

April 16, 2025

Thomas Moloney
Hood River Forestry Dept.
918 18th St
Hood River, OR 97031
Thomas.moloney@hoodrivercounty.gov

Letter sent by email only.

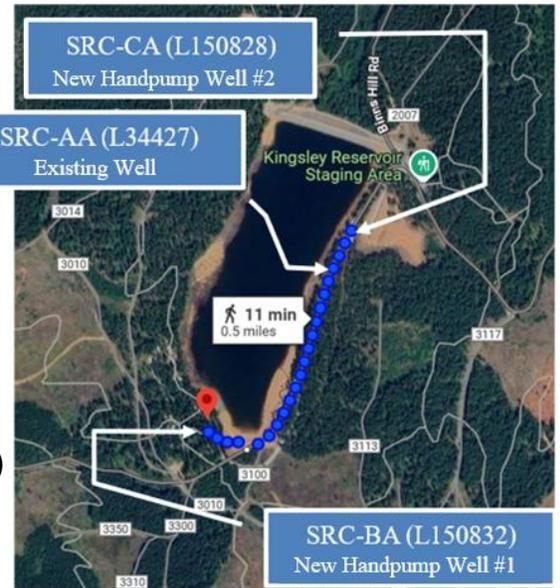
Re: **2 New Hand Pump Wells (PR#74-2024)**
Kingsley Reservoir Campground (PWS ID#95501)
Conditional Approval

Dear Mr. Moloney

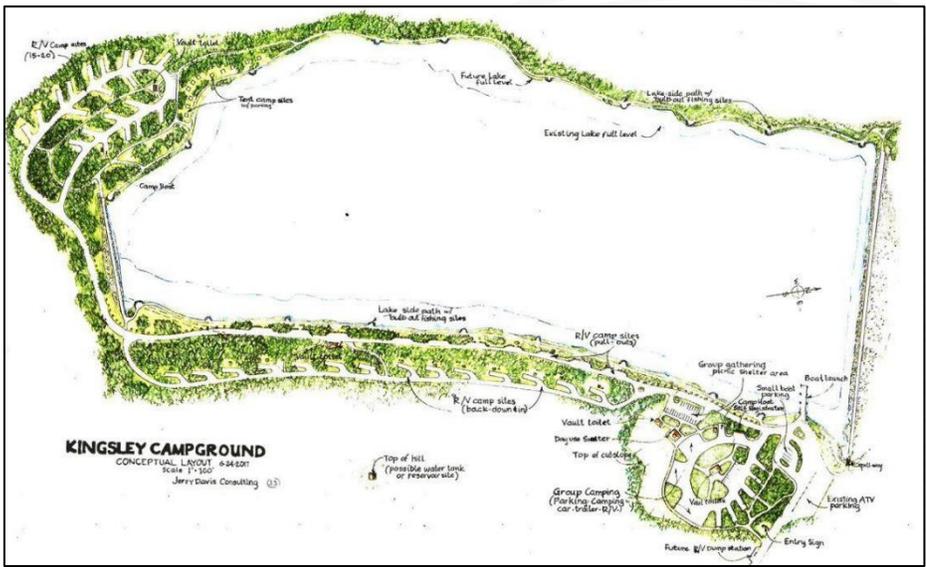
Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for two new wells equipped with hand pumps to serve the *Kingsley Reservoir Campground*, owned and operated by Hood River County.

On May 22, 2024, our office received a "Well Permit Application" showing the location of an existing well #1 ([L34427](#)) and the location of two new wells proposed to be constructed to serve the campground. No treatment is planned for the wells. A Land Use Compatibility Statement (LUCS) and a plan review fee payment in the amount of \$825 were also received on May 22, 2024 at which time the project was assigned plan review # 74-2024, trackable online at: <https://yourwater.oregon.gov/planreview.php?pwsno=95501>.

A Site Plan Approval letter was issued June 26, 2024. Well logs (enclosed) for the two new wells were received on April 1, 2025 and raw water coliform test results from the wells (absent of coliform bacteria) were received on April 11, 2025.



The project includes developing two new wells fitted with hand pumps to serve the Kingsley Reservoir Campground, open May 1st – October 25th (weather permitting). The campground is located on the Hood River County Tree Farm and includes 36 camp sites (suitable for both tents and RV's), 4 vault toilets, 3 ADA sites, and a boat ramp for non-motorized boating in the Green Point/Kingsley Reservoir.



<https://www.hoodrivercounty.gov/kingsleycampground>

The new wells are anticipated to be designated as follows:

- SRC-BA Well #2 (Handpump #1) – [HOOD51317](#) (L150832)
SRC-BA is on its own entry point (EP-B)
- SRC-CA Well #3 (Handpump #2) – [HOOD51318](#) (L150828)
SRC-CA is on its own entry point (EP-C)

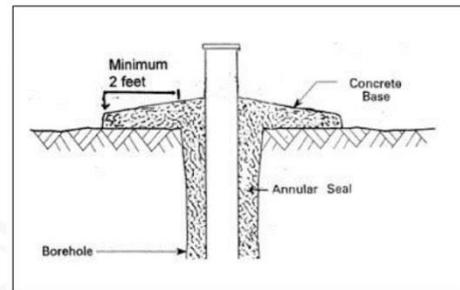


This designation is consistent with the existing Well #1 (SRC-AA) on EP-A as shown online at: <https://yourwater.oregon.gov/inventory.php?pwsno=95501>

Sources				
Facility ID	Facility Name - Well Logs	Activity Status	Availability	Source Type
EP-A	EP FOR WELL	A		GW
SRC-AA	WELL - L34427	A	Permanent	GW

A regional geologist in our program, Russ Kazmierczak, reviewed the well logs on April 15, 2025 and noted that both wells were adequately constructed into a confined aquifer. Enclosed are more details regarding Russ' well evaluation results.

The project is granted Conditional Approval, which means that in order to grant Final Approval, the following conditions will need to be met:



1. Photos are submitted showing the 4-ft x 4-ft reinforced (rebar) concrete base poured around the casing of each well and sloped to promote drainage (the top of the casing needs to extend at least 12” above the top of the slab).
2. Hand pump information is submitted (e.g., type of pump, make/model, photograph showing installation, and NSF-61 certification (or stainless steel for wetted parts).
3. Raw (Untreated) water quality test data for each well is submitted including:
 - Nitrate
 - Arsenic

These samples are to be taken from each of the new wells and analyzed by a lab certified in Oregon for drinking water analysis ([ORELAP certified lab](#)).

(Sampling results (received on April 11, 2025) from each well completed April 9, 2025 were absent of coliform bacteria.)

4. A copy of the Water Right Permit for each well from WRD, if a Water Right Permit is required or, if not required, correspondence from Oregon Water Resources Department that demonstrates a water right is not required for either well.

Note: I believe these wells are considered Exempt Use and do not need a water right based on the enclosed exempt use maps, however, please contact Robert Wood if you have questions regarding water rights:

Robert Wood Robert.L.Wood@water.oregon.gov	Oregon Water Resources Dept. 2705 E 2nd Street The Dalles, OR 97058	541-506-2651
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Until we receive verification that the conditions have been met and final approval has been issued, the wells are not approved for use. Upon completion of the project, please verify in writing that construction was completed according to the conditions above and submitted plans by completing the Project Final Approval Request form available on our website at:

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/PLANREVIEW/Documents/project-update-form.pdf>

If developed, please also send a set of as-built drawings. Documentation demonstrating how the above conditions were met and as-built drawings should reference Plan Review #74-2024 & PWS ID #95501 and can be emailed to me at evan.e.hofeld@oha.oregon.gov. If you have any questions, please feel free to call me at 971-200-0288.

Sincerely,



Evan Hofeld, Regional Engineer - OHA-Drinking Water Services
971-200-0288

evan.e.hofeld@oha.oregon.gov

cc:

- Josh Seerup, OHA – Drinking Water Services – Josh.Seerup@oha.oregon.gov
- Bill Goss, OHA – Drinking Water Services - William.H.GOSS@oha.oregon.gov
- Ian Stromquist, Hood River County Environmental Health Response Coordinator – ian.stromquist@hoodrivercounty.gov
- Tommy Laird, Well Const. Prog. Coord., OWRD - Tommy.K.LAIRD@water.oregon.gov
- Robert Wood, Water Master, OWRD - Robert.L.Wood@water.oregon.gov

Encl.

- Well Evaluation Results
- Well Logs and Exempt Use Maps
- Campground Conceptual Map

Well Evaluation Results

A regional geologist in our program, Russ Kazmierczak, reviewed the well logs on April 15, 2025 and noted that both wells were adequately constructed into a confined aquifer. Specifically, Russ noted the following:

- **SRC-BA Well #2 (Hand Pump Well #1) – HOOD51317 (L150832)**

As Built Well Construction Evaluation for Plan Review and/or Setback Waiver:

Well/Spring meets current construction standards.
 WRD special construction standards, see well log or Comments.

Well/Spring construction does not meet construction standards.
 Not sealed to appropriate depth. Recommended depth: _____
 Not appropriate seal materials
 Open to more than one aquifer
 Seal info missing or unknown
 Seal not constructed properly (Insufficient sealant volume Insufficient annular space)

Susceptible construction, but grandfathered source. Consider for reconstruction if nitrate $\geq 5\text{mg/L}$ or confirmed *E. coli* at source.

Susceptible well construction, **not approved for use.**

Comments: Calculated 9.1 sacks of bentonite needed for the seal and 15 sacks were used. The well is sealed to a depth of 20 feet below ground surface (ft bgs) into a layer of low permeability (brown clay) that extends from 2 ft bgs to 24 ft bgs. The well construction appears to meet OWRDs Well Construction Standards.

Nature of Aquifer Evaluation:

Aquifer Nature: Confined aquifer Semi-confined aquifer Unconfined aquifer

Comments: The area around the well is surficially mapped as Late High Cascades Volcanics (Qvmd). Depth to the water bearing zone was measured at 38 feet below ground surface (ft bgs) and the static water level (SWL) rose to 15 ft bgs. The rise in static water level indicates that the aquifer is most likely confined.

GWUDI Review Results:

New system/source **or** surface water is inside sanitary setback, initiate **monthly source assessment monitoring when source goes into production or as soon as possible.**
 Fractured bedrock, < 500 ft to surface water
 Coarse sand, gravel, and boulders, < 200 ft to surface water
 Sand and gravel, < 100 ft to surface water
 Sand, < 75 ft to surface water

Pre-existing source, initiate **monthly source assessment monitoring as part of annually generated monthly assessment monitoring list.**
 Fractured bedrock, < 500 ft to surface water
 Coarse sand, gravel, and boulders, < 200 ft to surface water
 Sand and gravel, < 100 ft to surface water
 Sand, < 75 ft to surface water

Source may be sensitive to GWUDI but approved for use. Source must be included as one of repeat coliform sampling sites, consider for GWUDI if *E. coli* ever confirmed in the source.

Do not need to consider for GWUDI.

Comments: Source does not meet distance criteria for assessment monitoring at this time. If *E. coli* is confirmed in the source consider for GWUDI.

Reviewed by: Russell Kazmierczak, R.G.

Date: 4/15/25



• **SRC-CA Well #3 (Hand Pump Well #2) – HOOD51318 (L150828)**

As Built Well Construction Evaluation for Plan Review and/or Setback Waiver:

- Well/Spring meets current construction standards.
 - WRD special construction standards, see well log or Comments.
- Well/Spring construction does not meet construction standards.
 - Not sealed to appropriate depth. Recommended depth: _____
 - Not appropriate seal materials
 - Open to more than one aquifer
 - Seal info missing or unknown
 - Seal not constructed properly (Insufficient sealant volume Insufficient annular space)
- Susceptible construction, but grandfathered source. Consider for reconstruction if nitrate \geq 5mg/L or confirmed *E. coli* at source.
- Susceptible well construction, **not approved for use.**

Comments: Calculated 9.1 sacks of bentonite needed for the seal and 15 sacks were used. The well is sealed to a depth of 20 feet below ground surface (ft bgs) into a layer of low permeability (red brown clay) that extends from 2 ft bgs to 26 ft bgs. The well construction appears to meet OWRDs Well Construction Standards.

Nature of Aquifer Evaluation:

Aquifer Nature: Confined aquifer Semi-confined aquifer Unconfined aquifer

Comments: The area around the well is surficially mapped as Late High Cascades Volcanics (Qvmd). Depth to the water bearing zone was measured at 56 feet below ground surface (ft bgs) and the static water level (SWL) rose to 18 ft bgs. The rise in static water level indicates that the aquifer is most likely confined.

GWUDI Review Results:

- New system/source or surface water is inside sanitary setback, initiate **monthly source assessment monitoring when source goes into production or as soon as possible.**
 - Fractured bedrock, < 500 ft to surface water
 - Coarse sand, gravel, and boulders, < 200 ft to surface water
 - Sand and gravel, < 100 ft to surface water
 - Sand, < 75 ft to surface water
- Pre-existing source, initiate **monthly source assessment monitoring as part of annually generated monthly assessment monitoring list.**
 - Fractured bedrock, < 500 ft to surface water
 - Coarse sand, gravel, and boulders, < 200 ft to surface water
 - Sand and gravel, < 100 ft to surface water
 - Sand, < 75 ft to surface water
- Source may be sensitive to GWUDI but approved for use. Source must be included as one of repeat coliform sampling sites, consider for GWUDI if *E. coli* ever confirmed in the source.
- Do not need to consider for GWUDI.

Comments: Source does not meet distance criteria for assessment monitoring at this time. If *E. coli* is confirmed in the source consider for GWUDI.

Reviewed by: Russell Kazmierczak, R.G.

Date: 4/15/25



Well Logs & Exempt Use Maps

- **SRC-BA Well #2 (Hand Pump Well #1) – HOOD51317 (L150832)**

Well Log Links: County Well ID: [HOOD 51317](#) Well Tag: [L150832](#)

Exempt Use Map Link:

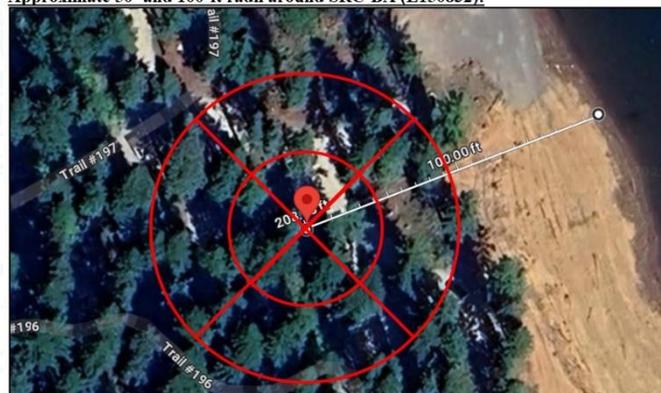
https://apps.wrd.state.or.us/apps/misc/vault/vault.aspx?Type=ExemptUseOwnerMap&w_l_g_nbr=150832

Lat: 45° 38' 3.5" N Long: 121° 40' 49.6" W [GoogleMaps Link](#) (45.6343119, -121.680439)

STATE OF OREGON WELL LOCATION MAP <small>This map is supplemental to the WATER SUPPLY WELL REPORT</small>		Oregon Water Resources Department <small>725 Summer St NE, Salem, OR 97301 (503)986-0900</small>		
LOCATION OF WELL Latitude: 45.63431190 Datum: WGS84 Longitude: -121.680439 Township/Range/Section/Quarter-Quarter Section: WM 2N 9E 27 NENW Address of Well: LARCH MOUNTAIN ROAD (OFF KINGSLEY RD.)		Well Label: L150832 Well Log: HOOD 51317 Printed: September 9, 2024		<small>DISCLAIMER: This map is intended to represent the approximate location of the exempt use well provided by the land owner. It is not intended to be construed as survey accurate in any manner.</small> <small>Generated by OWRD</small>
				



Approximate 50- and 100-ft radii around SRC-BA (L150832):



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Amended 8/16/2024
STATE OF OREGON
WATER SUPPLY WELL REPORT
 (as required by ORS 537.545 & 537.765 and OAR 690-205-0210)

HOOD 51317

WELL I.D. LABEL# L 150832
START CARD # 1074568
ORIGINAL LOG #

8/6/2024

(1) LAND OWNER Owner Well ID. _____
 First Name THOMAS Last Name MOLONEY
 Company HOOD RIVER COUNTY
 Address 918 18TH STREET
 City HOOD RIVER State OR Zip 97031

(2) TYPE OF WORK 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
 Seat: _____

(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 60.00 ft.

BORE HOLE			SEAL			Amt	sacks/lbs
Dia	From	To	Material	From	To		
10	0	20	Bentonite	0	20	15	S
6	20	60				Calculated	9.13
						Calculated	

Seal placement method A B C D Other: POUR IN
 Backfill placed from _____ ft. to _____ ft. Material _____
 Filter pack from _____ ft. to _____ ft. Material _____ Size _____
 Explosives used: Type _____ Amount _____
 Seal Placement Begin Date 7/26/2024 Begin Time 09 00

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
 Proposed Amount _____ Actual Amount _____

(6) CASING/LINER

C/L	Dia	+	From	To	Gauge	Mat	Type	Wld	Thrd	Shoe	Location
C	6		1	39	0.250	ST				OUT.	39
L	4		20	60	Sch40	PL					20

Temp casing Yes Dia 10 From + 0 To 20

(7) PERFORATIONS/SCREENS Perforations Method SAW
 Screens Type _____ Material _____

Perf/Screen	Casing/Screen	Dia	From	To	Scrm/slot width	Slot length	# of slots	Tele/ Pipe size
Perf	Liner	4	20	60	.125	6	40	

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

Type of Test	Yield (gal/min)	Drawdown	Drill Stem/ Pump Depth	Duration (hr)
Air	30		50	1

Temperature 50 °F Lab analysis Yes By _____
 Water quality concerns? Yes (describe below) TDS amount 0.02 ppm
 From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)
 County HOOD RIVER Twp 2.00 N N/S Range 9.00 E E/W WM
 Sec 27 NE 1/4 of the NW 1/4 Tax Lot 100
 Tax Map Number _____ Lot _____
 Lat _____ or 45.63431190 DMS or DD
 Long _____ or -121.68045800 DMS or DD
 Street address of well Nearest address
LARCH MOUNTAIN ROAD (OFF KINGSLEY RD.)

(10) STATIC WATER LEVEL

Existing Well / Pre-Alteration	Date	SWL (psi)	+ SWL (ft)
Completed Well	<u>7/26/2024</u>		<u>15</u>

Flowing Artesian? Dry Hole?
 WATER BEARING ZONES Depth water was first found 38'
 SWL Date From To Est Flow SWL (psi) + SWL (ft)

SWL Date	From	To	Est Flow	SWL (psi)	+ SWL (ft)
<u>7/26/2024</u>	<u>38</u>	<u>60</u>	<u>30</u>		<u>15</u>

(11) WELL LOG Ground Elevation 3182.90 FT

Material	From	To
TOP SOIL	0	2
BROWN CLAY, SOFT	2	24
RED & GRAY CINDERS, SOFT, BROKEN	24	38
GRAY & BROWN CINDERS, SOFT, BROKEN	38	60

Construction _____
 Begin Date 7/25/2024 Begin Time 07 09 End Date 7/26/2024

(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 1833 Date 8/6/2024
 Signed GABRIEL MOORE (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 1256 Date 8/6/2024
 Signed KARL MOORE JR (E-filed)
 Drilling Company: M-K WATERWELL DRILLING INC

ORIGINAL - WATER RESOURCES DEPARTMENT
 THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version:
 New exempt use wells must be submitted with a map and recording fee.

• **SRC-CA Well #3 (Hand Pump Well #2) – HOOD51318 (L150828)**

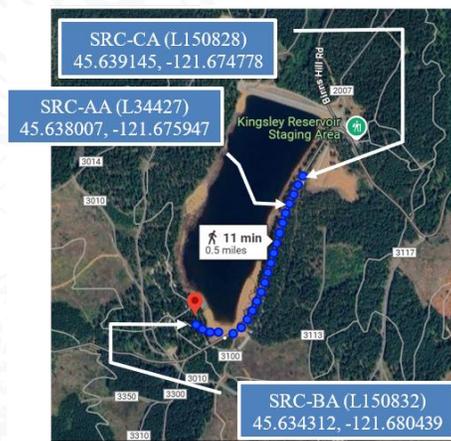
Well Log Links: County Well ID: [HOOD51318](#) Well Tag: [L150828](#)

Exempt Use Map Link:

https://apps.wrd.state.or.us/apps/misc/vault/vault.aspx?Type=ExemptUseOwnerMap&wl_tag_nbr=150828

Location: Lat: 45° 38' 20.9" N Long: 121° 40' 29.2" W [GoogleMaps Link](#) (45.634312, -121.680439)

<p>STATE OF OREGON WELL LOCATION MAP</p> <p>This map is supplemental to the WATER SUPPLY WELL REPORT</p>		<p>Oregon Water Resources Department 725 Summer St NE, Salem OR 97301 (503)986-0900</p> 	
<p>LOCATION OF WELL</p> <p>Latitude: 45.63914450 Datum: WGS84 Longitude: -121.67477800</p> <p>Township/Range/Section/Quarter-Quarter Section: WM2.00N9.00E22NWSE</p> <p>Address of Well: LARCH MOUNTAIN ROAD (OFF KINGSLEY RD.)</p>		<p>Well Label: 150828</p> <p>Printed: August 6, 2024</p> <p><small>DISCLAIMER: This map is intended to represent the approximate location the well. It is not intended to be construed as survey accurate in any manner. Provided by well constructor</small></p>	

Approximate 50- and 100-ft radii around SRC-CA (L150828):



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Amended 8/16/2024
STATE OF OREGON
WATER SUPPLY WELL REPORT
 (as required by ORS 537.545 & 537.765 and OAR 690.205-0210)

HOOD 51318
8/6/2024

WELL I.D. LABEL# L 150828
START CARD # 1074569
ORIGINAL LOG #

(1) LAND OWNER
 Owner Well I.D. _____
 First Name THOMAS Last Name MOLONEY
 Company HOOD RIVER COUNTY
 Address 918 18TH STREET
 City HOOD RIVER State OR Zip 97031

(2) TYPE OF WORK 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 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 80.00 ft.

BORE HOLE			SEAL			Amt	sacks/lbs
Dia	From	To	Material	From	To		
10	0	20	Bentonite	0	20	15	S
6	20	80				Calculated 9.13	
						Calculated	

Seal placement method A B C D E Other: POUR IN
 Backfill placed from _____ ft. to _____ ft. Material _____
 Filter pack from _____ ft. to _____ ft. Material _____ Size _____
 Explosives used: Type _____ Amount _____
 Seal Placement Begin Date 7/29/2024 Begin Time 10 : 00

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
 Proposed Amount _____ Actual Amount _____

(6) CASING/LINER

C/L	Dia	+	From	To	Gauge	Type	Wld	Thrd	Shoe Location
C	6	X	1	29	0.250	ST	X		OUT, 29
L	4		20	80	Sch40	PL	X		

Temp casing Yes Dia 10 From + 0 To 29

(7) PERFORATIONS/SCREENS
 Perforations Method SAW

Perf/Screen	Casing/Screen	Dia	From	To	Scm/slot width	Slot length	# of slots	Tele/Pipe size
Perf	Liner	4	60	80	.125	6	40	

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

Type of Test	Yield (gal/min)	Drawdown	Drill Stem/ Pump Depth	Duration (hr)
Air	10		70	1

Temperature 52 °F Lab analysis Yes By _____
 Water quality concerns? Yes (describe below) TDS amount 0.03 ppm
 From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)
 County HOOD RIVER Twp 2.00 N N/S Range 9.00 E E/W WM
 Sec 22 NW 1/4 of the SE 1/4 Tax Lot 100
 Tax Map Number _____ Lot _____
 Lat _____ or 45.63914450 DMS or DD
 Long _____ or -121.67477800 DMS or DD
 Street address of well Nearest address
LARCH MOUNTAIN ROAD (OFF KINGSLEY RD.)

(10) STATIC WATER LEVEL

Existing Well / Pre-Alteration	Date	SWL (psi)	+ SWL (ft)
Completed Well	<u>7/29/2024</u>		<u>25</u>

Flowing Artesian? Dry Hole?
 WATER BEARING ZONES Depth water was first found 56'

SWL Date	From	To	Est Flow	SWL (psi)	+ SWL (ft)
<u>7/29/2024</u>	<u>56</u>	<u>80</u>	<u>10</u>		<u>25</u>

(11) WELL LOG Ground Elevation _____

Material	From	To
TOP SOIL	0	2
RED & BROWN CLAY, SOFT	2	26
GRAY & RED CINDERS, SOFT, BROKEN	26	56
RED & BROWN CINDERS, SOFT, BROKEN	56	80

Construction
 Begin Date 7/26/2024 Begin Time 09 : 49 End Date 7/29/2024

(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 1833 Date 8/6/2024
 Signed GABRIEL MOORE (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 1256 Date 8/6/2024
 Signed KARL MOORE JR (E-filed)
 Drilling Company: M-K WATERWELL DRILLING INC

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

Campground Conceptual Map



KINGSLEY CAMPGROUND
CONCEPTUAL LAYOUT 6-24-2017
scale 1"=100'
Jerry Davis Consulting (LS)

