Public Health Division

Center for Health Protection, Drinking Water Services

Tina Kotek, Governor

April 23, 2026

Gerald Fisher, PE
gfisher@ci.independence.or.us
555 S Main St,
Independence, OR 97351 - Sent by email only -

Re: 2019 POLK Well #4 – L131610 (POLK54296) – PR# 2019-38
City of Independence – PWS # 00399
Final Approval

Dear Mr. Fisher:

On April 15, 2026, our office received confirmation that the above project was completed according to the plans submitted and conditions set forth in the September 8, 2023 conditional approval letter. As-builts were received April 15, 2026 and revised nitrate blending treatment calculations were received on April 23, 2026.

This verification completes the plan review requirements for Polk well #4 – L131610 (POLK54296), designated as SRC-BE under an existing entry point (EP-B). Final approval is issued at this time, and the well is approved for use. Due to the addition of the new source, enclosed is information regarding increased monitoring including quarterly radionuclides, quarterly nitrate, and increased lead and copper tap sampling at 60 sites. The well evaluation results provided by our geologist, Tom Patte, and a project description are also enclosed. If you have any questions, please feel free to call me at 971-200-0288.

Sincerely,

Evan Hofeld, Regional Engineer
OHA-Drinking Water Services
Evan.e.hofeld@oha.oregon.gov

CC: E. Payson Smith, PE, Westech Engineering: PSmith@westech-eng.com
Mathew Carpenter, Independence: carpenter.matthew@ci.independence.or.us

Enclosures:
1. Monitoring requirements
2. Well evaluation results
3. Project Description

Monitoring requirements for SRC-BE and EP-B (EP-A sampling is not shown)

Due to the addition of the new well Polk #4 (SRC-BE), increased monitoring including quarterly radionuclides and nitrate sampling is shown in Table 1. Source sampling detections are summarized in Table 2. Increased lead and copper tap sampling at 60 sites in the distribution system is required as shown in Tables 3 and 4.

Table 1 – Initial Source (SRC-BA) & Entry Point (EP-B) Monitoring (including quarterly radionuclides, nitrate, & PFAS and monthly source assessment coliform sampling)

Period =>	Year 1 (2026)				Year 2* (2027)	Year 3* (2028)
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter		
Sample Location =>	Source (SRC-BE)	Entry Point (EP-B)				
Population 10,300 as listed on Data Online for PWS ID 00399	☒ Coliform ☒ Nitrate, Nitrite ☒ Arsenic ☒ IOC ☒ VOC ☒ SOC ☒ Radiological including uranium, gross alpha, and radium 226/228 [Asbestos & Dioxin (waived 7/22/19)]	☐ Radiological ☐ Nitrate (quarterly sampling is to demonstrate blending to reduce nitrate below the MCL of 10 mg/l)	☐ Radiological ☐ Nitrate (quarterly sampling is to demonstrate blending to reduce nitrate below the MCL of 10 mg/l) ☐ VOC ☐ SOC ☐ PFAS** (Aug)	☐ Radiological ☐ Nitrate (quarterly sampling is to demonstrate blending to reduce nitrate below the MCL of 10 mg/l)	☐ Nitrate ☐ VOC ☐ SOC	☐ Nitrate ☐ VOC ☐ SOC ☐ IOC ☐ Arsenic

*Sampling subject to changed based on previous sampling results.
**Initial monitoring for PFAS remains unchanged and should be collected each quarter 2 to 4 months apart to complete the 1st and 3rd quarter sampling in 2026 as shown below and online at: https://yourwater.oregon.gov/pfas.php?pwsno=00399 (UCRM data was credited for the 2nd and 4th quarter sample).

Initial Monitoring

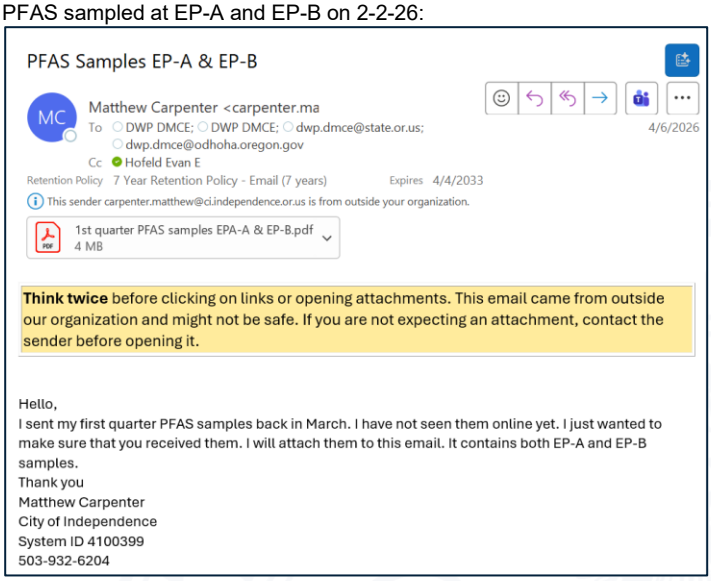
EP ID	Entry point name	Water type	Availability	Frequency	Schedule begin	Schedule end	First quarter	Second quarter	Third quarter	Fourth quarter
EP-A	EP FOR SOUTH WELLFIELD (5 WELLS)	GW	Permanent	4 quarters	1/1/2023		2/2/26	5/16/2023		11/20/2023
EP-B	EP FOR POLK ST/RIVER DR WELLFIELD	GW	Permanent	4 quarters	1/1/2023		2/2/26	5/16/2023		11/20/2023

For each active entry point, collect **4 consecutive quarters of samples within a 12-month period with samples collected 2 to 4 months apart**.

Table 2 - Source Sampling Detections for well #4 (SRC-BE)

Analyte	Sample Date	Detected Level	MCL
Lead	7/24/19	0.0039 mg/l (3.9 ppb)	10 ppb (90th percentile)
Nitrate	7/24/19	18.5 mg/l	10 mg/l
	12/3/25	12.9 mg/l	
	1/21/26	11.4 mg/l	
	2/18/26	12.5 mg/l	
Sodium	7/24/19	11.5 mg/l	20 mg/l (SMCL)
Radium 226/228	7/24/19	1.6 pCi/L	5 pCi/L

PFAS sampled at EP-A and EP-B on 2-2-26:



PFAS Samples EP-A & EP-B

MC Matthew Carpenter <carpenter.ma
To DWP DMCE; DWP DMCE; dwp.dmce@state.or.us; dwp.dmce@odhoha.oregon.gov
Cc Hofeld Evan E
4/6/2026
Retention Policy 7 Year Retention Policy - Email (7 years) Expires 4/4/2033
This sender carpenter.matthew@ci.independence.or.us is from outside your organization.
1st quarter PFAS samples EPA-A & EP-B.pdf
4 MB

Think twice before clicking on links or opening attachments. This email came from outside our organization and might not be safe. If you are not expecting an attachment, contact the sender before opening it.

Hello,
I sent my first quarter PFAS samples back in March. I have not seen them online yet. I just wanted to make sure that you received them. I will attach them to this email. It contains both EP-A and EP-B samples.
Thank you
Matthew Carpenter
City of Independence
System ID 4100399
503-932-6204

Table 3 - Number of Lead and Copper Tap Sampling Sites (60) (based on populaiton served as required in Table 34 in OAR 333-061-0036)		
Number of people served by the water system	Increased Number of Sample Locations	Reduced Number of Sample Locations
> 100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
< 100	5	5

Table 4. Required lead and copper sampling after Polk Well #4 (SRC-BE) is in use						
What Parameter	Where	When	Purpose	Enter 90th percentile lead (Pb90) & copper (Cu90), pH & alkalinity sample dates & results		
☐ **Round 1** Lead and Copper	60 tap sample sites	Round 1 – 7/1/26 – 12/31/26	Demonstrate the new well does not increase corrosion in the distribution system	Round 1 Sample Date(s) ↓		
				Pb90		mg/l
				Cu90		mg/l
☐ **Round 2** Lead and Copper	60 tap sample sites	Round 2 – 1/1/27 – 6/30/27	Demonstrate the new well does not increase corrosion in the distribution system	Round 2 Sample Date(s) ↓		
				Pb90		mg/l
				Cu90		mg/l

Well Evaluation Results – POLK54296

A regional geologist with DWS (Tom Pattee) reviewed the well log construction details on March 31, 2022 and noted the following:

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 ≥ 5mg/L or confirmed *E. coli* at source.
- ☐ Susceptible well construction, **not approved for use.**

Comments: This well was drilled to a depth of 64 ft and is cased to 63.5 ft. The casing is sealed to a depth of 25 ft. The casing seal extends through a 19 ft thick clay/silty clay layer that overlays the aquifer. Water enters the well through a well screen installed from 32 to 52 ft below ground level. Sensitivity Analysis results suggest that well construction does not contribute to overall sensitivity of the water supply to local land use practices.

Nature of Aquifer Evaluation:

Aquifer Nature: ☐ Confined aquifer ☐ Semi-confined aquifer ☒ Unconfined aquifer

Comments: This well draws water from an unconfined gravel aquifer. The water-bearing gravel is present at a depth of 20 ft and the static water-level was reported to be at a depth of 19.5 ft, roughly the same depth as the top of the aquifer. Therefore, the gravel aquifer is considered to be unconfined. Sensitivity Analysis results suggest that the aquifer is highly sensitive to nearby land use practices. Given the highly sensitive nature of the aquifer and the proximity of a fecal/viral contaminant source (Willamette River), this well should undergo monthly source assessment monitoring for the first year it is in service if the water from the well is to be treated with a disinfectant.

(Note: the well will receive 4-log viral treatment at WTP-B, so monthly assessment monitoring is not needed)

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: Although Sensitivity Analysis results suggest that the aquifer is highly sensitive to any nearby contaminant sources, the distance to the Willamette River is beyond the GWUDI setback distance for gravel aquifers. Therefore, the well is not considered to be susceptible to capturing unfiltered surface water at this time. Note that the Willamette River does represent a risk of fecal/viral contamination but at this time is not considered a risk with respect to cryptosporidium or giardia.

Reviewed by: Tom Pattee, R. G. Date: 03/31/2022

Tom Pattee) reviewed the well details and sample results on April 20, 2026 for the potential for a reduction in monitoring due to the wellfield and noted the following:

☒ Request for initial chemical monitoring reduction review
Other well ID#s: SRC-BA, SRC-BB, SRC-BC, & SRC-BD
Distance to other wells: ~1,850 ft to SRC-BA
☐ Well under consideration on New Entry Point
☒ Well under consideration on Existing Entry Point

County Well ID: POLK54296

Date Well Completed: 07/11/2019

Monitoring Reduction Determination Results:

☐ Qualifies for initial chemical monitoring reduction as part of existing Wellfield – one round of chemical testing is sufficient.
  ☐ Source is on existing entry point – future monitoring required at entry point.
  ☐ Source is on a separate entry point – future monitoring includes nitrate at all entry points & source monitoring at entry point designated by geologist in comments below.

☐ Qualifies for initial chemical monitoring reduction based on historical data from nearby public water supply well(s) sharing the same aquifer – one round of chemical testing is sufficient. Future monitoring required at entry point.

☐ Qualifies for Common Aquifer designation for DBP monitoring – additional DBP sample sites not required.

☒ Does not qualify for monitoring reduction.

☐ Other: _____

Comments: The capture zone and subsequent Drinking Water Source Area for SRC-BE (POLK54296), is likely to encompass a different portion of the aquifer than the existing wellfield. In addition, the land use practices have a different distribution pattern around the new well. Therefore, an initial monitoring reduction does not appear to be reasonable for this groundwater source.

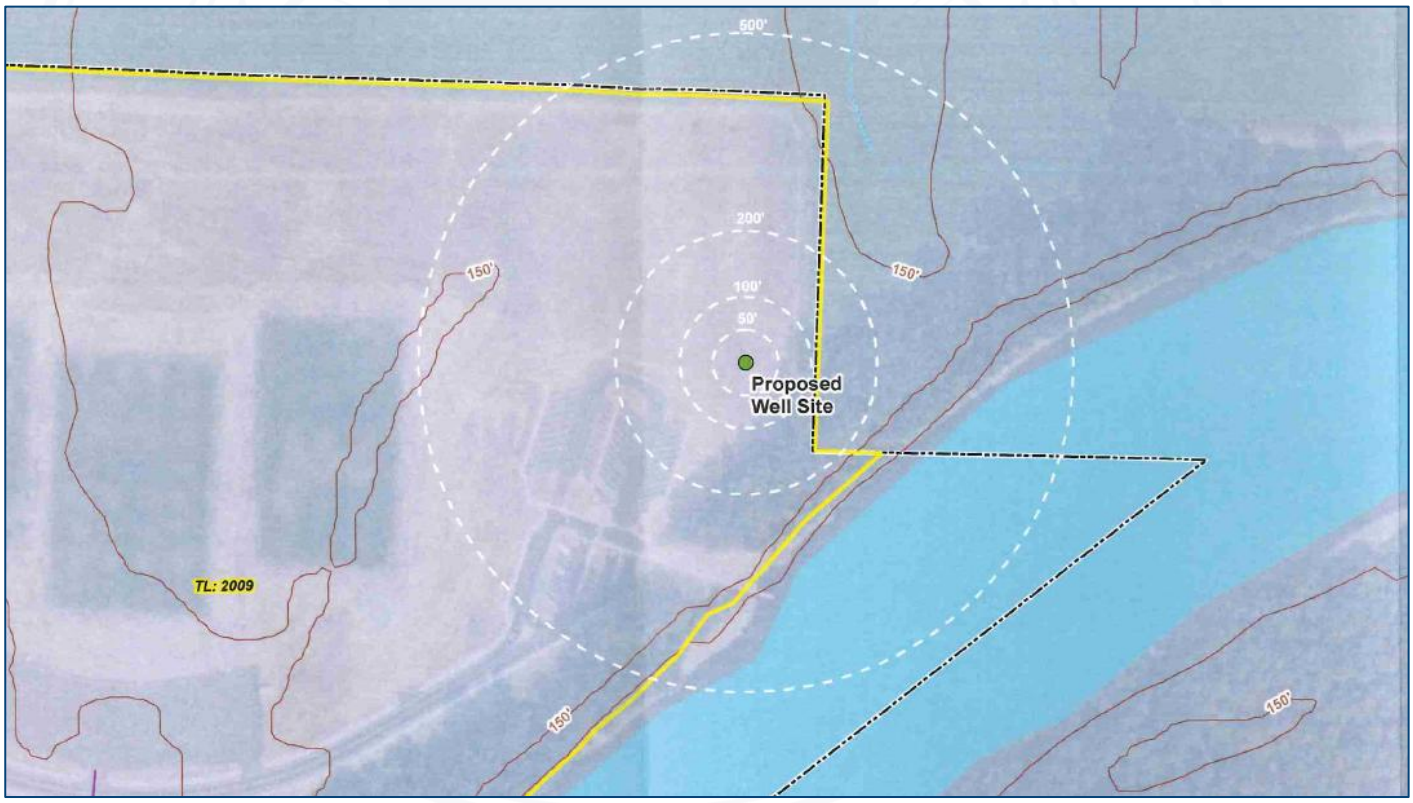
Reviewed by: Tom Pattee, R. G. Date: 04/20/2026

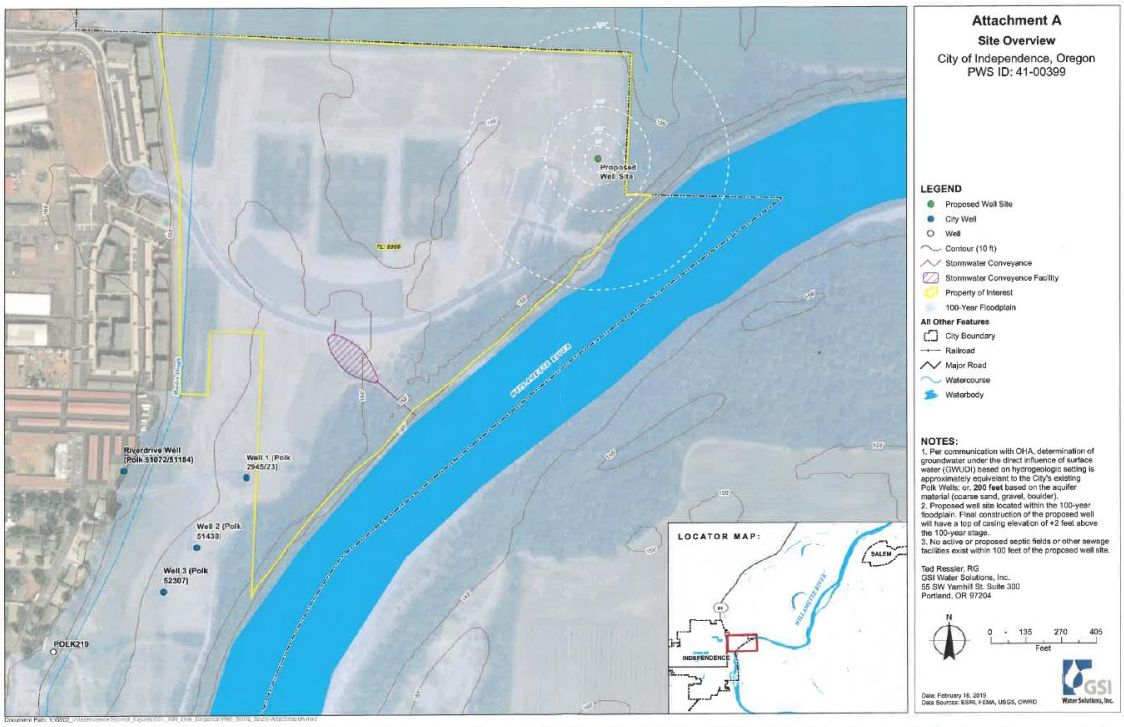
December 30, 2011

Project Description

The project included installation of a pitless adapter well (SRC-BE Polk Well #4 - L131610 (POLK54296)), drilled to a completed depth of 63.5 feet on July 11, 2019 on Tax Lot 2009 approximatly 270-ft away from the Willamette River as shown in the proposed location map below. Plans for associated piping and appurtenances to connect the well to the distribution system were also submitted.

The water from this well combines with the other Polk Street/River Drive wells at Entry Point B (EP-B). Sampling results indicate that nitrate levels are over the maximum contaminant level (MCL) for this well. Plans submitted included details on the controls for blending the water from this well with water from other wells on the entry point to achieve nitrate levels below the MCL. A coliform sample result for the well showed the presence of total coliform, however, 4-log viral disinfection is provided at WTP-B.





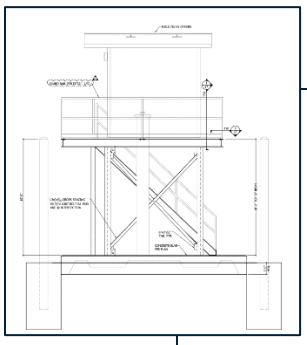
#691643 · Posted 12/19/2023

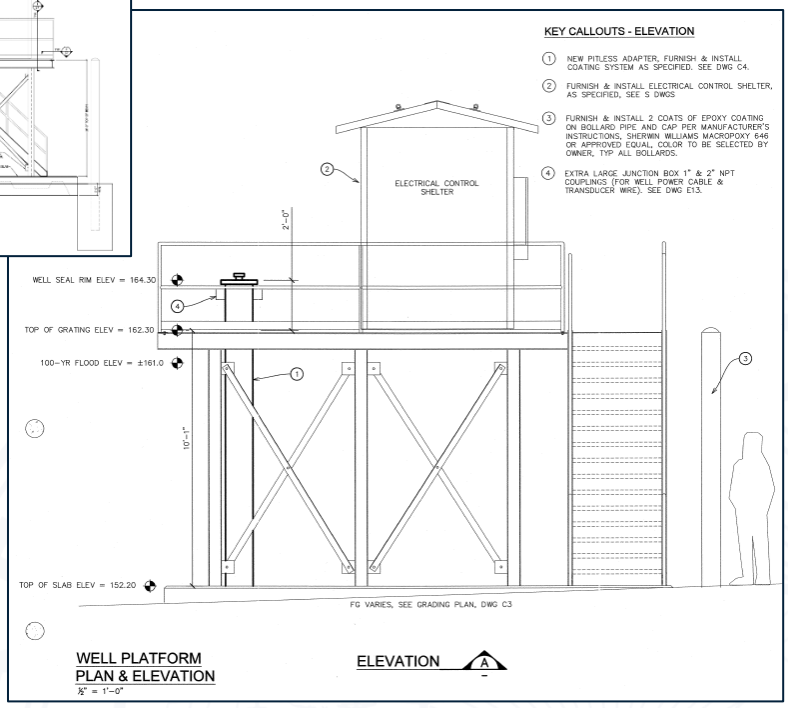
Polk Well #4 Improvements, Independence, OR

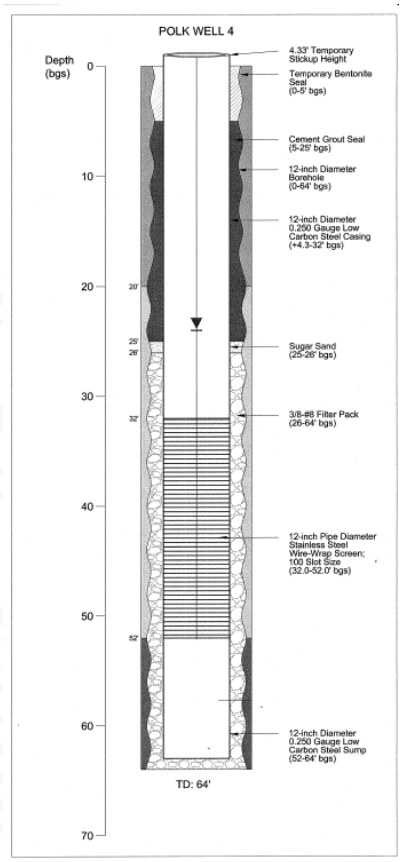
OWNER REFERENCE	2814.4030
BID DATE	Jan 10, 2024 at 02:30PM
PRE-BID	Scheduled - 12/22/2023 @ 01:00am @ (for location please Sign in or create an account)
ESTIMATE	$ 2,068,000.00
OWNER	City of Independence OR
TRADES	Water Well Construction: Drilling, Installation, Improvements & Repairs - General Engineering Contractor, High Voltage Electrical Contractor (HVE): Street & Highway Lighting, Venue/Arena Lights, Luminaires, Utility, Transformer Work, *General Engineering Contractor GEC; Subcontractor Opportunities

Description

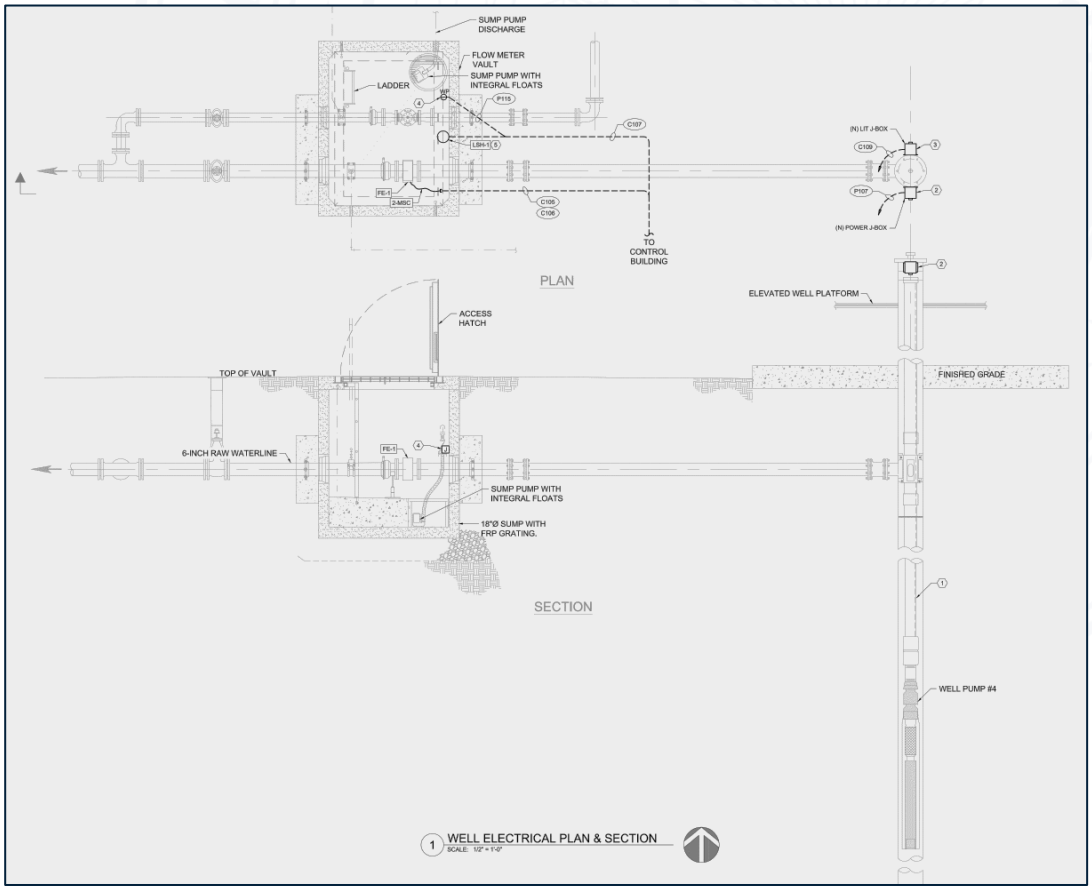
The work includes construction of a well pump station for an existing well and 2,200 feet of 8-inch raw water pipeline. The pump station includes a structural steel platform, electrical shelter, well pump, piping, flow meter vault, and site improvements. A new buried power service will be installed and spare conduits with an alignment roughly 2,300 feet long.



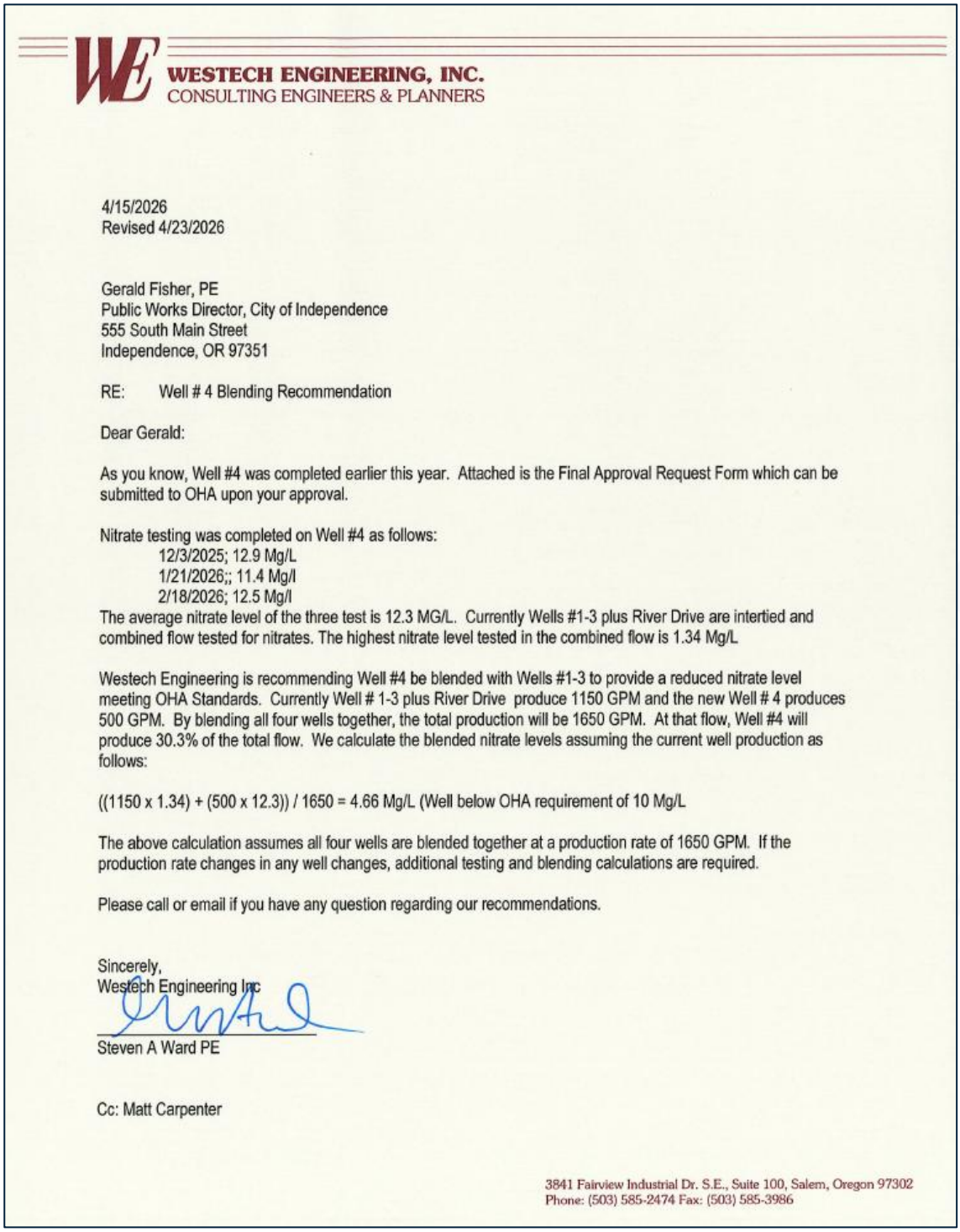




WELL RECORD DIAGRAM
N.T.S.



Blending recommendation to reduce nitrate levels.



WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS & PLANNERS

4/15/2026
Revised 4/23/2026

Gerald Fisher, PE
Public Works Director, City of Independence
555 South Main Street
Independence, OR 97351

RE: Well # 4 Blending Recommendation

Dear Gerald:

As you know, Well #4 was completed earlier this year. Attached is the Final Approval Request Form which can be submitted to OHA upon your approval.

Nitrate testing was completed on Well #4 as follows:
12/3/2025; 12.9 Mg/L
1/21/2026;; 11.4 Mg/l
2/18/2026; 12.5 Mg/l
The average nitrate level of the three test is 12.3 MG/L. Currently Wells #1-3 plus River Drive are intertied and combined flow tested for nitrates. The highest nitrate level tested in the combined flow is 1.34 Mg/L

Westech Engineering is recommending Well #4 be blended with Wells #1-3 to provide a reduced nitrate level meeting OHA Standards. Currently Well # 1-3 plus River Drive produce 1150 GPM and the new Well # 4 produces 500 GPM. By blending all four wells together, the total production will be 1650 GPM. At that flow, Well #4 will produce 30.3% of the total flow. We calculate the blended nitrate levels assuming the current well production as follows:

((1150 x 1.34) + (500 x 12.3)) / 1650 = 4.66 Mg/L (Well below OHA requirement of 10 Mg/L

The above calculation assumes all four wells are blended together at a production rate of 1650 GPM. If the production rate changes in any well changes, additional testing and blending calculations are required.

Please call or email if you have any question regarding our recommendations.

Sincerely,
Westech Engineering Inc

Steven A Ward PE

Cc: Matt Carpenter

3841 Fairview Industrial Dr. S.E., Suite 100, Salem, Oregon 97302
Phone: (503) 585-2474 Fax: (503) 585-3986

Well Log - L131610 (POLK54296)

Amended 3-14-24 by Jones Drilling

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

WELL I.D. LABEL# L 131610
START CARD # 1043407
ORIGINAL LOG #

POLK 54296

(1) LAND OWNER — Owner Well I.D. 6015
First Name — Last Name
Company City of Independence
Address 555 S. Main St.
City Independence State OR Zip 97351

(2) TYPE OF WORK ☒ New Well ☐ Deepening ☐ Conversion ☐ Alteration (complete 2a & 10) ☐ Abandonment(complete 5a)

(2a) PRE-ALTERATION
Casing: Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd
Seal: Material | From | To | Amt | sacks/lbs

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

(4) PROPOSED USE
☒ Domestic ☐ Irrigation ☐ Community
☐ Industrial/ Commericial ☐ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION — Special Standard ☐ (Attach copy)
Depth of Completed Well 63.5 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/lbs
16	0	64	Cement	7	25	37	S
					Calculated	9.1	
			Bentonite	0	7	8	S
					Calculated	5.5	

How was seal placed: Method ☐A ☐B ☒C ☐D ☐E
☒ Other Poured dry
25 Backfill placed from 15 ft. to 27 ft. Material fine sand
Filter pack from 27 ft. to 63.5 ft. Material wash round Size 3/8"
Explosives used: ☐ Yes Type Amount

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

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
◉	○	12	☒	3	32	250	◉	○	☒	☐
◉	○	12	☐	52	63.5	250	◉	○	☒	☐

Shoe ☐ Inside ☐ Outside ☐ Other Location of shoe(s)
Temp casing ☒ Yes Dia 16 From 0 To 60

(7) PERFORATIONS/SCREENS
Perforations Method
Screens Type Wrap rib Material stainless

Perf/Screen	Casing/Liner	Dia	From	To	Scm/slot width	Slot length	# of slots	Tele/pipe size
Screen		12	32	52	.1			

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

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
600	11	54	4

Temperature 62 °F Lab analysis ☐ Yes By
Water quality concerns? ☐ Yes (describe below) TDS amount 236

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)
County POLK Twp 8 S N/S Range 4 W E/W WM
Sec 21 NE 1/4 of the NE 1/4 Tax Lot 2009
Tax Map Number Lot
Lat ° ' " or DMS or DD
Long ° ' " or DMS or DD
◉ Street address of well ○ Nearest address
End of Deanne Dr. - Lebanon, OR 97302

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Pre-Alteration				
Completed Well	07-11-2019			19.5

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES — Depth water was first found 25

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
07-11-2019	25	52	800			19.5

(11) WELL LOG — Ground Elevation

Material	From	To
Top Soil	0	2
Brown clay	2	5
Brown silty clay	5	20
Brown dirty gravel	20	52
Brown clay	52	56
Blue clay	56	64

RECEIVED
AUG 27 2019
OWRD
JONES DRILLING CO., INC.
29400 SANTIAM HWY.
LEBANON, OR 97355
541-367-2560 541-451-2686
1-800-915-8388

Date Started 06-24-2019 Completed 07-11-2019

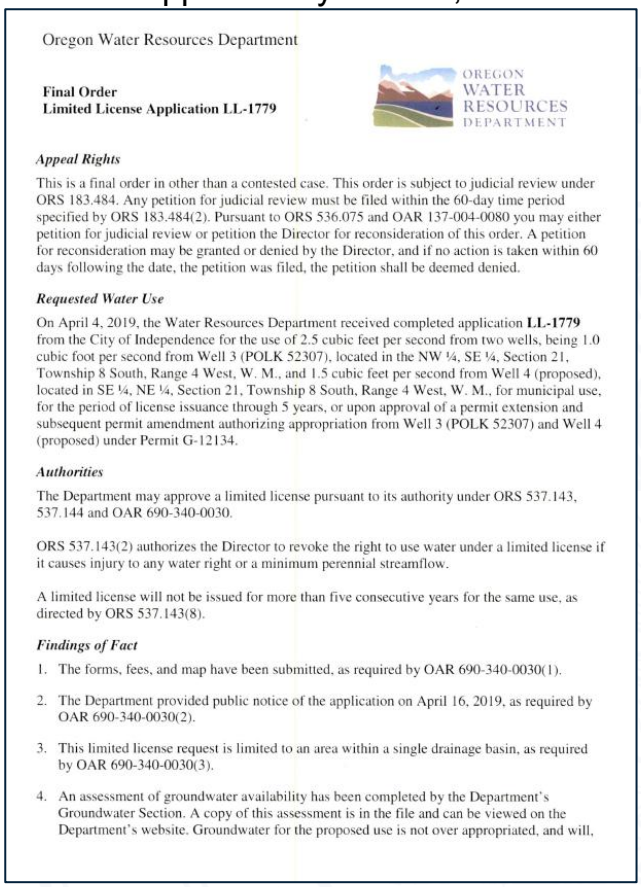
(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
License Number 1411 Date 07-26-2019
Signed Kurt Martin

(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 1684 Date 07-26-2019
Signed
Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version 0.95

Water Rights Information – Limited License Application LL-1779

The City intends to add Polk Well 4 to its existing water use permit, Permit G-12134 and until approved by OWRD, a limited water use license will be sought.



Oregon Water Resources Department

Final Order
Limited License Application LL-1779

OREGON WATER RESOURCES DEPARTMENT

Appeal Rights

This is a final order in other than a 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.

Requested Water Use

On April 4, 2019, the Water Resources Department received completed application **LL-1779** from the City of Independence for the use of 2.5 cubic feet per second from two wells, being 1.0 cubic foot per second from Well 3 (POLK 52307), located in the NW ¼, SE ¼, Section 21, Township 8 South, Range 4 West, W. M., and 1.5 cubic feet per second from Well 4 (proposed), located in SE ¼, NE ¼, Section 21, Township 8 South, Range 4 West, W. M., for municipal use, for the period of license issuance through 5 years, or upon approval of a permit extension and subsequent permit amendment authorizing appropriation from Well 3 (POLK 52307) and Well 4 (proposed) under Permit G-12134.

Authorities

The Department may approve a limited license pursuant to its authority under ORS 537.143, 537.144 and OAR 690-340-0030.

ORS 537.143(2) authorizes the Director to revoke the right to use water under a limited license if it causes injury to any water right or a minimum perennial streamflow.

A limited license will not be issued for more than five consecutive years for the same use, as directed by ORS 537.143(8).

Findings of Fact

1. The forms, fees, and map have been submitted, as required by OAR 690-340-0030(1).
2. The Department provided public notice of the application on April 16, 2019, as required by OAR 690-340-0030(2).
3. This limited license request is limited to an area within a single drainage basin, as required by OAR 690-340-0030(3).
4. An assessment of groundwater availability has been completed by the Department's Groundwater Section. A copy of this assessment is in the file and can be viewed on the Department's website. Groundwater for the proposed use is not over appropriated, and will, if properly conditioned, avoid injury to existing groundwater rights or to the groundwater resource.
5. The Department has determined that the proposed groundwater use will have the potential for substantial interference with surface water, namely, the Willamette River.
6. The finding of the potential for substantial interference requires that surface water availability be considered. Surface water is available during the full period requested.
7. Because the use requested is longer than 120 days and because the use is in an area that has sensitive, threatened or endangered fish species, the use is subject to the Department's rules under OAR 690-033. These rules aid the Department in determining whether a proposed use will impair or be detrimental to the public interest with regard to sensitive, threatened, or endangered fish species. No comments were received that would cause the Department to require additional conditions or limitations.
8. The Department has determined that the proposed source has not been withdrawn from further appropriation per ORS 538.200.
9. The Department has not received other comments related to the possible issuance of the limited license.
10. Pursuant to OAR 690-340-0030(4)(5), conditions have been added with regard to notice and water-use measurement.
11. The City of Independence has indicated that the proposed use is compatible with the applicable acknowledged comprehensive land-use plan. A copy of the land use compatibility statement is in the file.

Conclusions of Law

The proposed water use will not impair or be detrimental to the public interest pursuant to OAR 690-340-0030(2), as limited in the order below.

Order

Therefore, pursuant to ORS 537.143, ORS 537.144, and OAR 690-340-0030, application **LL-1779** is approved as conditioned below.

1. The period and rate of use for **LL-1779** shall be from license issuance through 5 years, or upon approval of a permit extension and subsequent permit amendment under Permit G-12134, authorizing 2.5 cubic feet per second from two wells, being 1.0 cubic foot per second from Well 3 (POLK 52307) and 1.5 cubic feet per second from Well 4 (proposed) for the purpose of municipal use.
2. The licensee shall give notice to the Watermaster in the district where use is to occur not less than 15 days or more than 60 days in advance of using the water under the limited license. The notice shall include the location of the diversion, the quantity of water to be diverted, and the intended use and place of use. In the case of this application, this order serves as the notice described above.

Page 2

3. Before water use may begin under this limited license, the licensee shall install a totalizing flow meter at each point of appropriation. The totalizing flow meter must be installed and maintained in good working order. In addition, the licensee shall maintain a record of all water use, including the total number of hours of pumping, the total quantity pumped each month, and the categories of beneficial use to which the water is applied. During the period of the limited license, the record of use shall be submitted to the Department annually, and shall be submitted to the Watermaster upon request.

4. The Department requires the water user to obtain, from a qualified individual (see below), and report annual static water levels for each well on the permit. The static water level shall be measured in the month of March. Reports shall be submitted to the Department within 30 days of measurement.

   The permittee shall report an initial March static water-level measurement once well construction is complete and annual measurements thereafter. Annual measurements are required whether or not the well is used. The first annual measurement will establish a reference level against which future measurements will be compared. However, the Director may establish the reference level based on an analysis of other water-level data. The Director may require the user to obtain and report additional water levels each year if more data are needed to evaluate the aquifer system.

   All measurements shall be made by a certified water rights examiner, registered professional geologist, registered professional engineer, licensed well constructor or pump installer licensed by the Construction Contractors Board. Measurements shall be submitted on forms provided by, or specified by, the Department. Measurements shall be made with equipment that is accurate to at least the standards specified in OAR 690-217-0045. The Department requires the individual performing the measurement to:

   A. Associate each measurement with an owner's well name or number and a Department well log ID; and
   B. Report water levels to at least the nearest tenth of a foot as depth-to-water below ground surface; and
   C. Specify the method of measurement; and
   D. Certify the accuracy of all measurements and calculations reported to the Department.

   The Department may require the discontinuance of groundwater use, or reduce the rate or volume of withdrawal, from the well(s) if any of the following events occur:

   A. Annual water-level measurements reveal an average water-level decline of three or more feet per year for five consecutive years; or
   B. Annual water-level measurements reveal a water-level decline of 15 or more feet in fewer than five consecutive years; or
   C. Annual water-level measurements reveal a water-level decline of 25 or more feet; or
   D. Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.

The period of restricted use shall continue until the water level rises above the decline level which triggered the action or the Department determines, based on the permittee's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or causing substantial interference with senior water rights. The water user shall not allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit. If more than one well is involved, the water user may submit an alternative measurement and reporting plan for review and approval by the Department.

5. Groundwater production shall be allowed only from the **alluvial** groundwater reservoir.

6. The Director may revoke the right to use water for any reason described in ORS 537.143(2), and OAR 690-340-0030(6). Such revocation may be prompted by field regulatory activities or by any other information.

7. Use of water under a limited license shall not have priority over any water right exercised according to a permit or certificate, and shall be subordinate to all other authorized uses that rely upon the same source.

8. By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

9. A copy of this limited license shall be kept at the place of use, and be made available for inspection by the Watermaster or other state authority.

NOTE: This water-use authorization is temporary. Applicants are advised that issuance of this final order does not guarantee that any permit for the authorized use will be issued in the future; any investments should be made with that in mind.

Issued July 15, 2019

Dwight French, Water Right Services Division Administrator
for Thomas M. Byler, Director, Oregon Water Resources Department

cc: Joel M. Plahn, District 16 Watermaster
Kim Grigsby, GSI Water Solutions, Inc.
Elise Kelley, ODFW
Nancy Gramlich, DEQ
Hydrographics
File

If you need further assistance, please contact the Water Rights Section at the address, phone number, or fax number below. When contacting the Department, be sure to reference your limited license number for fastest service.

Remember, this limited license does not provide a secure source of water. Water use can be revoked at any time. Such revocation may be prompted by field regulatory activities or many other reasons.

Water Rights Section
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem OR 97301-1271
Phone: (503) 986-0817 Fax: (503) 986-0901

Land Use Information

STATE OF OREGON
DEPARTMENT OF HUMAN SERVICES
DRINKING WATER PROGRAM
LAND USE COMPATIBILITY STATEMENT

Certain plan review approvals for drinking water projects have been identified by the Department of Land Conservation and Development as Class B permits affecting land use. The Department of Human Services is therefore required by ORS 197-180, OAR 660-30-065 to - 070, OAR 660-31-010-040, the Department of Human Service=s state agency coordination program and OAR 333-61-062 to ensure that projects defined in OAR 333-61-062(1) are compatible with city and county comprehensive plans and land use regulations. This form or other acceptable documentation and necessary attachments must accompany each set of project plans to ensure that compatibility.

1. GENERAL INFORMATION

a. Project Title New Water Supply Well - Polk Well 4

b. Applicant City of Independence
Name of Water System

c. Type of project New water supply well for existing system (PWS ID #41-00399)
Treatment, Transmission, Storage, Distribution, Etc.

d. Project contact person Kie Cottam, Public Works Director
Engineer, owners, etc., including title
555 S Main St
Street Address
Independence, OR 97351 503.837.1190
City, State, Zip Code Phone

e. The local government entity* having comprehensive planning authority over the site of the proposed project is:

Agency Name City of Independence Planning Department Phone 503.837.1164

Address 555 S Main St Independence, OR Zip 97351
(*If the proposed project is located within the jurisdiction of more than one planning authority, all entities must certify compatibility.)

f. If a statement of compatibility previously has been submitted to the Department to cover a master water system plan, of which this project is a segment, no further information is required. If such a statement has been filed, the date of the submittal was _____.

(Continued on the back)

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LAND USE COMPATIBILITY DETERMINATION (Complete either 2 or 3)

2. PLANNING AUTHORITY STATEMENT: (To be completed by local planning authority)

a. I certify that this project has been reviewed for compatibility with:

1. ~ The acknowledged comprehensive plan and land use regulations.

2. ~ Statewide planning goals. The goals apply because:

~ There is no acknowledged plan, or
~ Conditions described in OAR 660-31-025(3) apply.

b. I find that this project **(circle one)** IS or IS NOT, compatible.
Attach appropriate land use decision(s) written findings as required in ORS 215.416 (8) or (9) or 227.173 (1) OR (2), or OAR 660-31-025 (2) or (3).

Signed _____ Title City Planner
Date 2/24/2019

3. APPLICANT REQUEST FOR PLAN REVIEW APPROVAL

I hereby certify that I have applied to the local governments cited in 1.e above for a determination of compatibility with the local acknowledged plan or the statewide planning goals as applicable. I hereby request that the Department issue the plan review approval with the understanding that issuance of said approval is not a finding of compliance with the statewide planning goals or compatibility with the applicable, acknowledged comprehensive plan and land use regulations, but will be conditional, pending the applicant receiving a land use approval from each unit of local government. When signed, such approval shall be forwarded to the Department. I understand that plan review approval for this project will not be effective until and unless the Department of Human Services has received a copy of the land use approval and determined it to be complete and adequate.

Signed Kie Cottam Title Director Public Works Date 2/26/19

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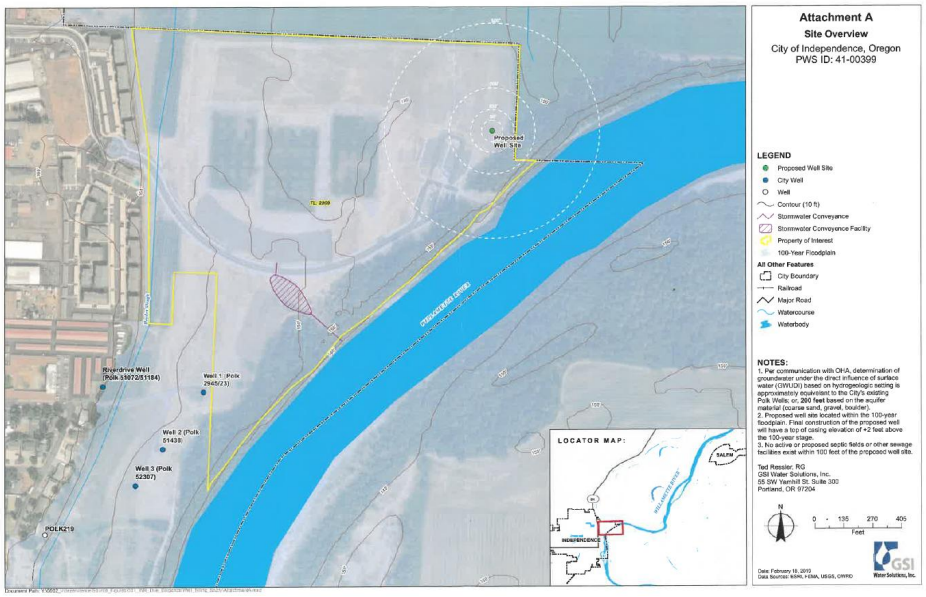


Test Results

Asbestos and Dioxin Waiver Request:

From: Ryan Dougherty <rdougherty@gsiws.com>
Sent: Friday, July 12, 2019 9:36 AM
To: GENTRY Carrie L <Carrie.L.GENTRY@dhsoha.state.or.us>
Cc: Ted Ressler <tressler@gsiws.com>
Subject: Analyte List for City of Independence - Polk Well 4

Think twice before clicking on links or opening attachments. This email came from outside our organization and might not be safe. If you are not expecting an attachment, contact the sender before opening it.

Hey Carrie,

I wanted to follow up on our conversation from a few days ago regarding analytes for OHA's Plan Review process. The City of Independence initiated the Plan Review process for Polk Well 4 in 2019 (PR# 38-2019), and Evan Hofeld's review of the preliminary submittal is attached. We are preparing for aquifer testing and water quality sampling to be completed in the next two weeks, and wanted to confirm with you that our analytical list is complete.

I have attached for your review our planned list of analytes for the raw water sample of the groundwater source. For this sample, we are requesting a waiver from sampling:

1. **Asbestos:** Because the well is constructed in a non-asbestos-bearing aquifer formation; and
2. **Dioxin:** Because the well is constructed in a semi-confined aquifer (~20 feet of silt/clay [Willamette Silt Unit]), and there are no known environmental sites in proximity (1 mile radius) to site with dioxin as a COC.

Please let me know if you approve of the list and omission of asbestos and dioxin from the raw water sample, and don't hesitate to call if you have any questions.

Thanks,
Ryan

GSI Water Solutions, Inc.

Ryan Dougherty, EIT
Project Engineer | Hydrogeologist
direct: 971.200.8537 | mobile: 775.229.5667
55 SW Yamhill Street, Suite 300, Portland, OR 97204
GSI Water Solutions, Inc. | www.gsiws.com

From: PATTEE Tom
Sent: Monday, July 22, 2019 6:03 PM
To: Hofeld Evan E <EVAN.E.HOFELD@dhsoha.state.or.us>; GENTRY Carrie L <Carrie.L.GENTRY@dhsoha.state.or.us>
Cc: DANIELS Bradley K <Bradley.K.DANIELS@dhsoha.state.or.us>
Subject: RE: Analyte List for City of Independence - Polk Well 4

Carrie,

For City of Independence, they don't have to monitor for Dioxin… as for Asbestos, since they are not in an area where asbestiform minerals occur, they only need to document that they don't have any AC pipe in their distribution system.

Questions concerning Dioxin and Asbestos come up every couple of years. There are area-wide waivers in place for both these substances:

For Dioxin:

Surface water: Surface water systems in which there are now or have been in the past, any of the following activities, will be required to monitor their water for Dioxin:

- Pulp and paper manufacturing
- Disposal sites of past production of herbicides containing 2,4,5-trichlorophenol (2,4,5-T).
- Chemical manufacturing plants that produce or have produced 2,4,5-trichlorophenol, 2,4,5-TP (Silvex) or hexachlorophene.
- Municipal and industrial waste incineration facilities.

Groundwater: The potential for Dioxin to travel significant distances in groundwater is low owing to the contaminant's significant tendency to sorb onto organic matter. Therefore, systems drawing from groundwater will not be required to monitor for Dioxin, unless the source is under the direct influence of surface water where Dioxin has been detected.

For Asbestos:

The principle source of asbestos in drinking water are asbestos cement (AC pipe) and natural deposits of asbestiform minerals. Systems are exempt from monitoring for asbestos fibers in their water if they:

1. Document that they do not utilize AC pipe anywhere in their distribution system, and
2. Are outside regions of known or suspected occurrences of asbestiform minerals**.

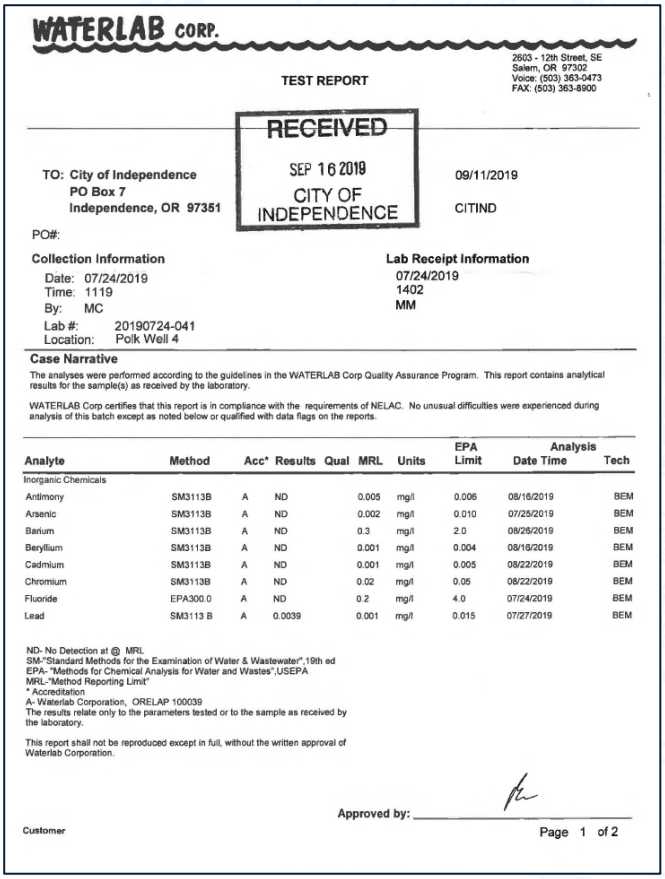
** Asbestiform minerals are associated with specific rock types found only in a few geologic regions of Oregon. These occur in Southwest Oregon (includes all of Curry and Josephine counties and portions of Coos, Douglas, and Jackson Counties). These also occur in Northeast Oregon (primarily Grant and Baker Counties). These geologic regions that potentially host asbestiform minerals make up only a small portion of either of these two areas. Maps showing the location of these areas (completed by Shawn in 2009) can be reviewed on the Portland I: Drive at:

Procedures\Tech Services Procedures\Initial Chemical Sampling New Sources\Craft versions and comments\Asbestos Monitoring Map Project (AMMP)_SS_.pdf

Detections:

Source Sampling Detections for well #4 (SRC-BE)			
Analyte	Sample Date	Detected Level	MCL
Lead	7/24/19	0.0039 mg/l (3.9 ppb)	10 ppb
Nitrate	7/24/19	18.5 mg/l	10 mg/l
	12/3/25	12.9 mg/l	
	1/21/26	11.4 mg/l	
	2/18/26	12.5 mg/l	
Sodium	7/24/19	11.5 mg/l	20 mg/l (SMCL)
Radium 226/228	7/24/19	1.6 pCi/L	5 pCi/L

7/24/19 Sampling Results



WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

RECEIVED
SEP 16 2019
CITY OF INDEPENDENCE

TO: City of Independence
PO Box 7
Independence, OR 97351

09/11/2019

CITIND

PO#:

Collection Information
Date: 07/24/2019
Time: 1119
By: MC
Lab #: 20190724-041
Location: Polk Well 4

Lab Receipt Information
07/24/2019
1402
MM

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Inorganic Chemicals									
Antimony	SM3113B	A	ND		0.005	mg/l	0.006	08/16/2019	BEM
Arsenic	SM3113B	A	ND		0.002	mg/l	0.010	07/25/2019	BEM
Barium	SM3113B	A	ND		0.3	mg/l	2.0	08/26/2019	BEM
Beryllium	SM3113B	A	ND		0.001	mg/l	0.004	08/16/2019	BEM
Cadmium	SM3113B	A	ND		0.001	mg/l	0.005	08/22/2019	BEM
Chromium	SM3113B	A	ND		0.02	mg/l	0.05	08/22/2019	BEM
Fluoride	EPA300.0	A	ND		0.2	mg/l	4.0	07/24/2019	BEM
Lead	SM3113 B	A	0.0039		0.001	mg/l	0.015	07/27/2019	BEM

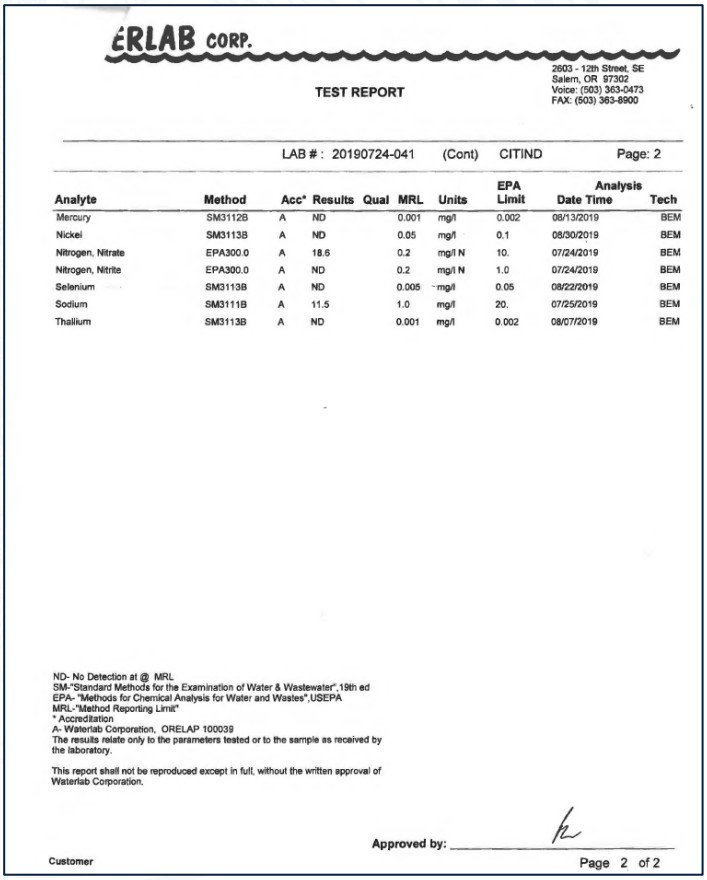
ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",19th ed
EPA- "Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
* Accreditation
A- Waterlab Corporation, ORELAP 100039
The results relate only to the parameters tested or to the sample as received by the laboratory.

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.

Approved by: _____

Customer

Page 1 of 2



ERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

LAB # : 20190724-041 (Cont) CITIND Page: 2

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Mercury	SM3112B	A	ND		0.001	mg/l	0.002	08/13/2019	BEM
Nickel	SM3113B	A	ND		0.05	mg/l	0.1	08/30/2019	BEM
Nitrogen, Nitrate	EPA300.0	A	18.6		0.2	mg/l N	10.	07/24/2019	BEM
Nitrogen, Nitrite	EPA300.0	A	ND		0.2	mg/l N	1.0	07/24/2019	BEM
Selenium	SM3113B	A	ND		0.005	mg/l	0.05	08/22/2019	BEM
Sodium	SM3111B	A	11.5		1.0	mg/l	20.	07/25/2019	BEM
Thallium	SM3113B	A	ND		0.001	mg/l	0.002	08/07/2019	BEM

ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",19th ed
EPA- "Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
* Accreditation
A- Waterlab Corporation, ORELAP 100039
The results relate only to the parameters tested or to the sample as received by the laboratory.

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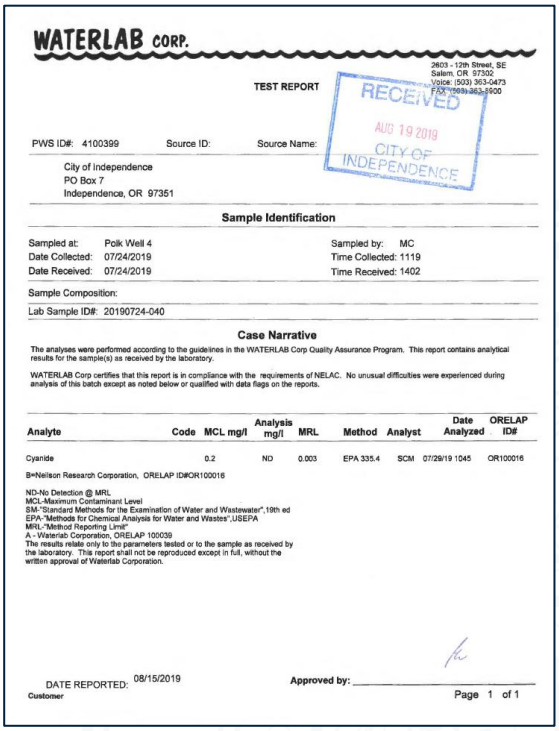
Approved by: _____

Customer

Page 2 of 2



WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

RECEIVED
AUG 19 2019
CITY OF INDEPENDENCE

PWS ID#: 4100399 Source ID: Source Name:

City of Independence
PO Box 7
Independence, OR 97351

Sample Identification

Sampled at: Polk Well 4
Date Collected: 07/24/2019
Date Received: 07/24/2019
Sampled by: MC
Time Collected: 1119
Time Received: 1402

Sample Composition:

Lab Sample ID#: 20190724-040

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

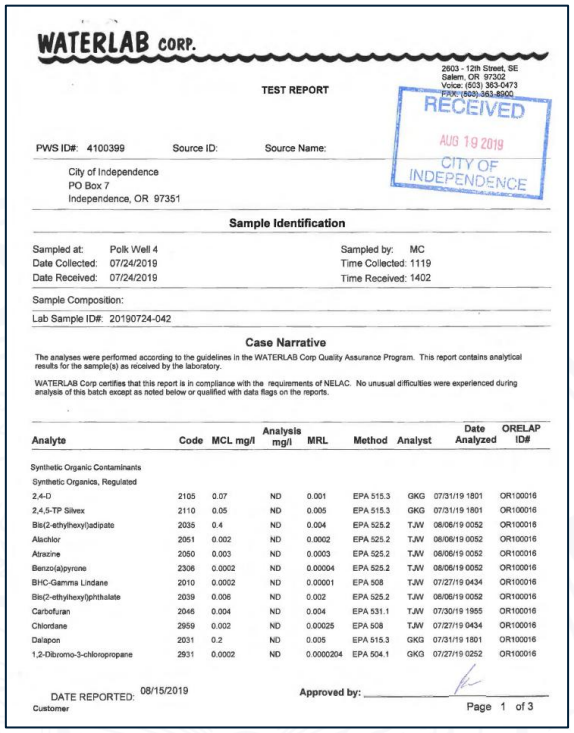
Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#
Cyanide		0.2	ND	0.003	EPA 335.4	SCM	07/29/19 1045	OR100016

B=Neilson Research Corporation, ORELAP ID#OR100016

ND-No Detection @ MRL
MCL-Maximum Contaminant Level
SM-"Standard Methods for the Examination of Water and Wastewater",19th ed
EPA-"Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
A - Waterlab Corporation, ORELAP 100039

DATE REPORTED: 08/15/2019
Customer

Approved by: _____



WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

RECEIVED
AUG 19 2019
CITY OF INDEPENDENCE

PWS ID#: 4100399 Source ID: Source Name:

City of Independence
PO Box 7
Independence, OR 97351

Sample Identification

Sampled at: Polk Well 4
Date Collected: 07/24/2019
Date Received: 07/24/2019
Sampled by: MC
Time Collected: 1119
Time Received: 1402

Sample Composition:

Lab Sample ID#: 20190724-042

Case Narrative

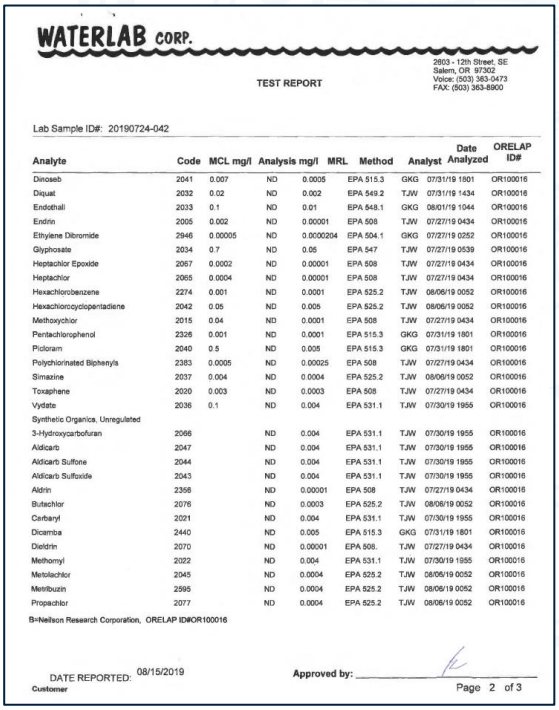
The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#
Synthetic Organic Contaminants								
Synthetic Organics, Regulated								
2,4-D	2105	0.07	ND	0.001	EPA 515.3	GKG	07/31/19 1801	OR100016
2,4,5-TP Silvex	2110	0.05	ND	0.005	EPA 515.3	GKG	07/31/19 1801	OR100016
Bis(2-ethylhexyl)adipate	2035	0.4	ND	0.004	EPA 525.2	TJW	08/06/19 0052	OR100016
Alachlor	2051	0.002	ND	0.0002	EPA 525.2	TJW	08/06/19 0052	OR100016
Atrazine	2050	0.003	ND	0.0003	EPA 525.2	TJW	08/06/19 0052	OR100016
Benzo(a)pyrene	2306	0.0002	ND	0.00004	EPA 525.2	TJW	08/06/19 0052	OR100016
BHC-Gamma Lindane	2010	0.0002	ND	0.00001	EPA 508	TJW	07/27/19 0434	OR100016
Bis(2-ethylhexyl)phthalate	2039	0.006	ND	0.002	EPA 525.2	TJW	08/06/19 0052	OR100016
Carbofuran	2046	0.004	ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Chlordane	2959	0.002	ND	0.00025	EPA 508	TJW	07/27/19 0434	OR100016
Dalapon	2031	0.2	ND	0.005	EPA 515.3	GKG	07/31/19 1801	OR100016
1,2-Dibromo-3-chloropropane	2931	0.0002	ND	0.0000204	EPA 504.1	GKG	07/27/19 0252	OR100016

DATE REPORTED: 08/15/2019
Customer

Approved by: _____



WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

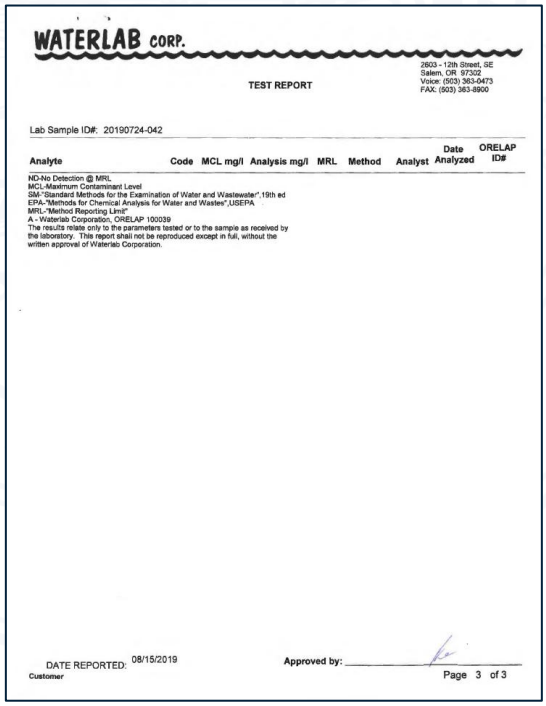
Lab Sample ID#: 20190724-042

Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#
Dinoseb	2041	0.007	ND	0.0005	EPA 515.3	GKG	07/31/19 1801	OR100016
Diquat	2032	0.02	ND	0.002	EPA 549.2	TJW	07/31/19 1434	OR100016
Endothall	2033	0.1	ND	0.01	EPA 548.1	GKG	08/01/19 1044	OR100016
Endrin	2005	0.002	ND	0.00001	EPA 508	TJW	07/27/19 0434	OR100016
Ethylene Dibromide	2946	0.00005	ND	0.0000204	EPA 504.1	GKG	07/27/19 0252	OR100016
Glyphosate	2034	0.7	ND	0.05	EPA 547	TJW	07/27/19 0539	OR100016
Heptachlor Epoxide	2067	0.0002	ND	0.00001	EPA 508	TJW	07/27/19 0434	OR100016
Heptachlor	2065	0.0004	ND	0.00001	EPA 508	TJW	07/27/19 0434	OR100016
Hexachlorobenzene	2274	0.001	ND	0.0001	EPA 525.2	TJW	08/06/19 0052	OR100016
Hexachlorocyclopentadiene	2042	0.05	ND	0.005	EPA 525.2	TJW	08/06/19 0052	OR100016
Methoxychlor	2015	0.04	ND	0.0001	EPA 508	TJW	07/27/19 0434	OR100016
Pentachlorophenol	2326	0.001	ND	0.0001	EPA 515.3	GKG	07/31/19 1801	OR100016
Picloram	2040	0.5	ND	0.005	EPA 515.3	GKG	07/31/19 1801	OR100016
Polychlorinated Biphenyls	2383	0.0005	ND	0.00025	EPA 508	TJW	07/27/19 0434	OR100016
Simazine	2037	0.004	ND	0.0004	EPA 525.2	TJW	08/06/19 0052	OR100016
Toxaphene	2020	0.003	ND	0.0003	EPA 508	TJW	07/27/19 0434	OR100016
Vydate	2036	0.1	ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Synthetic Organics, Unregulated								
3-Hydroxycarbofuran	2066		ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Aldicarb	2047		ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Aldicarb Sulfone	2044		ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Aldicarb Sulfoxide	2043		ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Aldrin	2358		ND	0.00001	EPA 508	TJW	07/27/19 0434	OR100016
Butachlor	2076		ND	0.0003	EPA 525.2	TJW	08/06/19 0052	OR100016
Carbaryl	2021		ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Dicamba	2440		ND	0.005	EPA 515.3	GKG	07/31/19 1801	OR100016
Dieldrin	2070		ND	0.00001	EPA 508.	TJW	07/27/19 0434	OR100016
Methomyl	2022		ND	0.004	EPA 531.1	TJW	07/30/19 1955	OR100016
Metolachlor	2045		ND	0.0004	EPA 525.2	TJW	08/06/19 0052	OR100016
Metribuzin	2595		ND	0.0004	EPA 525.2	TJW	08/06/19 0052	OR100016
Propachlor	2077		ND	0.0004	EPA 525.2	TJW	08/06/19 0052	OR100016

B=Neilson Research Corporation, ORELAP ID#OR100016

DATE REPORTED: 08/15/2019
Customer

Approved by: _____



WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

Lab Sample ID#: 20190724-042

Analyte	Code	MCL mg/l	Analysis mg/l	MRL	Method	Analyst	Date Analyzed	ORELAP ID#

ND-No Detection @ MRL
MCL-Maximum Contaminant Level
SM-"Standard Methods for the Examination of Water and Wastewater",19th ed
EPA-"Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
A - Waterlab Corporation, ORELAP 100039

DATE REPORTED: 08/15/2019
Customer

Approved by: _____

WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

TO: City of Independence
PO Box 7
Independence, OR 97351

08/27/2019

CITIND

PO#:

Collection Information
Date: 07/24/2019
Time: 1119
By: MC
Lab #: 20190724-045
Location: Polk Well 4

Lab Receipt Information
07/24/2019
1402
MM

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date	Time	Tech
Radionuclides total		D	see attached					08/06/2019	1736	jcg

RECEIVED
SEP 03 2019
CITY OF INDEPENDENCE

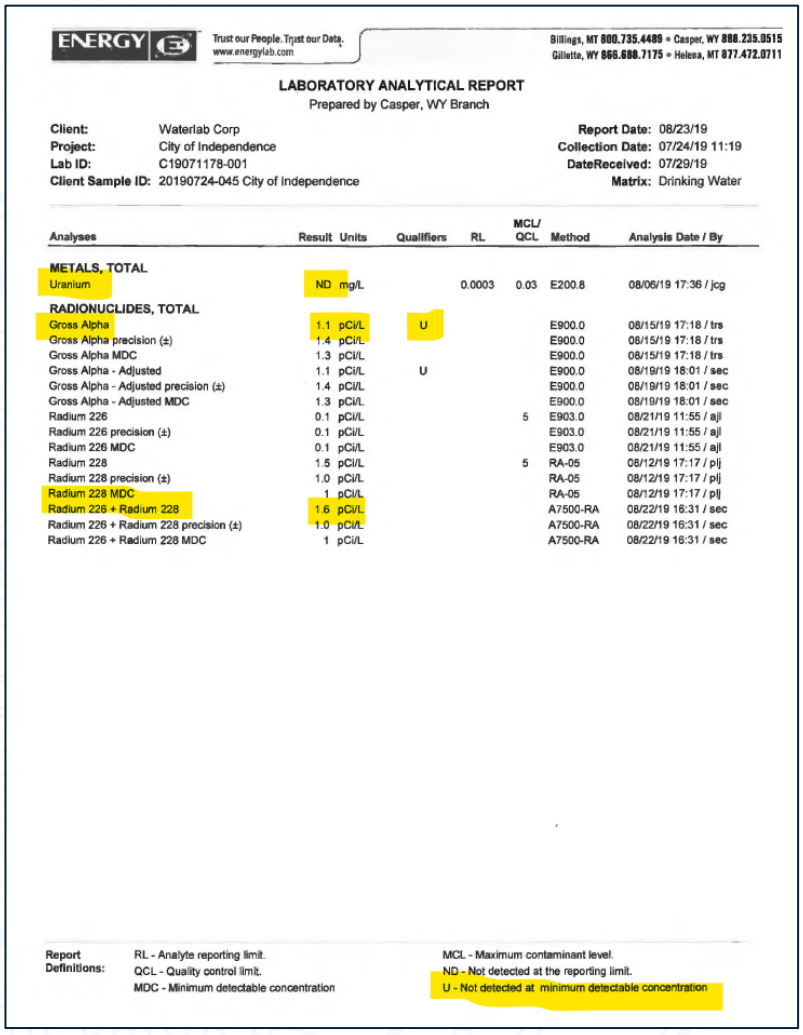
ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",19th ed
EPA- "Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
* Accreditation:
A- Waterlab Corporation, ORELAP 100039
The results relate only to the parameters tested or to the sample as received by the laboratory.

This report shall not be reproduced except in full, without the written approval of Waterlab Corporation.
D = Energy Laboratories, Inc ORELAP ID #WY200001

Approved by: _____

Customer

Page 1 of 1



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Billings, MT 800.735.4489 • Casper, WY 888.235.0515
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

LABORATORY ANALYTICAL REPORT
Prepared by Casper, WY Branch

Client: Waterlab Corp
Project: City of Independence
Lab ID: C19071178-001
Client Sample ID: 20190724-045 City of Independence

Report Date: 08/23/19
Collection Date: 07/24/19 11:19
DateReceived: 07/29/19
Matrix: Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL							
Uranium	ND	mg/L		0.0003	0.03	E200.8	08/06/19 17:36 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	1.1	pCi/L	U			E900.0	08/15/19 17:18 / trs
Gross Alpha precision (±)	1.4	pCi/L				E900.0	08/15/19 17:18 / trs
Gross Alpha MDC	1.3	pCi/L				E900.0	08/15/19 17:18 / trs
Gross Alpha - Adjusted	1.1	pCi/L	U			E900.0	08/19/19 18:01 / sec
Gross Alpha - Adjusted precision (±)	1.4	pCi/L				E900.0	08/19/19 18:01 / sec
Gross Alpha - Adjusted MDC	1.3	pCi/L				E900.0	08/19/19 18:01 / sec
Radium 226	0.1	pCi/L			5	E903.0	08/21/19 11:55 / ajl
Radium 226 precision (±)	0.1	pCi/L				E903.0	08/21/19 11:55 / ajl
Radium 226 MDC	0.1	pCi/L				E903.0	08/21/19 11:55 / ajl
Radium 228	1.5	pCi/L			5	RA-05	08/12/19 17:17 / plj
Radium 228 precision (±)	1.0	pCi/L				RA-05	08/12/19 17:17 / plj
Radium 228 MDC	1	pCi/L				RA-05	08/12/19 17:17 / plj
Radium 226 + Radium 228	1.6	pCi/L				A7500-RA	08/22/19 16:31 / sec
Radium 226 + Radium 228 precision (±)	1.0	pCi/L				A7500-RA	08/22/19 16:31 / sec
Radium 226 + Radium 228 MDC	1	pCi/L				A7500-RA	08/22/19 16:31 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

10/9/2019 Sampling Results

WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

RECEIVED
OCT 18 2019
CITY OF INDEPENDENCE

TO: City of Independence
PO Box 7
Independence, OR 97351

10/14/2019

CITIND

PO#:

Collection Information

Date: 10/09/2019
Time: 0942
By: MC
Lab #: 20191009-048
Location: Polk well #4

Lab Receipt Information

10/09/2019
1354
MM

Case Narrative

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAC. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time		Tech
Nitrogen, Nitrate	EPA300.0	A	ND		0.2	mg/l N	10.	10/09/2019	2117	AS

ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",19th ed
EPA- "Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
* Accreditation
A- Waterlab Corporation, ORELAP 100039
The results relate only to the parameters tested or to the sample as received by the laboratory.

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Approved by: _____

Customer

Page 1 of 1

2025/2026 nitrate sampling results used for blending recommendation calculations.

TO: City of Independence
555 S Main St. PO Box 7
Independence, OR 97351

12/4/2025

CITIND

PO#:

PWS ID#: 4100399

Collection Information
Date: 12/3/2025
Time: 0837
By: MC
Lab #: 20251203-008
Location: Polk Well 4

Lab Receipt Information
12/3/2025
0922
SM

Case Narrative

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Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Nitrogen, Nitrate - RUSH	EPA300.0	A	12.9	EH	0.2	mg NO3-N/l	10.	12/3/2025 1728	as

ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",20th ed
EPA- "Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
* Accreditation
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EH = Exceeds EPA Standard = Health Hazard

Approved by: _____

Page 1 of 1

WATERLAB CORP.

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

TEST REPORT

TO: City of Independence
555 S Main St. PO Box 7
Independence, OR 97351

01/22/2026

CITIND

PO#:

PWS ID#: 4100399

Collection Information
Date: 01/21/2026
Time: 0838
By: MC
Lab #: 20260121-010
Location: polk well 4 sample tap

Lab Receipt Information
01/21/2026
0953
SW

Case Narrative

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Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Nitrogen, Nitrate	EPA300.0	A	11.4		0.2	mg NO3-N/l	10.	01/21/2026 1703	as

ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",20th ed
EPA- "Methods for Chemical Analysis for Water and Wastes",USEPA
MRL-"Method Reporting Limit"
* Accreditation
A- Waterlab Corporation, ORELAP 100039
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---

TO: City of Independence
555 S Main St. PO Box 7
Independence, OR 97351

02/20/2026

CITIND

PO#:

PWS ID#: 4100399

Collection Information
Date: 02/18/2026
Time: 0810
By: TG
Lab #: 20260218-009
Location: Polk well 4

Lab Receipt Information
02/18/2026
0935
SM

Case Narrative

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Analyte	Method	Acc*	Results	Qual	MRL	Units	EPA Limit	Analysis Date Time	Tech
Nitrogen, Nitrate	EPA300.0	A	12.5		0.2	mg NO3-N/l	10.	02/19/2026 1707	as

ND- No Detection at @ MRL
SM-"Standard Methods for the Examination of Water & Wastewater",20th ed
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MRL-"Method Reporting Limit"
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Page 1 of 1

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS & PLANNERS

4/15/2026
Revised 4/23/2026

Gerald Fisher, PE
Public Works Director, City of Independence
555 South Main Street
Independence, OR 97351

RE: Well # 4 Blending Recommendation

Dear Gerald:

As you know, Well #4 was completed earlier this year. Attached is the Final Approval Request Form which can be submitted to OHA upon your approval.

Nitrate testing was completed on Well #4 as follows:
12/3/2025; 12.9 Mg/L
1/21/2026; 11.4 Mg/l
2/18/2026; 12.5 Mg/l
The average nitrate level of the three test is 12.3 MG/L. Currently Wells #1-3 plus River Drive are intertied and combined flow tested for nitrates. The highest nitrate level tested in the combined flow is 1.34 Mg/L

Westech Engineering is recommending Well #4 be blended with Wells #1-3 to provide a reduced nitrate level meeting OHA Standards. Currently Well # 1-3 plus River Drive produce 1150 GPM and the new Well # 4 produces 500 GPM. By blending all four wells together, the total production will be 1650 GPM. At that flow, Well #4 will produce 30.3% of the total flow. We calculate the blended nitrate levels assuming the current well production as follows:

((1150 x 1.34) + (500 x 12.3)) / 1650 = 4.66 Mg/L (Well below OHA requirement of 10 Mg/L

The above calculation assumes all four wells are blended together at a production rate of 1650 GPM. If the production rate changes in any well changes, additional testing and blending calculations are required.

Please call or email if you have any question regarding our recommendations.

Sincerely,
Westech Engineering Inc.

Steven A Ward PE

Cc: Matt Carpenter

3841 Fairview Industrial Dr. S.E., Suite 100, Salem, Oregon 97302
Phone: (503) 585-2474 Fax: (503) 585-3986