

February 15, 2018

Robert Smethers
Riverbend-Riverbank Community, PWS #41-00458
461 Hebb Park Rd.
West Linn, OR 97068
Dear Mr. Smethers:

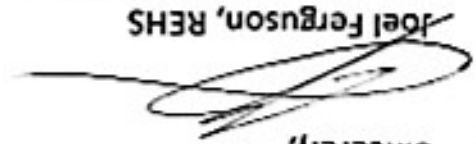
Thanks to Don Smethers for his time and assistance in conducting a Water System Survey at Riverbend-Riverbank Community on December 11, 2017. The main purpose of the survey is to evaluate the entire water system in terms of supplying safe drinking water to the public. I have enclosed a copy of the report for your records. Please let me know if any corrections need to be made.

Water system facilities were found to be well operated and maintained by knowledgeable and competent staff. No significant deficiencies or rule violations were identified. Please note the following comments and/or recommendations:

1. The Drinking Water Program has established criteria for determining whether a system should be considered to have "outstanding performance." Systems that are designated outstanding performers may have their water system survey frequency reduced from every 3 years to every 5 years. Congratulations, your water system met the established criteria. Therefore, your next water system survey will be scheduled in 5 years. I have enclosed a certificate along with a handout that describes the outstanding performance criteria such that you can assure your system continues to meet these criteria.
2. A summary of your monitoring requirements can be found on page 1. Please maintain a copy of this page and refer to it for future monitoring scheduling.

If you have any questions or concerns, or would like this in an alternate format, please contact me at (503) 742-5367. You can also contact me at 503-742-5367 or by email at joelfer@co.clackamas.or.us. Your cooperation is appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Ferguson". The signature is stylized with a large, sweeping initial "J" and "F".

Joel Ferguson, REHS

Clackamas County Environmental Health

encl: Outstanding Performer Criteria and Certificate

cc: OHA Drinking Water Program

Deficiency Summary

Surveyor: Joel Ferguson, R.E.H.S.

Date Corrective Action Plan is due: n/a

County: Clackamas

Yes No

Significant Deficiencies and Rule Violations:

Date to be corrected

Date corrected

☒ ☐

Source:

Well construction:

Spring/other source:

Treatment:

Surface water treatment:

Disinfection:

Other treatment:

Finished Water Storage:

Distribution:

Monitoring:

Management & Operations:

Operator Certification:

Other Rule Violations:

Comments:

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Survey Date: 12/11/17

Water System Survey
OHA Drinking Water Services

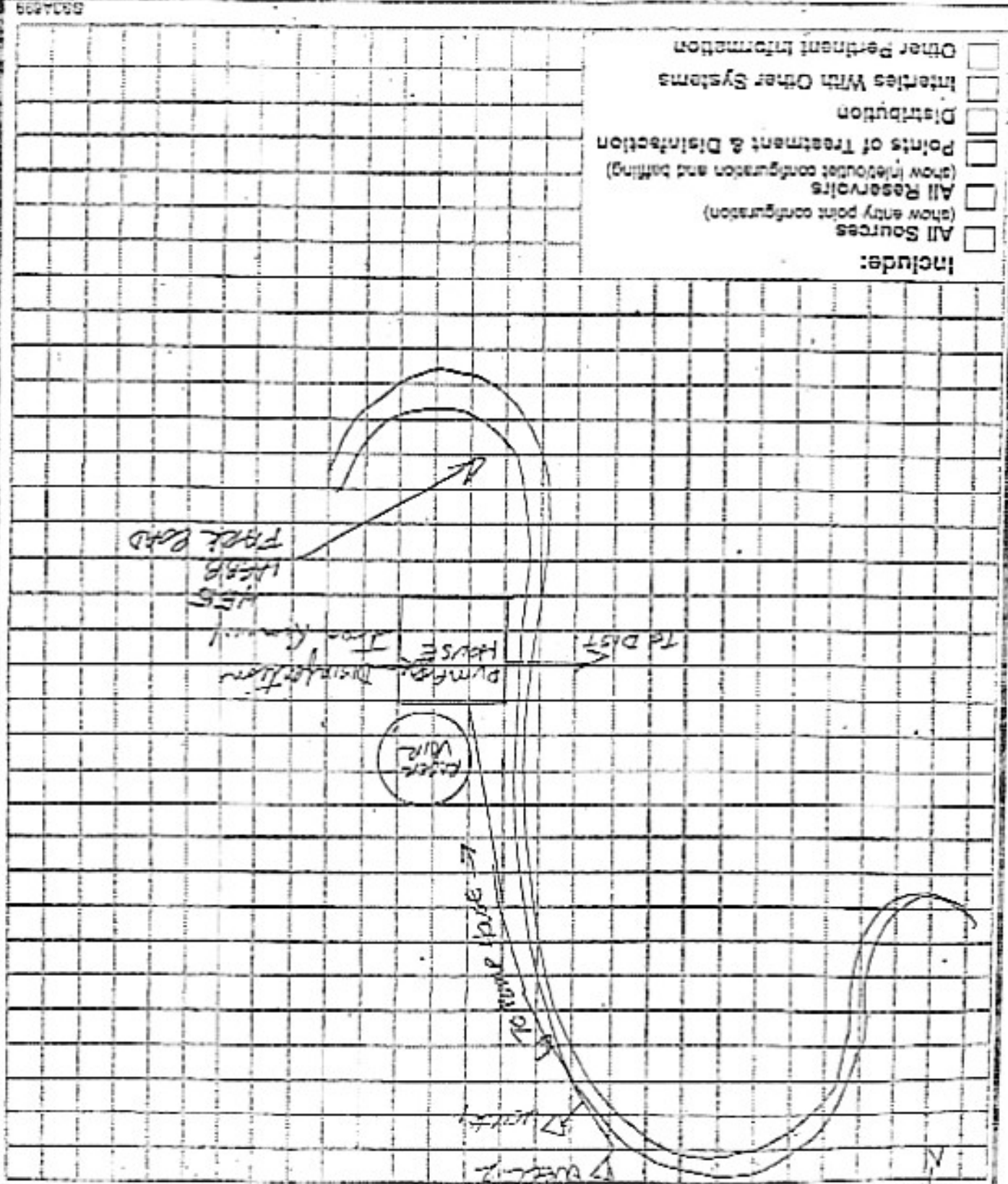
Inventory and Narrative

☐ Outstanding Performer					
Type:	Community (C)	Status	Size	Season:	Year-round
License:	Not Licensed	Population:	225	Begins: (mm/dd)	/
Responsible Agency:	County	Connections:	81	Ends: (mm/dd)	/
Service Characteristics: Residential: Rural (RA)					
Ownership: 2 - Private					
Operator Certification		WD: Choose an item.	WT: Choose an item.	FE ☐ Small WS ☒	
Requirements:					

Primary Administrative Contact (Mailing Address):					
Contact Name:	Robert Smethers				
Title:	Operator				
Street Address:	461 Hebb Park Rd.				
City/State/Zip:	West Linn, Oregon 97068				
Legal/Owner Address:					
Contact Name:	Riverbend-Riverbank Community				
Title:					
Street Address:	P.O. Box 1872				
City/State/Zip:	Lake Oswego, Oregon 97035				
System Physical Address:					
Contact Name:					
Title:					
Street Address:	455 Hebb Park Rd.				
City/State/Zip:	West Linn, Oregon 97068				
Emergency Systems Available:					
Name:	None				
PWS ID#: 41					
Narrative:					

This community water system serves a rural neighborhood off of Pete's Mountain Rd. near the Willamette River & Hebb Park. It consists of 2 pitless adapter wells, 3 pressure tanks, 75K res. & 2-5hp variable drive pumps. The system chlorinates for residual maintenance & injects poly phosphate for iron removal.

Please send updated pump house design when completed



- Include:
- ☐ All Sources (show entry point configuration)
 - ☐ All Reservoirs (show inlet/outlet configuration and baffling)
 - ☐ Points of Treatment & Disinfection
 - ☐ Distribution
 - ☐ Interfuses With Other Systems
 - ☐ Other Pertinent Information

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Land Use Codes: (A) Pristine Forest (B) Irrigated Crops (C) Non-Irrigated Crops (D) Pasture (E) Light Industry (F) Heavy Industry (G) Urban-Sewered Area (H) Rural On-Site Sewage Disposal (I) Urban On-Site Sewage Disposal (J) Rangeland (K) Managed Forest (L) Commercial (M) Recreational Use

YES NO

Has the water system implemented strategies (e.g., posting source area signs, notifying residents of Haz Waste collection events, provide residents information about maintaining their septic systems, abandoning unused wells, etc.) to protect their drinking water sources?

Is the water system interested in protecting their drinking water sources from contamination? If yes, contact regional geologist at 541-726-2587.

Comments:

Comments:

Well Information

Source ID# : SRC-	AA	BA
Source Name:	Well # 1	Well # 2
Well log available?	Yes Ciac9528	Yes L41302
Well log ID (e.g., COLU123, L12345)	Ciac9528	L41302
Well active?	Yes No	Yes No
Pitless adaptor?	☒ ☐	☒ ☐
Sanitary seal & casing watertight?	☒ ☐	☒ ☐
Raw water sample tap?	☒ ☐	☒ ☐
Treated water sample tap? ☐ N/A	☒ ☐	☒ ☐
If vented, properly screened?	☒ ☐	☒ ☐
Wellhead protected from flooding?	☒ ☐	☒ ☐
Concrete slab around casing?	☒ ☐	☒ ☐
Casing height ≥ 12-in. above slab/grade?	☒ ☐	☒ ☐
Flowmeter?	☒ ☐	☒ ☐
Pressure gauge?	☒ ☐	☒ ☐
Pump to waste piping?	☒ ☐	☒ ☐
Well meets setbacks from hazards?	☒ ☐	☒ ☐
If no, identify list of hazard(s) within the setback and the distance to the hazard.		
HAZARD:		
DISTANCE (ft):		
Protective housing?	☒ ☐	☒ ☐
If yes, does it have:		
Heat?	☒ ☐	☒ ☐
Light?	☒ ☐	☒ ☐
Floor drain?	☒ ☐	☒ ☐
Well pump removal provision?	☒ ☐	☒ ☐
Pump Type:	Submersible	Submersible
Bearing lubrication:		
Pumping capacity (gpm):	Water 105	Water 105
If no well log available, record any known information regarding depth of well, depth of gravel pack, and location of test hole.		

Comments:

If no well log available, record any known information regarding depth of well, depth of grout seal, year of installation, or casing diameter in the comments section below.

Potential Sanitary Hazards (From OAR 333-061-0050(2)(a)(E))

The following sanitary hazards are not allowed within 100 feet of a well or spring:

- Any existing or proposed pit privy
- Subsurface sewage disposal drain field
- Cesspool
- Solid Waste disposal site
- Pressure sewer line
- Buried fuel storage tank
- Animal yard, feedlot, or animal waste storage
- Untreated storm water or gray water disposal
- Chemical (including solvent, pesticides, and fertilizers)(storage, usage, or application)
- Fuel transfer or storage
- Mineral resource extraction
- Vehicle or machinery maintenance or long term storage
- Junk / auto / scrap yard
- Cemetery
- Unapproved well
- Well that has not been properly abandoned or of unknown or suspect construction
- Source of pathogenic organisms
- Any other similar public health hazards

The following are not allowed within 50 feet of a well or spring:

- Gravity sewer line
- Septic Tank

Exemptions to these setbacks must be listed and documented within the plan approval letter and in an approved construction waiver standard.

If a surface water source is located within 500 feet of a well or spring, please note the water body name and the distance to the well or spring. All groundwater sources within 500 feet to a surface water source should be considered for potential surface water influence. Check the file for correspondence. If a review has been done indicate results in comment section. If not, contact the Springfield office 541-726-2587.

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Disinfection

No #	Disinfection Method	Location	Disinfection Source Water	Residual Maintenance	Other Purpose	Proportional to Flow	Dosage Recorded
1	Sodium Hypochlorite	Prior to storage	☐	☒		☒	☒

Chlorine residuals ☐ N/A

• Is a DPD or other EPA approved method used? ☒ Yes ☐ No

• NSF 60/61 certified (or equivalent)? ☒ Yes ☐ No

• Are entry point residuals recorded at least once per day (SWTR, GWR 4-log)? ☒ N/A

• Is entry point residual monitoring continuous if population > 3,300? ☒ N/A

• Are distribution residuals recorded at least twice weekly? ☒ Yes ☐ No

• Are on-line chlorine analyzers verified weekly with DPD type or EPA approved test kit? ☒ N/A

Chlorine gas ☒ N/A

Separate room for gas storage and feeder? ☐ Yes ☐ No

Fan with on/off switch outside? ☐ Yes ☐ No

Vent located next to the floor? ☐ Yes ☐ No

Door with a window? ☐ Yes ☐ No

UV ☒ N/A

• Does all water contact UV (no bypass)? ☐ Yes ☐ No

• Is lamp sleeve cleaned? ☐ Yes ☐ No

• Is lamp replaced per manufacturer? ☐ Yes ☐ No

• Intensity sensor with alarm or shut-off? ☐ Yes ☐ No

CT Evaluation for disinfection ☒ N/A

• Is contact time based on a tracer study or adequate alternative? ☐ Yes ☐ No

Describe adequate alternative method for contact time: _____

• Is there a flow meter on effluent side of clearwell/contact chamber or adequate alternative? ☐ Yes ☐ No

Describe adequate alternative method for flow rate: _____

Tracer study demand flow (gpm): _____

Have tracer study parameters changed? ☐ Yes ☐ No

• (SW only) Are pH, temp, and chlorine residual measured daily before or at the first user? ☐ Yes ☐ No

• Are CT values being calculated correctly? ☐ Yes ☐ No

• Are CT values met at all times (SWTR, GWR 4-log)? ☐ Yes ☐ No

Comments:

Comments:

Yes / No		Yes / No	
☒	☐	☒	☐
Dosages		Raw pH	
☒	☐	☒	☐
Raw temperature		☒	☐
☒	☐	☒	☐
Raw turbidity and/or particle counts		☒	☐
☐	☒	☐	☒
Flowrate		☒	☐
☒	☐	☒	☐
Treated pH		☒	☐
☒	☐	☒	☐
Treated temperature		☒	☐
☒	☐	☒	☐
Treated turbidity		☒	☐

Records Kept _____

☐ Yes ☐ No	☒ Has treatment changed? ☐ Is lab equipment for on-site analysis appropriate? ☐ Is equipment maintained properly? ☐ Is redundant equipment available? ☐ Are chemicals NSF Standard 60 certified or equivalent? ☐ N/A - no chemicals are used ☒ Does system practice corrosion control? ☒ Is corrosion control operated within parameters set by DWS? ☐ N/A Describe method of corrosion control (if applicable)
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[illegible]

$$51/6$$

Number	Name	Tank Type*	Tank Material	Year Built	Volume (gal.)
1	Storage tank	(G) Ground	Concrete	1970's	75K
2-4	Hydro pneumatic	(P) Pressure	Steel	'09	119

[illegible]

Distribution System Information

Service Area and Facility Map

- ☒ Yes
☐ No
- Does the system have a service area and facility map (indicate features on map):
- ☒ Water lines (including size and material)
 - ☒ Treatment facilities
 - ☒ Storage facilities (reservoirs)
 - ☐ Sampling points
 - ☒ Booster pumps
 - ☐ Pressure regulating valves
 - ☐ Pressure zones
 - ☒ Sources-wells & withdrawal points

Distribution Data

- ☒ Yes
☐ No
- System pressure ≥ 20 psi? ☒
 - Water system leakage $< 10\%$? ☒
 - Hydrants or blowoffs on all dead ends? ☐ N/A
 - Routine flushing? (How often) ☒
 - Adequate valving? ☒
 - Routine valve turning? (How often) ☒
 - Does the distribution system have asbestos cement (AC) pipe? ☒

If yes, verify asbestos sampling is completed on Water Quality Monitoring Page (CWS, NTNC).

60psi
Comments

blow offs @ dead ends

monthly

annual

Cross Connection Control (CWS, NTNC, and TNC)

- ☒ Yes
☐ No
☐ N/A
- Devices tested annually? (CWS, NTNC, TNC) ☐
 - Ordinance or enabling authority? (CWS) ☐
 - Annual Summary Report submitted? (CWS) ☐
 - Certified Cross Connection Control Specialist? (CWS > 300 connections) ☒

Comments

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Comments:

Water Quality Monitoring

Contaminant	N/A	Frequency	Next Tests Due
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Entry Point Sampling:			
Nitrate	☐	Annual	2018
Arsenic	☐	9 years	2023
Inorganic Chemicals (Including Nitrite)	☒	9 years	2023
Inorganic Chemicals (Including Nitrate)	☐	9 years	2023
SOCs	☐	3 years	2020
VOCs (sw)	☒	3 years	2020
VOCs (gw)	☐	3 years	2020
Radionuclides (Community Water Systems Only):			
Gross Alpha	☐	6 years	2026
Radium 226/228	☐	9 years	2026
Uranium	☐	9 years	2026

Distribution System Sampling:			
Coliform Bacteria	☐	Monthly	
Asbestos (for AC pipe/asbestos geologic areas)	☒		
THMs and HAAs	☐	3 years	July, 2020
Lead and Copper, # sites: 5	☐	3 years	June 1-Sept 30, 2020
Other Sampling:			
TOC	☒		
Turbidity	☒		
Source Water Coliform	☒		
Other (specify)	☐		

☐ Yes
☒ No
 • Is all required monitoring current? Lead & copper past due

☐ Yes
☒ No
 • Are samples collected at the correct locations in the system?

☐ Yes
☒ No
 • Have all MCL violations or LCR AL exceedances been addressed? ☐ N/A

☐ Yes
☒ No
 • Does the system have a written coliform sampling plan?

Does the plan include: Yes ☒ No ☐
 Brief narrative ☒ ☐
 Distribution map ☒ ☐
 Sample site locations ☒ ☐
 Rotation schedule ☒ ☐
 Repeat locations ☒ ☐
 Source locations ☒ ☐ N/A

Comments:

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Management & Operations

O&M Manual and Emergency Response Plan

- Does system have an operation and maintenance manual? Updated Feb. 2017 ☐ Yes ☒ No
- Does system have an emergency response plan? Updated Feb. 2017 ☐ Yes ☒ No
- Do any system components have auxiliary power? ☐
- If yes, describe: generator for boost pump

Operator Certification

- Is the DRC identified and certified at the appropriate level? ☐ Yes ☒ No ☐ N/A
- If the DRC is a contract operator, how do they work with the system? ☐ Yes ☒ No ☐ N/A
- Does system have written protocols for under-certified operators? ☐ Yes ☒ No ☐ N/A

Plan Review/Master Plan

- Have all major modifications been approved by DWS? ☐ Yes ☒ No ☐ N/A
- Does the system have a current (<20 yr. old) master plan? (Not required if < 300 connections) ☐ Yes ☒ No ☐ N/A
- What year was the plan completed?

Compliance Status

- Is water system in compliance (all orders resolved and not a priority non-complier)? ☐ Yes ☒ No ☐ N/A
- Does the system issue public notice as required? ☐ Yes ☒ No ☐ N/A
- Are consumer confidence reports sent to users each year? ☐ Yes ☒ No ☐ N/A

Comments:



P-3#4100456

12-11-17



Well #2



Well #1

13/15



STATE ENGINEER, BALTIC OCEAN
 The original and final copy
 of this report are to be
 filed with the
 STATE ENGINEER, BALTIC OCEAN
 within 30 days from the date
 of well completion.

(1) OWNER: **Paul Hebb**
 Address: **P.O. Box 524**
Lake Dallas, ORE

(2) TYPE OF WORK (check):
 New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
 If abandonment, describe method and procedure in Item 11.

(3) TYPE OF WELL:
 Rotary ☒ Auger ☐ Driven ☐ Bored ☐
 Domestic ☒ Industrial ☐ Municipal ☐ Irrigation ☐ Test Well ☐ Other ☐

CASING INSTALLED:
 Threaded ☐ Welded ☒
 10" diam. from 71' to 70' R. Gauge 279
 10" diam. from 70' to 70' R. Gauge 279

PERFORATIONS:
 Type of perforation used: ☒ No. ☐ No.
 10" diam. from 71' to 70' R. Gauge 279
 10" diam. from 70' to 70' R. Gauge 279

(7) SCREENS:
 Manufacturer's Name: _____
 Model No.: _____
 Well screen installed? ☒ Yes ☐ No

(8) WELL TESTS:
 Drawdown to ambient water level is _____
 Was a pump test made? ☒ Yes ☐ No If yes, by whom? **STRASSER**
 Yield: **306** gal/min. with **54** ft. drawdown after **24** hrs.

Artisan flow _____
 R. Gauge _____
 R. Gauge _____
 R. Gauge _____

(9) CONSTRUCTION:
 Well seal—Material used: **CEMENT (FEET)**
 Diameter of well bore to bottom of seal: **10** in.
 Diameter of well bore below seal: **10** in.
 Number of inches of cement used in well seal: **35** inches
 Number of sacks of cement used in well seal: _____
 Brand name of cement: _____
 Number of pounds of bentonite per 100 gallons: _____
 of water: _____
 Was a drive shoe used? ☒ Yes ☐ No
 Did any struts contain removable water? ☒ Yes ☐ No
 Type of water: _____
 Section of sealing struts: _____
 Was well sealed properly? ☒ Yes ☐ No
 Gravel placed from _____ ft. to _____ ft.

WATER WELL REPORT
 STATE OF OREGON
 JUN 17 1974
 RECEIVED
 351/E-2366

(10) LOCATION OF WELL:
 County: **CLATSOP**
 Township and distance from section or subdivision corner: **NW 1/4 Section 11 T. 25 N. R. 2E**
 Section: **5478**

(11) WATER LEVEL: Completed well.
 Depth at which water was first found: **148**
 Static level: **90** ft. below land surface. Date: **5/23/74**
 Artesian pressure: _____ ft. per square inch. Date: _____

(12) WELL LOG:
 Diameter of well below casing: **10**
 Depth drilled: **221** ft. Depth of completed well: **221** ft.
 Formation: Describe color, texture, grain size and structure of material; 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 preferred water-bearing strata.

MATERIAL	From	To	FT.
TOP SOIL	0	1	1
GRAVEL AND PEBBLES	1	5	5
GRAVEL SAND	5	13	13
GRAVEL SAND	13	19	19
GRAVEL SAND	19	26	26
GRAVEL SAND	26	30	30
GRAVEL SAND	30	36	36
GRAVEL SAND	36	41	41
GRAVEL SAND	41	48	48
GRAVEL SAND	48	58	58
GRAVEL SAND	58	68	68
GRAVEL SAND	68	78	78
GRAVEL SAND	78	88	88
GRAVEL SAND	88	98	98
GRAVEL SAND	98	108	108
GRAVEL SAND	108	118	118
GRAVEL SAND	118	128	128
GRAVEL SAND	128	138	138
GRAVEL SAND	138	148	148
GRAVEL SAND	148	158	158
GRAVEL SAND	158	168	168
GRAVEL SAND	168	178	178
GRAVEL SAND	178	188	188
GRAVEL SAND	188	198	198
GRAVEL SAND	198	208	208
GRAVEL SAND	208	218	218
GRAVEL SAND	218	221	221

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) **John R. [Signature]**
 Date: **6/12/74**
 Drilling Machine Operator's License No. **54**

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.
 Name: **ALSTRESSER DRILLING CO**
 Address: **8110 SE 30th Lane Portland, ORE**
 (Signed) **Robert L. [Signature]**
 Date: **June 12, 1974**
 Contractor's License No. **10**

(USE ADDITIONAL SHEETS IF NECESSARY)
 87-0234-110

