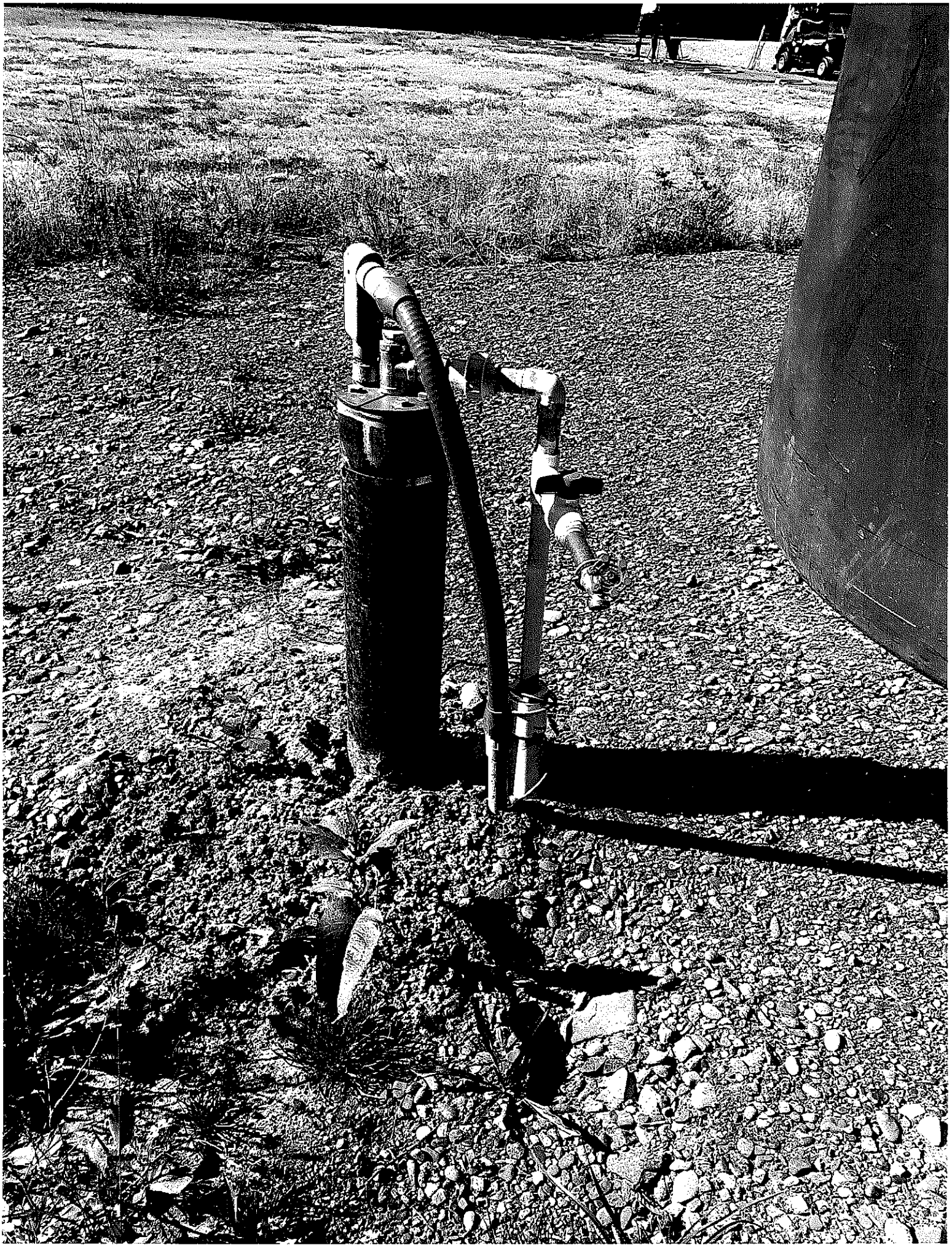
The remainder of the 10 inch bore is filled with bentonite to ground level. Filling the cut out in the steel casing and filling the void between the 5 inch PVC and the 6 inches of steel. The 6 inch steel casing has a 2 inch annular space around the casing. In order to accommodate an 8 inch steel casing, we would have to drill a 12 inch hole. The cost to the customer would probably double (i.e. 8 inch steel casing, well seal or cap, retooling to drill a 12 inch hole to accommodate the 8 inch steel casing for just 4 feet).

I have spoken to several people from the Water Resources Department as well as Kris Byrd and Joel Jeffery. I have met with Alan Ome and Scott Cicilliani on our jobs and discussed our drilling method and protection of the 5 inch PVC casing and we have not had any issues protecting the PVC or the resource from any damage. They have verbally approved our method of construction.

Our area has many issues with water quality (i.e. iron, low pH, sulpher and salt air. For these reasons, we install PVC casing in our sand and gravel wells. For our bedrock wells, we use a 6 inch steel casing to accommodate a 4 ½ inch PVC liner. Please approve this special standard for this application and all others.

Sincerely,

Jim Mack Sr. MGWC



STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

CURR 52950
4/14/2020

WELL I.D. LABEL# L 136502
START CARD # 1046865
ORIGINAL LOG #

(1) LAND OWNER

Owner Well I.D. 1875
First Name _____ Last Name _____
Company CITY OF BROOKINGS
Address 898 ELK DR.
City BROOKINGS State OR Zip 97415

(2) TYPE OF WORK

[X] New Well [ ] Deepening [ ] Conversion [ ] Alteration (complete 2a & 10) [ ] Abandonment(complete 5a)

(2a) PRE-ALTERATION

	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
Casing:									

	Material	From	To	Amt	sacks/lbs
Seal:					

(3) DRILL METHOD

[ ] Rotary Air [X] Rotary Mud [ ] Cable [ ] Auger [ ] Cable Mud
[ ] Reverse Rotary [ ] Other _____

(4) PROPOSED USE

[ ] Domestic [ ] Irrigation [X] Community
[ ] Industrial/ Commericial [ ] Livestock [ ] Dewatering
[ ] Thermal [ ] Injection [ ] Other _____

(5) BORE HOLE CONSTRUCTION

Special Standard [ ] (Attach copy)
Depth of Completed Well 32.33 ft.

BORE HOLE

Dia	From	To
10	0	33

SEAL

Material	From	To	Amt	sacks/lbs
Bentonite	0	20	14	S
		Calculated	9.5	
		Calculated		

How was seal placed: Method [ ] A [ ] B [ ] C [ ] D [ ] E
[X] Other POUR FROM SURFACE
Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from 20 ft. to 33 ft. Material SAND Size 12/20
Explosives used: [ ] Yes Type _____ Amount _____

(5a) ABANDONMENT USING UNHYDRATED BENTONITE

Proposed Amount Actual Amount

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
●	○	6	X	2.5	5	.250	●	○		
●	○	5	X	2	27.33	Sdr 26	○	●	X	
○	○						○	○		
○	○						○	○		
○	○						○	○		

Shoe [ ] Inside [ ] Outside [ ] Other Location of shoe(s) _____
Temp casing [ ] Yes Dia _____ From + [ ] _____ To _____

(7) PERFORATIONS/SCREENS

Perforations Method _____
Screens Type Johnson V-Wire Material Stainless Steel

Perf/ Screen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
Screen	Casing	5	27.33	32.33	.02			5

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

(●) Pump ( ) Bailer ( ) Air ( ) Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
15.7	3.5	32	1

Temperature 53 °F Lab analysis [X] Yes By Bandon Well & Pump Co.
Water quality concerns? [ ] Yes (describe below) TDS amount 24 ppm

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)

County CURRY Twp 41.00 S N/S Range 13.00 W E/W WM
Sec 2 SW 1/4 of the NE 1/4 Tax Lot 101
Tax Map Number _____ Lot _____
Lat ° ' " or 42.05562924 DMS or DD
Long ° ' " or -124.20783293 DMS or DD
(●) Street address of well ( ) Nearest address
99040 S. BANK CHETCO RIVER RD, BROOKINGS OR 97415

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Pre-Alteration			[ ]	
Completed Well	4/13/2020		[ ]	6.6

Flowing Artesian? [ ] Dry Hole? [ ]

WATER BEARING ZONES Depth water was first found 6.58

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
4/10/2020	6.58	33	87			6.58

(11) WELL LOG

Ground Elevation 65.00

Material	From	To
Topsoil w/sand & gravel	0	2
Gravel c-f w/clay brown & wood	2	16
Silty clay gray	16	19
Silty clay brown	19	22
Clay w/gravel f-c brown 40%	22	26
Gravel f-m w/clay brown 10%	26	31
Clay w/gravel f-m brown 20%	31	33

Date Started 4/10/2020 Completed 4/13/2020

(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 well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 1759 Date 4/14/2020
Signed CHRISTOPHER KERSEY (E-filed)

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

License Number 1493 Date 4/14/2020
Signed JAMES MACK SR (E-filed)
Contact Info (optional) Bandon Well & Pump Co. (541) 347-7867

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version: