

CLAIM OF BENEFICIAL USE for Transfer with Multiple Changes - Groundwater



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.oregon.gov/OWRD

A fee of \$230 must accompany this form for any Transfer final orders including a water right with a priority date of July 9, 1987, or later.

Example – A transfer involves 5 rights and one of the rights has a priority date of July 9, 1987, or later, the fee is required.

A separate form shall be completed for each transfer.

This form is subject to revision. **Begin each new claim** by checking for a new version of this form at:
<https://www.oregon.gov/OWRD/Forms/Pages/default.aspx>

The completion of this form is required by OAR 690-014-0100(1) and 690-014-0110(4).

Please type or print in dark ink. If this form is found to contain errors or omissions, it may be returned to you. **Every item must have a response.** If any requested information does not apply to the claim, insert "NA." **Do not delete or alter any section of this form unless directed by the form.** The Department may require the submittal of additional information from any water user or authorized agent.

"Section 7" of this form is intended to aid in the completion of this form and should not be submitted.\

A claim of beneficial use includes both this report and a map. If the map is being mailed separately from this form, please include a note with this form indicating such.

If you have questions regarding the completion of this form, please call 503-979-9103.

The Department has a program that allows it to enter into a voluntary agreement with an applicant for expedited services. Under such an agreement, the applicant pays the cost to hire additional staff that would not otherwise be available. This program means a certificate may be issued in about a month. For more information on this program see:

<https://www.oregon.gov/OWRD/programs/WaterRights/RA/Pages/default.aspx>

GENERAL INFORMATION

Type of Authorized Change

This Claim is being submitted for a transfer involving multiple changes.

YES NO

Mark all that apply:

1. Change in POA(s) or Additional POA(s)
2. Change in Place of Use
3. Change in Character of Use

A separate section will be completed for each type of change authorized in the transfer final order.

1. File Information

APPLICATION #
T- 11760

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2. Property Owner (current owner information)

APPLICANT/BUSINESS NAME City of Island City		PHONE NO. 541-963-5017	ADDITIONAL CONTACT NO.
ADDRESS 10605 Island Avenue			
CITY Island City	STATE OR	ZIP 97850	E-MAIL karen@islandcityhall.com

If the current property owner is not the transfer holder of record, it is recommended that an assignment be filed with the Department. ***Each*** transfer holder of record must sign this form.

3. Transfer holder of record (this may, or may not, be the current property owner)

TRANSFER HOLDER OF RECORD City of Island City			
ADDRESS 10605 Island Avenue			
CITY Island City	STATE OR	ZIP 97850	

4. Date of Site Inspection:

April 11, 2024

5. Person(s) interviewed and description of their association with the project:

NAME	DATE	ASSOCIATION WITH THE PROJECT
Matt Gillum	April 11, 2024	Water System Operator

6. County:

Union

7. If any property described in the place of use of the transfer final order is excluded from this report, identify the owner of record for that property (ORS 537.230(5)):

OWNER OF RECORD N/A		
ADDRESS		
CITY	STATE	ZIP

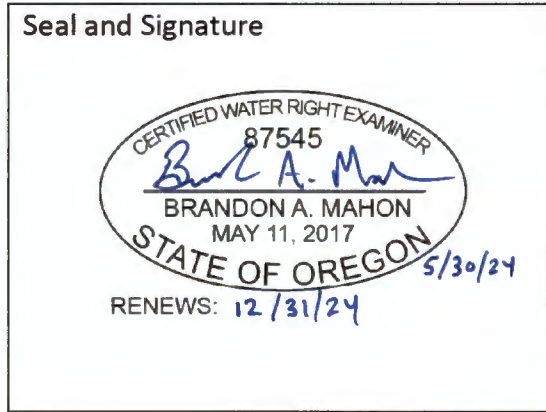
Add additional tables for owners of record as needed

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**SECTION 2
SIGNATURES**

CWRE Statement, Seal and Signature

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge.



CWRE NAME Brandon A. Mahon		PHONE NO. 541-963-8309	ADDITIONAL CONTACT No.
ADDRESS 1901 N. Fir Street			
CITY La Grande	STATE OR	ZIP 97850	E-MAIL bmahon@andersonperry.com

Transfer Holder of Record Signature or Acknowledgement

Each transfer holder of record must sign this form in the space provided below.

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge. I request that the Department issue a water right certificate.

SIGNATURE	PRINT OR TYPE NAME	TITLE	DATE
	Dave Comfort	Mayor	6-27-24

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SECTION 3
Changes Made

Note: The Claim only needs to describe the changes that were authorized in the transfer final order.

Change #1

Change in POA(s) or Additional POA(s)

Did the transfer order authorize a change in the points of appropriation or additional points of appropriation? YES NO

If "NO", this Section can be deleted.

1. New or additional point of appropriation name or number:

POINT OF APPROPRIATION (POA) NAME OR NUMBER (CORRESPOND TO MAP)	WELL LOG ID # FOR ALL WORK PERFORMED ON THE WELL (IF APPLICABLE)	WELL TAG # (IF APPLICABLE)	SOURCE (IF LISTED IN TRANSFER FINAL ORDER)
Well No. 4 (APOA 3)	UNIO 2496	N/A	N/A
Well No. 5	UNIO 5255†	L-1/5856	N/A

(APOA 4 under Cert. 62005
APOA 2 under Cert. 89288)

Attach each well log available for the well (include the log for the original well and any subsequent alterations, reconstructions, or deepenings) See Attachment A.

If well logs are available, items A and B below can be deleted

2. Variations:

Was the use developed differently from what was authorized by the transfer final order, or extension final? YES NO

If yes, describe below.

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3. Claim Summary:

NEW OR ADDITIONAL POA NAME OR #	MAXIMUM RATE AUTHORIZED	CALCULATED THEORETICAL RATE BASED ON SYSTEM	AMOUNT OF WATER MEASURED
Well No. 4 (APOA 3)	1 CFS	2.31	2.32
Well No. 5	1 CFS - Cert. 62005	2.44	2.43

(APOA 4 under Cert. 62005
APOA 2 under Cert. 89288)

2.67 CFS - Cert. 89288

System Description

Are there multiple new or additional Points of Appropriation (POA)?

YES NO

If "YES" you will need to copy and complete either Section A or B in this Section for each POA.

POA Name or Number this section describes (only needed if there is more than one):

Well No. 4 (APOA 3) - Cert. 62005

A. POA System Information

Provide the following information concerning the point of appropriation. Information provided must describe the equipment used to appropriate water from the point of appropriation.

1. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Goulds	10RJMC	Unknown	Submersible	8 inches	8 inches

2. Motor Information

MANUFACTURER	HORSEPOWER
Unknown	60

3. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
60	26	79.3	26.3	2.31

4. Provide pump calculations:

See Attachment B for Well No. 4 calculations. Operating PSI not measured between well and reservoir. Value varies until output nearly matches observed flow.

5. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
255,038,000	255,088,000	48 min.	2.32

Reminder: For pump calculations use the reference information at the end of this document.

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System Description

Are there multiple new or additional Points of Appropriation (POA)?

YES NO

If "YES" you will need to copy and complete either Section A or B in this Section for each POA.

POA Name or Number this section describes (only needed if there is more than one):

Well No. 5 (APOA 4) - Cert. 62005

(APOA 2) - Cert. 89288

A. POA System Information

Provide the following information concerning the point of appropriation. Information provided must describe the equipment used to appropriate water from the point of appropriation.

1. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Goulds	12CHC	Unknown	Submersible	8 inches	8 inches

2. Motor Information

MANUFACTURER	HORSEPOWER
Hitachi	75

3. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
75	33	89.4	30	2.44

4. Provide pump calculations:

See Attachment C for calculations for Well No. 5. Operating PSI not measured between well and restroom. Value varies until output nearly matches observed flow.

5. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
369,833,536	369,899,072	60 min.	2.43

Reminder: For pump calculations use the reference information at the end of this document.

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6. Additional notes or comments related to the system:

The average flow over the one-hour pump test was approximately 1,100 gpm or 2.4 CFS. However, the well is capable of flows greater than 1,200 gpm, as shown in the meter readout picture attached in Attachment D. Due to system operations, the well typically runs for shorter durations at this higher flow rate.

B. Groundwater Source Information (Well and Sump)

1. Is the appropriation from a dug well (sump)?

YES NO

If "NO", items 2 through 4 relating to this section may be deleted.

Reminder: Construction standards for sumps can be found in OAR 690-210-0400.

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Change #2

Change in Place of Use

Did the transfer order authorize a change in the place of use?

YES NO

If "NO", this Section can be deleted.

1. Claim Summary – Authorized Use:

If Irrigation or Nursery Use:

THE # OF ACRES ALLOWED	THE # OF ACRES DEVELOPED
N/A	N/A

If the new use(s) was not irrigation or nursery:

NEW USE(S)	WAS THE NEW PLACE OF USE DEVELOPED TO THE FULL EXTENT AUTHORIZED UNDER THE ORDER? (INCLUDE THE LOCATION OF THE DEVELOPED PLACE USE ON THE CLAIM MAP)
Municipal	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA <input type="checkbox"/>
	YES <input type="checkbox"/> NO <input type="checkbox"/> NA <input type="checkbox"/>

2. Variations:

Was the use developed differently from what was authorized by the transfer final order? YES NO

If yes, describe below.

(e.g. "The order authorized a change in place of use for 40 acres. The water user only developed 38 acres.")

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Change #3

Change in Character of Use

Did the transfer order authorize a change in character of use?

YES NO

If "NO", this Section can be deleted.

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SECTION 4 CONDITIONS

All conditions contained in the transfer final order, or any extension final order shall be addressed. Reports that do not address all performance related conditions will be returned.

1. Time Limits:

Describe how the water user has complied with each of the development timelines established in the transfer final order and any extensions of time issued for the transfer:

	DATE FROM TRANSFER	DATE THE AUTHORIZED CHANGES WERE COMPLETED *THIS DATE MUST FALL BETWEEN THE "ISSUANCE DATE" AND THE "COMPLETENESS DATE"
ISSUANCE DATE	October 27, 2014	
COMPLETENESS DATE FROM ORDER (C)	October 1, 2024	June 2016

* MUST BE WITHIN PERIOD BETWEEN TRANSFER FINAL ORDER, OR ANY EXTENSION FINAL ORDER ISSUANCE AND THE DATE TO COMPLETE THE CHANGE

2. Is there an extension final order(s)?
If "NO", you may delete the following table.

YES NO

3. Measurement Conditions:

a. Does the transfer final order, or any extension final order require the installation of a meter or other approved measuring device? YES NO

If "NO", items b through f relating to this section may be deleted.

Reminder: If a meter or approved measuring device was required, the COBU map must indicate the location of the device in relation to the point of appropriation.

b. Has a meter been installed? YES NO

c. Meter Information

POA NAME OR #	MANUFACTURER	SERIAL #	CONDITION (WORKING OR NOT)	CURRENT METER READING	DATE INSTALLED
Well No. 4	Water Specialties	20171138-08	Working	255,088,000	1994
Well No. 5	Endress-Hauser	M8009916000	Working	369,899,072	2015

(APOA 4-Cert. 62005
APOA 2-Cert. 89288)

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4. Recording and reporting conditions

a. Is the water user required to report the water use to the Department?

YES NO

If "NO", item b relating to this section may be deleted.

5. Other conditions required by the transfer final order or extension final order:

a. Were there special well construction standards?

YES NO

b. Was submittal of a ground water monitoring plan required?

YES NO

c. Other conditions?

YES NO

If "YES" to any of the above, identify the condition and describe the water user's actions to comply with the condition(s):

Water shall be acquired from the same aquifer (water source) as the original point of appropriation. All wells draw from the same aquifer.

**SECTION 5
ATTACHMENTS**

Provide a list of any additional documents you are attaching to this report:

ATTACHMENT NAME	DESCRIPTION
Attachment A	Well No. 4 (UNIO 2496), Well No. 5 (UNIO 52551)
Attachment B	Well No. 4 Pump Calculations
Attachment C	Well No. 5 Pump Calculations
Attachment D	Well No. 5 Flowmeter Readout

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SECTION 6

CLAIM OF BENEFICIAL USE MAP

The Claim of Beneficial Use Map must be submitted with this claim. Claims submitted without the Claim of Beneficial Use map will be returned. The map shall be submitted on poly film at a scale of 1" = 1320 feet, 1" = 400 feet, or the original full-size scale of the county assessor map for the location.

The changes that were authorized under the transfer final order must be mapped based on the developed locations; new or additional points of appropriation and place of use.

In cases where the order involved additional points of appropriation, the additional points should be mapped based on their developed locations. The original points of appropriation should be mapped based on the original right of record at the time the transfer final order was issued.

In cases where the order involved changing the place of use for a portion of a water right, the portion of the place of use being changed should be mapped based on the developed location. If the transfer also included portions of the place of use that were not being modified, but were receiving a new or additional point of appropriation, the place of use for those lands should be mapped based on the original right of record at the time the transfer final order was issued.

Provide a general description of the survey method used to prepare the map. Examples of possible methods include, but are not limited to, a traverse survey, GPS, or the use of aerial photos. If the basis of the survey is an aerial photo, provide the source, date, series and the aerial photo identification number.

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Map Checklist

Please be sure that the map you submit includes ALL the items listed below.
(Reminder: Incomplete maps and/or claims may be returned.)

- Map on polyester film
- Appropriate scale (1" = 400 feet, 1" = 1320 feet, or the original full-size scale of the county assessor map)
- Township, Range, Section, Donation Land Claims, and Government Lots
- N/A If irrigation, number of acres irrigated within each projected Donation Land Claims, Government Lots, Quarter-Quarters
- N/A Locations of fish screens and/or fish by-pass devices in relationship to point of diversion
- Locations of meters and/or measuring devices in relationship to point of diversion or appropriation
- Conveyance structures illustrated (pumps, reservoirs, pipelines, ditches, etc.)
- Point(s) of diversion or appropriation (illustrated and coordinates)
- N/A Tax lot boundaries and numbers
- N/A Source illustrated if surface water
- Disclaimer ("This map is not intended to provide legal dimensions or locations of property ownership lines")
- Application and permit number or transfer number
- North arrow
- Legend
- CWRE stamp and signature

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Common Calculations

The Department typically uses the following calculations to determine system capacities; many of which are available to download from the Department's Web Site.

Pumps:

$$Q \text{ Pump} = \frac{(\text{horsepower})(\text{pump efficiency})}{(\text{total head in feet})} = Q \text{ in cfs}$$

Efficiency factors:

NOTE: Pump efficiency factor for centrifugal pump (75%) = 6.61
 Pump efficiency factor for turbine pump (80%) = 7.04

$$\text{Centrifugal Pump, 75\% eff. } \frac{(550 \text{ ft lb/sec/Hp})(.75)}{(62.4 \text{ lb/cu ft})} = 6.61 \text{ ft}^4/\text{sec/Hp}$$

$$\text{Turbine \& Submersible Pumps, 80\% eff. } \frac{(550 \text{ ft lb/sec/Hp})(.80)}{(62.4 \text{ lb/cu ft})} = 7.04 \text{ ft}^4/\text{sec/Hp}$$

Total head is the sum of suction lift, pressure head, and discharge lift.

If the operating pressure is not measured, varying the assumed operational pressure in the above formulas until the calculated outputs are equal, or nearly so, will generally give the most correct theoretical capacity of the system.

Efficiencies have been assumed to be 75% for centrifugal pump installations and 80% for turbine or submersible pumps. See the list below of converted psi's to feet of head. These figures account for minor friction losses. If the system involves unusually long pipelines friction losses should be accounted for by using standard charts and formulas.

Refer to the conversion table below to compute PSI to head for pump pressure in feet.

$$[(\text{psi}/.433)(1.1)] = \text{head (in feet/psi)} = 2.54 \text{ feet head/psi}$$

PSI	HEAD	PSI	HEAD
25	63.5	55	139.7
30	76.2	60	152.4
35	88.9	65	165.1
40	101.6	70	177.8
45	114.3	75	190.5
50	127.0	80	203.2

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ATTACHMENT A
Well No. 4 (UNIO 2496) and Well No. 5
(UNIO 52551) Well Logs

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STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

Union
2496

UNIO 2496

SEP 12 1994

3N/38E/30

WATER RESOURCES L (START CARD) # 65113
SALEM, OREGON

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number 4
Name City of Island City
Address 10202 S. McAlister Road
City Island City State OR Zip 97850

(2) TYPE OF WORK
 New Well Deepening Alteration (repair/recondition) Abandonment

(3) DRILL METHOD:
 Rotary Air Rotary Mud Cable Auger
 Other

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Livestock Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well 490 ft.
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	
28"	0	8	Granular	0	8	2400#
			Bentonite			
28"	8	230	Concrete	8	230	30 yards
19"	230	490				

How was seal placed: Method A B C D E
 Other _____ Colorado

Backfill placed from _____ ft. to _____ ft. Material Silica sand
Gravel placed from 200 ft. to 460 ft. Size of gravel 6-9

(6) CASING/LINER: 5/16 gravel from 460-490

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	20"	+2	230	.375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Liner:	10"	205	460	.365	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:

Perforations Method _____
 Screens Type Houston Material S.S.

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
SEE ATTACHED BACK PAGE							

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

<input checked="" type="checkbox"/> Pump	<input type="checkbox"/> Bailer	<input type="checkbox"/> Air	Flowing
Yield gal/min	Drawdown	Drill stem at	Artesian
			Time
1000	108'		36 hr. --
1500	120'		5 hr.
2000	192'		4 hr.

Temperature of water 55° Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom Coffey Labs.
Did any strata contain water not suitable for intended use? No Yes Bentonite OR
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County Union Latitude _____ Longitude _____
Township 3 N or XX Range 38 E or XXWM.
Section 3 NW 1/4 SW 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) Walton Road

(10) STATIC WATER LEVEL:
50' ft. below land surface. Date 7/29/94
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found 8'

From	To	Estimated Flow Rate	SWL
SEE ATTACHED			

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
SEE ATTACHED			

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Date started 6-13-94 Completed 7-29-94

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, 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.
Signed _____ WWC Number 1506
Date 8-31-94

(bonded) Water Well Constructor Certification:
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 water supply well construction standards. This report is true to the best of my knowledge and belief.
Signed _____ WWC Number 1506
Date 8-31-94

UNIO 2496

RECEIVED

SEP 12 1994

WATER RESOURCES DEPT.
SALEM, OREGON

FINAL DESIGN

ISLAND CITY WELL NO. 4
July 12, 1994

		<u>Length</u>
<u>Upper 20-inch Casing</u>		
+ 2 ft. to 230 ft.	Casing	232 ft.
<u>Grout Seat</u>		
8 ft. to 230 ft.		222 ft.
<u>Upper 16-inch Casing (final position)</u>		
+ 2 ft. to 220 ft.	Casing	222 ft.
<u>Lower 10-inch Casing and Screen</u>		
205 ft.	10x16 Slip Packer	
205 ft. to 210 ft.	Casing	5 ft.
210 ft. to 213 ft.	Screen	3 ft.
213 ft. to 235 ft.	Casing	22 ft.
235 ft. to 258 ft.	Screen	23 ft.
258 ft. to 268 ft.	Casing	10 ft.
268 ft. to 274 ft.	Screen	6 ft.
274 ft. to 292 ft.	Casing	18 ft.
292 ft. to 296 ft.	Screen	4 ft.
296 ft. to 302 ft.	Casing	6 ft.
302 ft. to 310 ft.	Screen	8 ft.
310 ft. to 319 ft.	Casing	9 ft.
319 ft. to 329 ft.	Screen	10 ft.
329 ft. to 334 ft.	Casing	5 ft.
334 ft. to 344 ft.	Screen	10 ft.
344 ft. to 360 ft.	Casing	16 ft.
360 ft. to 370 ft.	Screen	10 ft.
370 ft. to 416 ft.	Casing	46 ft.
416 ft. to 422 ft.	Screen	6 ft.
422 ft. to 430 ft.	Casing	8 ft.
430 ft. to 450 ft.	Screen	20 ft.
450 ft. to 460 ft.	Casing	10 ft.
460 ft.	Bail Bottom	
Summary	10-inch 50 Slot Screen	100 ft.
	10-inch Casing	155 ft.

Filter Pack

200 ft. to 460 ft. 6-9 Colorado Silica Sand

Received Received
 JUL 03 2024 JUL 03 2024
 OWRD OWRD

RiverSide, Inc.

UNIO 2492

WELL DRILLER'S REPORT
ISLAND CITY, OREGON

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: ~~JUNE~~ JUL 94

TIME	DEPTH		FORMATION DESCRIPTION	DRILL-STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
6-17-94	0	10	TOP SOIL			
	10	11	TOP SOIL			
	11	12	BROWN CLAY		soft	
	12	14	RIVER ROCK + SAND		Rock 6" - 10"	
	14	19	RIVER ROCK + SAND		Rock 6" - 10"	
	19	24	RIVER ROCK + SAND		Rock 6" - 10"	
	24	30	RIVER ROCK + SAND		Rock 6" - 10"	
6-18-94	30	34	RIVER ROCK + SAND		Rock 6" - 10"	Received
	34	40	RIVER ROCK + SAND		Rock 6" - 10"	JUL 03 2024
6-18-94	40	44	RIVER ROCK + SAND		Rock 6" - 8"	
	44	50	RIVER ROCK + SAND		Rock 6" - 8"	OWRD
6-20-94	50	54	RIVER ROCK + SAND ^{some} Fractured Rock		Rock 6"	
	54	55	" " Fractured Rock		"	
	55	60	River Rock & sand. O'level		"	
	60	64	" " ^{little} clay ^{1) mass of} clay on rocks			
	64	65	RIVER ROCK + SAND gravel		Broken Rock switch to gear bit	
	65	69	smaller Rock & sand			
	69	70	sand			
	70	75	Brack Rock SAND			

River Side, Inc.

UNIO 2496

WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DBILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: _____

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
	75	80	BROKEN ROCK + SAND		some 3" Rock	
	80	85	" " "		}	
6/21/74	85	90	" " "	Log for 600.		
6/21/74	90	94	BROKEN ROCK SAND			
	94	96	BROWN CLAY w ROCK		soft	
	96	100	BROKEN ROCK SAND		3" rock	
	100	105	BROKEN ROCK SAND			
	105	107	BROWN CLAY + ROCK		soft	
	107	110	BROWN CLAY		soft	
	110	115	BROWN CLAY		soft	
	115	120	BROKEN ROCK SAND		3" rock	
	120	125	" " "		}	
	125	130	" " "			
	130	132	Brown clay	50	soft	
	132	135	BROKEN ROCK SAND		3" Rock	
	135	140	" " "		}	
	140	149	River rock + SAND	5' Retained ^{new} old ^{THIN} layer of clay		
6/22/74	149	150	River Rock + SAND		3" Rock	change BACK (look Bit)
	150	155	River Rock + SAND		3" }	

River Side, Inc.

UNIO 2496

WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: _____

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
155	160		RIVER ROCK - SAND		5' rock	
160	163		RIVER ROCK CLAY		30' Brown clay	
163	165		RIVER ROCK SAND (CEMENTED)		3' rock	
165	166		RIVER ROCK CEMENTED SAND ON ROCK		}	
166	170		RIVER ROCK CEMENTED SAND ON ROCK			
170	172		RIVER ROCK W LAYER OF CLAY			
172	176		RIVER ROCK W CEMENTED SAND ON ROCK			
176	178		RIVER ROCK CEMENTED		HARD	
178	180		RIVER ROCK (BROWN SAND LAYER)			
180	185		RIVER ROCK W SOME SAND ON ROCK			
185	189		RIVER ROCK W CEMENTED LAYER		(Brown color)	
189	190		RIVER ROCK "		To green clay	
190	198		RIVER ROCK W HARD GREEN CLAY		(cemented layer)	
198	200		RIVER ROCK W CEMENTED LAYER (GRAY CLAY)			
200	205		RIVER ROCK W GREEN CLAY (HARD CEMENTED LAYER)			
205	210		RIVER ROCK W HARD GREEN CLAY CEMENTED LAYER SAND CLAY			
210	215		RIVER ROCK LAYER OF HARD GREEN CLAY + CEMENTED LAYER			
215	220		RIVER ROCK LAYER CLAY LAYER CEMENTED LAYER (OR SAND)			
220	225		RIVER ROCK LAYER SAND CLAY CEMENTED ROCK GREEN CLAY			

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TAKE MORE WATER

RiverSide, Inc.

UNIO 2496

WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: _____

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
	225	226	Rock w sand clay			
	226	230	Rock w layer cemented			
	230	235	Rock w sand clay			
	235	240	River Rock + sand			
	241	243	River Rock + sand			
	243	250	RIVER Rock + SAND	lost for 20'	} 20'	
6-23-94	250	255	" " "			
	255	260	RIVER Rock W SAND			Received JUL 03 2024
	260	261	SAND			OWRD
	261	265	RIVER Rock w SAND w layer GRAY clay			
	265	270	" " w little SAND w layer GREEN + GRAY clay ON Rock			
	270	275	RIVER Rock w little SAND w layer green clay some cemented ON Rock			
	275	280	" " " " " " " "			
	280	282	" " " " " " " "			
	282	283	River Rock w gray clay soft			
	283	289	River Rock w little SAND layer cemented Rock w green clay + Gray clay			little 286 + Gray clay
	289	290	GRAY clay w Rock soft			
	290	291	" " w Rock			
	291	293	Rock + SAND		32'	

River Side, Inc.

UNIO 2496

WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: _____

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
	293	296	River Rock w SAND		3	
	296	300	GRAY CLAY	soft		
	300	305	River Rock w little bit SAND		11'	
	305	310	River Rock w SAND			
	310	311	" " " "			
	311	315	sand clay w SAND	GRAY layer sand	311	
	315	320	River Rock w SAND		15'	
	320	325	" " " "			
	325	330	CORSE SAND			
	330	333	GRAY CLAY	soft		
	333	338	Rock w SAND		5'	
	338	340	Rock w cemented w green clay + SAND		HARD	
	340	344	" " " " " " " "		HARD 344	
	344	346	" " " " " " " "			
	346	347	CORSE SAND			
	347	349	Rock w cemented w SAND		Hard	
	349	350	Rock w sand like gray clay			
	350	353	Rock w green cemented		Hard	
	353	355	Rock cemented Green		HARD	

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WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: _____

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
	355	360	River Rock w green HARD CLAY		SOME CEMENTED	
	360	365	RIVER ROCK w SAND			
	365	366	" " "			
	366	367	COURSE SAND			
	367	370	Rock w SAND.			
	370	375	Rock w SAND layer 375		CEMENTED Rock green	Logged for EUG-
	375	378	" "			
	378	381	Rock w clay + w SAND AT END			
6-24-99	381	383	Medium Sand.			} 4'
	383	385	Sand & Shale			
	385	387	Gravel & sand with ^{vertical} streaks of Green shale			
	387	388	Consistent Sand & Shale.			
	388	390	Shale & sand with Green shale			} 6'
	390	395	RIVER ROCK w SAND			
	395	396	" " "			
	396	397	GRAY CLAY			
	397	399	RIVER ROCK w SAND			} 2'
	399	400	River Rock w CEMENTED SAND			
	400	400	River Rock SAND			} 1'

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UNIO-2496

WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

REVERSE ROTARY

DATE: _____

RECORDED
SEP 18 1984
SALLEN, OREGON

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
	401	402	Gray clay			
	402	406	River rock w SAND	4'		
	406	407	RICKER ROCK w GRAY CLAY			
	407	410	GRAY CLAY			
	410	415	GRAY CLAY w SAND			
	415	419	CORSE SAND			
	419	420	RIVER ROCK SAND	1'		
	420	421	" " "			
	421	422	CORSE SAND			
	422	423	GRAY CLAY w little ROCK			
	423	427	GRAY CLAY			
	427	430	layer clay + SAND			
	430	435	Rock + SAND			
	435	440	" "			
	440	445	" "			
	445	450	" "			
	450	455	River rock w Green clay cemented	HARD		
	455	457	" " " " " "			
	457	458	River rock w clay			

} 7'

} 20'

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JUL 03 2024
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RiverSide, Inc.

UNIQ 2496

WELL DRILLER'S REPORT

WATER SUPPLY IMPROVEMENTS - WELL NO. 4

ISLAND CITY, OREGON

DRILLER: TERRY DAUGHERTY

REPORTED BY: _____

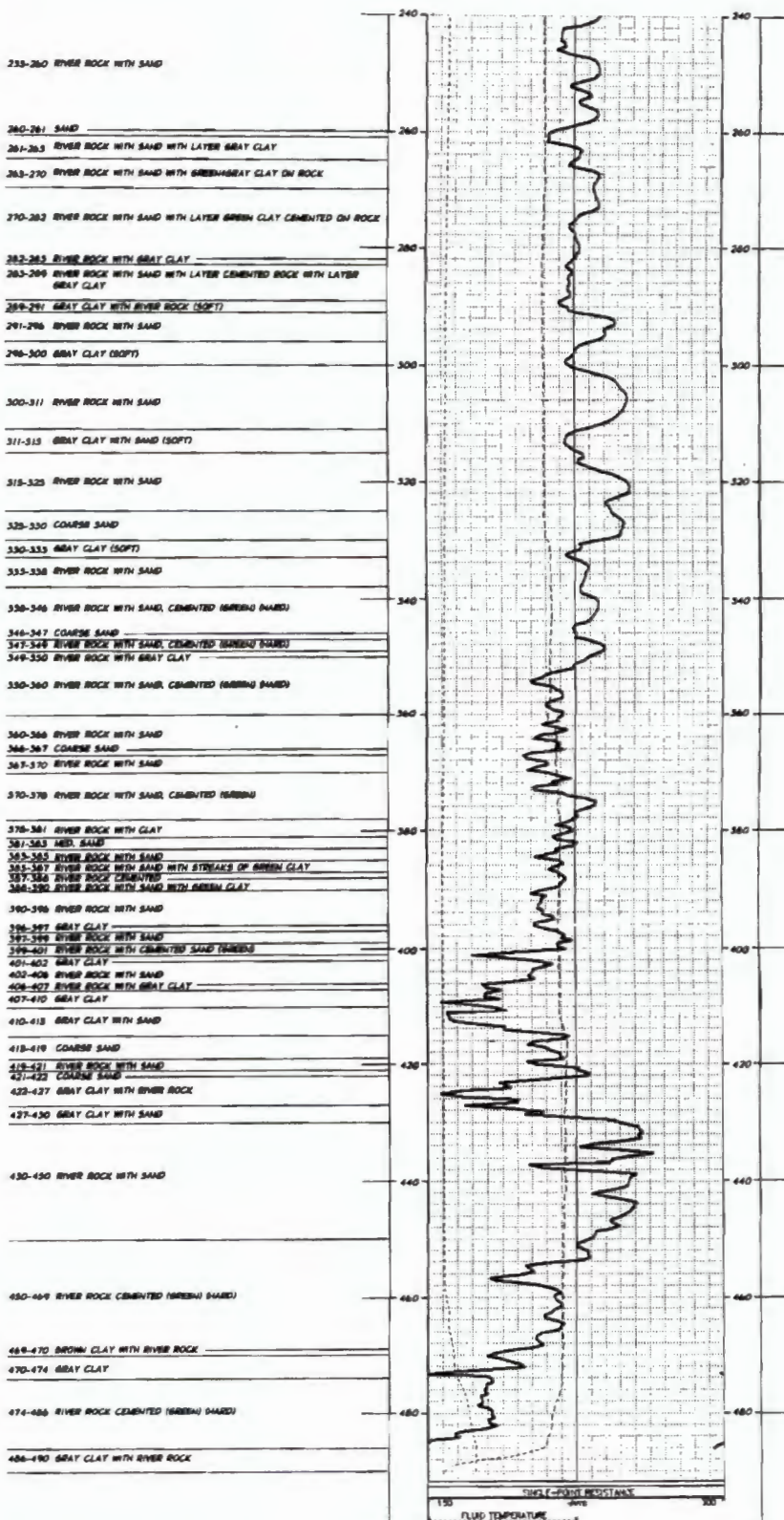
REVERSE ROTARY

DATE: _____

TIME	DEPTH		FORMATION DESCRIPTION	DRILL STEEL FOOTAGE	DRILLING CHARACTERISTICS (hard, soft, broken, caving, etc.)	COMMENTS (mud loss, sample locations, static water level, mud added, etc.)
	FROM	TO				
458	460	RIVER ROCK w cemented green clay			HARD	
460	465	" " "	" "	" "	"	
465	469	" " "	" "	" "	"	
469	470	BROWN CLAY w Rock				
470	474	GRAY CLAY				
474	480	RIVER ROCK w cemented green clay			HARD	
480	485	" " "	" "	" "	"	
485	486	" " "	" "	" "	"	
486	490	GRAY CLAY w Rock				

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WELL LOG #4
CITY OF ISLAND CITY



NO.	DATE	BY	REVISION
1	1-2-10	AL	
2	1-2-10	AL	
3	1-2-10	AL	
4	1-2-10	AL	
5	1-2-10	AL	

DESIGNED BY: ALFRED L. ANDERSON
 DRAWN BY: ALFRED L. ANDERSON
 CHECKED BY: ALFRED L. ANDERSON
 DATE: 1-2-10



ALFRED L. ANDERSON
 ENGINEER
 1234 5TH AVENUE, DENVER, CO 80202
 PHONE: 303-555-1234

ANDERSON
 ENGINEERING & CONSTRUCTION, P.C.
 1234 5TH AVENUE, DENVER, CO 80202
 PHONE: 303-555-1234

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 JUL 03 2024
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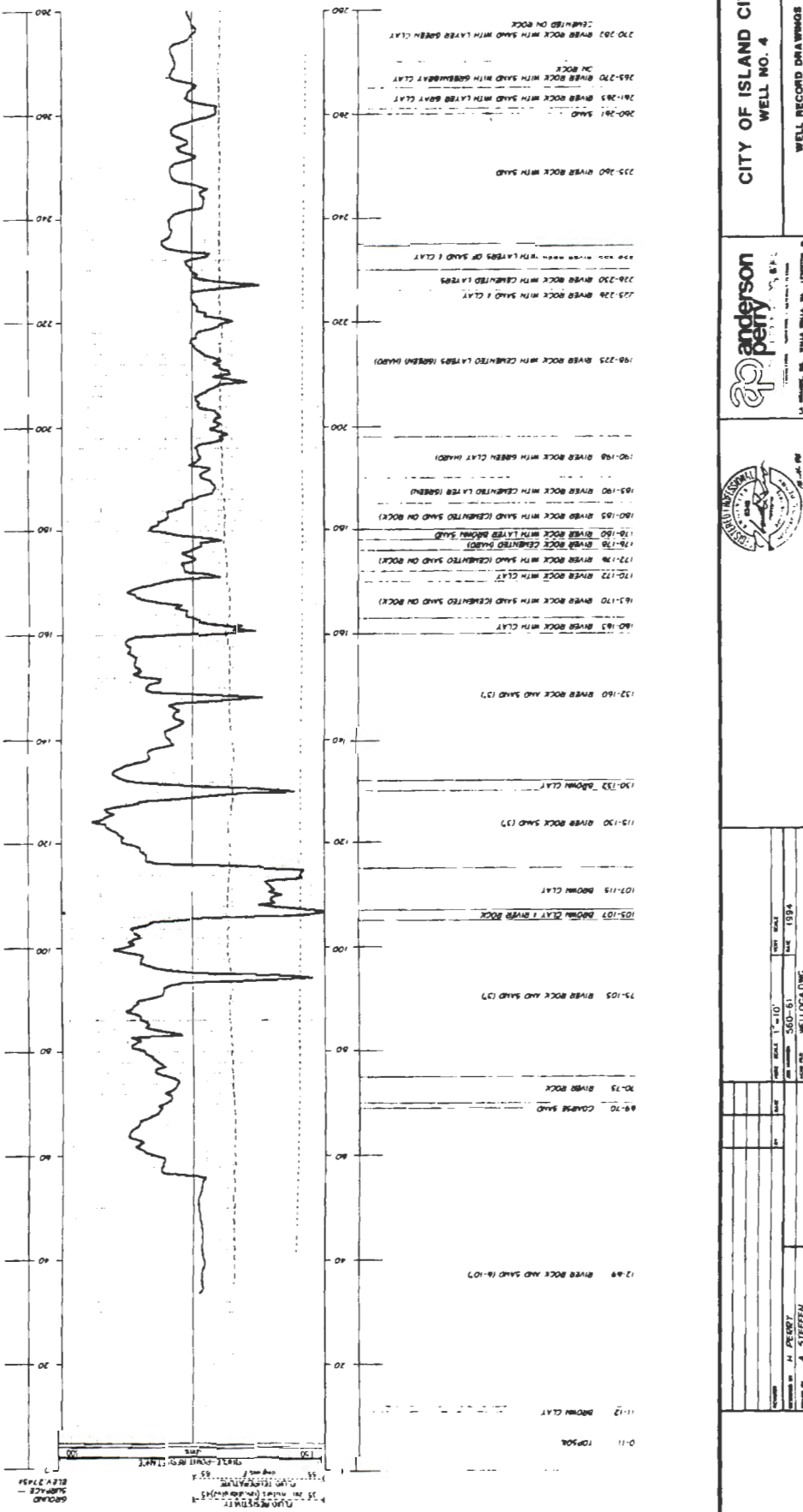
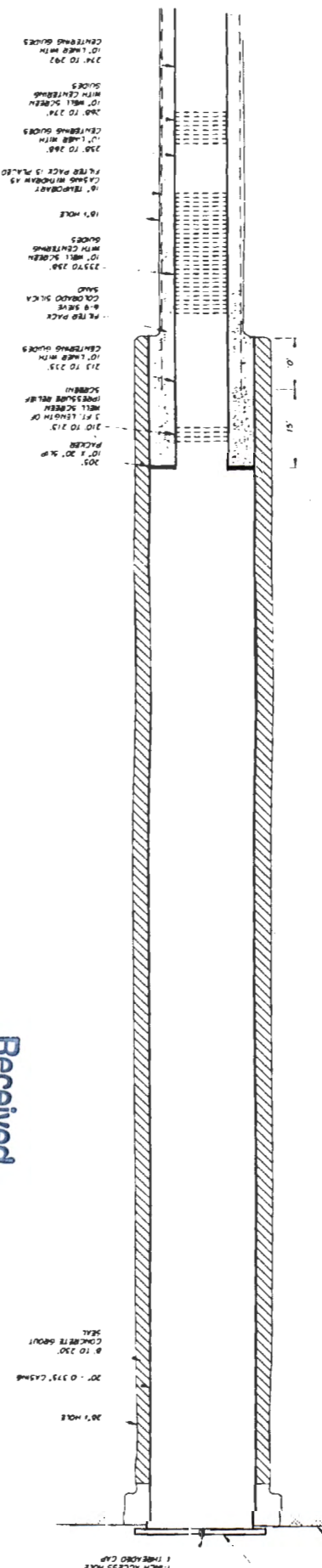
CITY OF ISLAND CITY
WELL NO. 4

WELL RECORD DRAWINGS



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DATE	NO. OF SHEETS	NO. OF PAGES	NO. OF DRAWINGS
NOV 20 2019	1	1	1
DESIGNED BY	CHECKED BY	APPROVED BY	
A. STEFFEN	A. STEFFEN	A. STEFFEN	
PROJECT NO.	DATE	NO. OF SHEETS	NO. OF PAGES
580-191-01	11-11-19	1	1
CLIENT	DATE	NO. OF SHEETS	NO. OF PAGES
WELLOC INC	11-11-19	1	1



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UNIDRAWING # CITY OF ISLAND CITY

"CORRECTED"
UNIO 52551

UNIO 52551

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

WELL LABEL # L 115856

START CARD # 1027054

(1) LAND OWNER Owner Well I.D. 5

First Name _____ Last Name _____
Company City of Island City
Address 10605 Island Avenue
City Island City State OR Zip 97850

(2) TYPE OF WORK New Well Deepening Conversion
 Alteration (repair/recondition) Abandonment

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable Auger Cable Mud
 Reverse Rotary Other

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/ Commercial Livestock Dewatering
 Thermal Injection Other

(5) BORE HOLE CONSTRUCTION Special Standard Attach copy
Depth of Completed Well 515 ft.

BORE HOLE			SEAL			Amt	sacks/ lbs
Dia	From	To	Material	Front	To		
24	0	245	Bentonite Chips	0	7	2,500	P
16	245	520	Cement	7	245	250,800	P
			calculated	0	7	60	
			calculated	7	245	48750	

How was seal placed Method A B C D E
 Other Trimie pipe/cement **pumped**
Backfill placed from _____ ft to _____ ft. Material _____
Filter pack from 235 ft. to 520 ft. Material Sand Size 6/9
Explosives used: Yes Type _____ Amount _____

(6) CASING/LINER

Casing	Liner	Dia	From	To	Gauge	Stl	Plstc	Wld	Thrd
<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	2	245	.375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	10	225	230	.365	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	10	233	250	.365	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	10	260	265	.365	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	10	275	282	.365	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

(7) PERFORATIONS/SCREENS
Perforations Method _____
Screens Type Wire Wrap Material Stainless _____

Perf/ Screen	Casing/ Liner	Dia	From	To	Scr/slot width	Slot length	# of slots	Tele/ pipe size
Screen	Casing	10	230	233	.08			
Screen	Casing	10	250	260	.08			
Screen	Casing	10	265	275	.08			
Screen	Casing	10	282	287	.08			
Screen	Casing	10	308	318	.08			

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian

Yield gal min	Drawdown	Drill stem/Pump depth	Duration (hr)
1,500	123	220	24

Temperature 55 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe below)

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)
County UNION Twp 3 S N/S Range 38 E E/W W/1
Sec 3 SW 1/4 of the SE 1/4 Tax Lot 1501
Tax Map Number _____ Lot _____
Lat _____ " or 45.32832487 DMS or DD
Long _____ " or -118.044758 DMS or DD
 Street address of well Nearest address
On McAllister Rd Approximately 910 Ft of the intersection of Buchanan Ln

(10) STATIC WATER LEVEL
Date _____ SWL(psi) + SWL(ft)
Existing Well / Predeepening _____
Completed Well 03-16-2016 _____ 40
Flowing Artesian? Dry Hole?

WATER BEARING ZONES Depth water was first found 40

SWL Date	From	To	Est Flow	SWL (psi)	+ SWL (ft)
07-24-2015	40	292	1,500		40
07-24-2015	297	320	1,500		40
07-28-2015	329	387	1,500		40
07-29-2015	402	420	1,500		40
07-29-2015	422	439	1,500		40

(11) WELL LOG Ground Elevation _____

Material	From	To
Top soil	0	7
Brown sand, cobbles	7	40
Brown sand, cobbles brown clay mix	40	45
Medium to large cobbles	45	65
Brown sand, cobbles	65	105
Large cobbles	105	162
Large cobbles, brown clay mix	162	165
Large cobbles	165	210
Cemented cobbles	210	220
Cobbles, brown clay mix	220	245
Large cobbles	245	273
Large cobbles with smaller gravel	273	292
Tan clay	292	297
Fine to coarse sand	297	300
Tan clay some gravel	300	308
Cobbles	308	320
Brown clay	320	323
Brown clay some gravel	323	329
Gravel, cobbles	329	331

Date Started 07-09-2015 Completed 03-16-2016

RECEIVED BY OWRD
I certify that the work I performed on 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 SALEM, OR Date APR 21 2016
Password: (if filing electronically) SALEM, OR
Signed _____

(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 1505 Date 04-15-2016
Password: (if filing electronically)
Signed _____
Contact Info (optional)

(5) BORE HOLE CONSTRUCTION

BORE HOLE			SEAL			sacks/ lbs
Dia	From	To	Material	From	To	

FILTER PACK

From	To	Material	Size

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
		10		287	308	.365				
		10		318	341	.365				
		10		346	360	.365				
		10		380	405	.365				
		10		415	431	.365				
		10		436	458	.365				
		10		460	487	.365				
		10		492	498	.365				
		10		503	515	.365				

(7) PERFORATIONS/SCREENS

Perf/ Screen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
Screen	Casing	10	341	346	.08			
Screen	Casing	10	360	380	.08			
Screen	Casing	10	405	415	.08			
Screen	Casing	10	431	436	.08			
Screen	Casing	10	458	460	.08			
Screen	Casing	10	487	492	.08			
Screen	Casing	10	498	503	.08			

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

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

Water Quality Concerns

From	To	Description	Amount	Units

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL (psi)	+ SWL (ft)
07-31-2015	443	520	1,500		40

(11) WELL LOG

Material	From	To
Coarse sand, brown clay	331	335
Fine sand	335	338
Brown clay, gravel	338	340
Cobbles, sand	340	343
Large cobbles, with gravel	343	363
Large cobbles	363	387
Brown clay	387	395
Blue clay	395	402
Coarse sand, small gravel	402	403
Small to medium gravel	403	413
Small to medium gravel, cobbles	413	420
Brown clay	420	422
Blue clay, some gravel	422	431
Sand, gravel with some blue clay	431	433
Medium gravel, some cobbles	433	439
Brown clay, blue clay	439	443
Blue clay with some gravel	443	451
Small gravel	451	453
Fine to coarse sand, small gravel	453	463
Small to medium gravel	463	467
Blue clay with gravel	467	483
Small to medium gravel	483	505
Blue clay, gravel mix	505	520

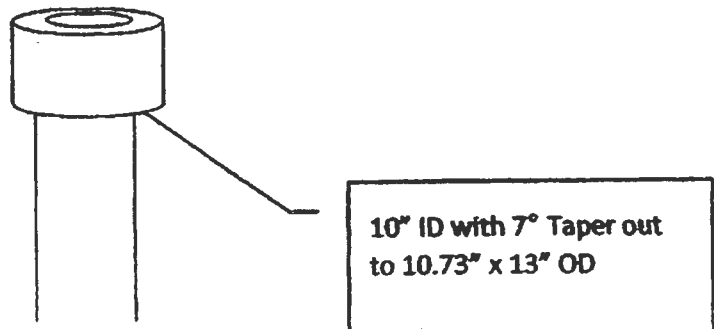
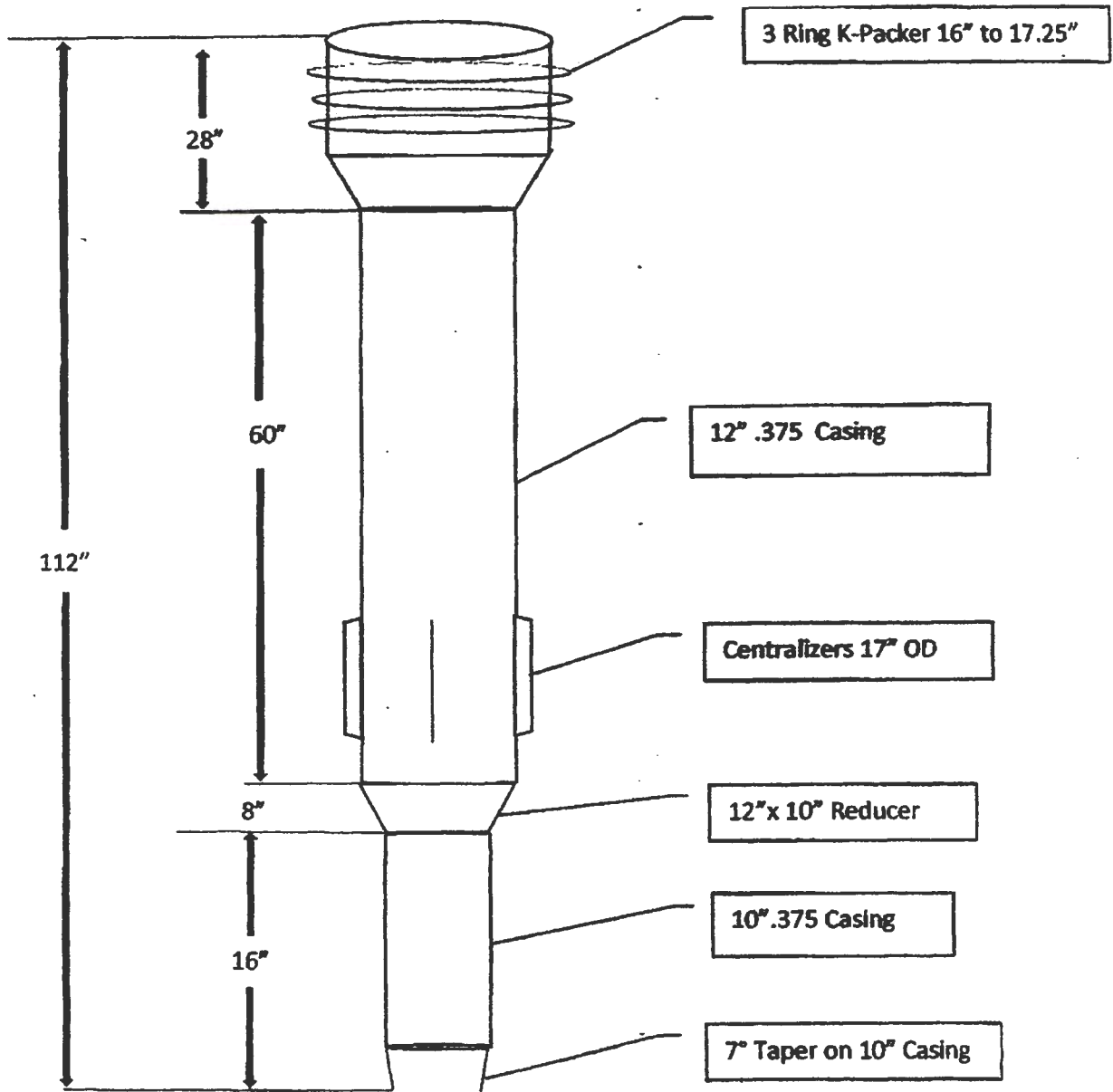
Comments/Remarks

NOTF K-Packer at 225' see attachment

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UNIO 52551

City Of Island City Packer Design



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ATTACHMENT B
Well No. 4 Pump Calculations

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JUL 03 2024
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Pump Capacity Calculation Sheet - Well No. 4

using Department designed formula:

$$(\text{hp})(\text{efficiency}) / (\text{lift} + \text{psi head}) = \text{capacity in cfs}$$

Efficiency:

Centrifugal = 6.61

Turbine = 7.04

Data Entry (fill in underlined blanks)

HP = 60
Efficiency = 6.61
Lift = 105.6
PSI = 26

Results Calculated

(hp)(efficiency) = 396.6
Head based on psi = 66.1
Total dynamic head = 171.7
(head + lift)

Pump Capacity = 2.31 feet per second

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ATTACHMENT C
Well No. 5 Pump Calculations

Received
JUL 03 2024
OWRD

Pump Capacity Calculation Sheet - Well No. 5

using Department designed formula:

$$(\text{hp})(\text{efficiency}) / (\text{lift} + \text{psi head}) = \text{capacity in cfs}$$

Efficiency:

Centrifugal = 6.61

Turbine = 7.04

Data Entry (fill in underlined blanks)

HP = 75
Efficiency = 6.61
Lift = 119.4
PSI = 33

Results Calculated

(hp)(efficiency) = 495.75
Head based on psi = 83.8
Total dynamic head = 203.2
(head + lift)

Pump Capacity = 2.44 feet per second

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ATTACHMENT D
Well No. 5 Flowmeter Readout

Received
JUL 03 2024
OWRD

Received

JUL 03 2024

OWRD



ESC

Well 6...
1355.78
9 gal/min (us) 3
369833984.00
9 gal (us) 3

LETTER OF TRANSMITTAL

TO: Oregon Water Resources Department **DATE:** July 1, 2024
ATTN: Certificate Section **JOB NO.:** 562-10
 725 Summer Street N.E., Suite A **RE:** City of Island City, Oregon
 Salem, Oregon 97301 Transfer T-11760 Claim of Beneficial Use

WE ARE SENDING YOU:

COPIES	DESCRIPTION
1	Completed Claim of Beneficial Use (COBU) Report and Map for Transfer T-11760
1	Attachments A through D
1	Check No. 34014 for \$230 - Application Fee

THESE ARE TRANSMITTED AS CHECKED:

- As requested
- For your use
- For approval
- For review and comment
- For your files
- For Bids Due _____

REMARKS

To Whom it May Concern:

Enclosed is the original signed COBU Report and Map for Transfer T-11760. We have also enclosed payment for the application fee as well as the supporting documentation detailed above.

Thank you for your time. Please call me if there are any questions.

Received
 JUL 03 2024
 OWRD

BAM/jg
 cc: Karen Howton, City of Island City (w/o encl.)
 File No. 562-10-02 (w/encl.)

Signed: 
 Brandon A. Mahon, P.E.,
 C.W.R.E