



## State of Utah

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## Department of Environmental Quality

Kimberly D. Shelley  
*Executive Director*

DIVISION OF DRINKING WATER  
Nathan Lunstad, Ph.D., P.E.  
*Director*

December 4, 2024

Craig Weston  
Kane Springs Water Co.  
51 West Center #515  
Orem, Utah 84057

Subject: **Plan Approval**, Well Equipping, Kane Springs Water Co. Well #1 (WS001)  
Kane Springs Water Co. (Kane Springs Campground), System #10048, File #11980

Dear Craig Weston:

The Division of Drinking Water (the Division) received the plans and specifications for equipping the Kane Springs Water Co. Well #1 from your consultant, William Anderson with Anderson Engineering Inc. on June 05, 2024. Revised plans and specifications were received on September 03, 2024. The Division originally issued Plan Approval for drilling the Kane Springs Water Co. Well #1 on April 3, 2020. The well grouting was witnessed on June 24, 2019 (the well was a “test well” at that time). The Division then issued Plan Approval for equipping the well on April 15, 2020. The well was not equipped after approval and the project was tabled.

Our understanding of the project is the Kane Springs Water Co. Well #1 will be equipped with a 7.5 hp Franklin Electric tri-seal high capacity submersible pump, model 60FH7S4-PECV, capable of a pumping rate of 60 gallons per minute (gpm) which will be limited by a VFD drive/pump rate that will not exceed 50 gpm, a Baker Mfg. Co. pitless adapter, model no 4PS810WBWE02F3S, the construction of a climate controlled well house and the installation of associated valving and metering equipment.

We also understand that an aquifer pump test was conducted which indicates a sustainable constant pumping rate of 60 gpm. This will result in the Division assigning a “safe yield” of 40 gpm for this new well. This well is identified as WS001 in the Division’s database.

We have received the following information for Kane Springs Water Co. Well #1:

1. Certification of well seal.
2. Well driller’s report (well log).
3. Aquifer drawdown test results including step drawdown test and constant-rate test.
4. New Source Chemical Analysis of the well water.

5. Plans and specifications for equipping the well.
  - a. Pump information including pump curve and operating point.
  - b. Well head discharge piping design.
  - c. Well house design and pitless adapter specifications.

We have completed our review of the plans and specifications, stamped and signed by William Anderson, P. E., and dated August 29, 2024, and find they basically comply with the applicable portions of *Utah's Administrative Rules for Public Drinking Water Systems in R309*. On this basis, **the plans for equipping Kane Springs Water Co. Well #1, the construction of a well house and the associated piping required to connect this well to a future distribution system are hereby approved.**

This approval pertains to construction only. **An Operating Permit must be obtained from the Director before Kane Springs Water Co. Well #1 may be put into service.** A checklist outlining the well approval process, including the items required for issuing an operating permit for this well is enclosed for your information. Enclosed please also find an Operating permit Checklist for other components of this project.

Approvals or permits from the local authority or county may be necessary before beginning construction of this project. As the project proceeds, notice of any changes in the approved design, as well as any change affecting the quantity or quality of the delivered water, must be submitted to the Division. We may also conduct interim and final inspections of this project. Please notify us when actual construction begins so that these inspections can be scheduled.

This approval must be renewed if construction has not begun or if substantial equipment has not been ordered within one year of the date of this letter.

If you have any questions regarding this approval, please contact Curtis Page, P.E. of this office, at (435) 650-7795, or me at (385) 515-1464.

Sincerely,



Michael Newberry, P.E.  
Permitting and Engineering Support Manager

CMP/mrn/mdb

Enclosures — Well Approval Checklist; Operating Permit Checklist

cc: Orion Rogers, Southeast Utah Health Department, orogers@utah.gov  
William Anderson P.E., Anderson Engineering Inc., bill@andersonmontana.com  
Curtis M. Page, P.E., DEQ Southeast District Engineer, cmpage@utah.gov  
Craig Weston, Kane Creek Campground, cnweston@icloud.com  
David Kruse, Division of Drinking Water, dbkruse@utah.gov (arsenic, inorganics, organics, NO3, rads)  
Sitara Federico, Division of Drinking Water, sfederico@utah.gov (RTCR/bact. sampling)

**Division of Drinking Water**  
**Checklist for New Public Drinking Water Wells**  
(Per Utah Administrative Code, Rule *R309-515-6*)

System Name: \_\_\_\_\_ System Number: \_\_\_\_\_

Well Name & Description: \_\_\_\_\_

**1. Approval to Drill the Well**

- ☐ Project Notification Form (PNF)
- ☐ Preliminary Evaluation Report (PER) concurrence
- ☐ Well drilling specifications and plans
- ☐ Valid Start Card or authorization to drill letter from the Division of Water Rights

**2. Approval to Equip the Well**

- ☐ PNF (if the well drilling and well equipping are designed by different consultants)
- ☐ Well location data
- ☐ Certification of well seal
- ☐ Well driller's report (well log)
- ☐ Aquifer drawdown test results (step drawdown test & constant-rate test) for well yield determination
- ☐ Chemical analyses of the well water
- ☐ Plans and specifications for equipping the well
  - ☐ Pump information (e.g., pump specifications, pump curve & operating point, motor information, etc.)
  - ☐ Well head discharge piping
  - ☐ Well house design

**3. Operating Permit to Introduce the Well Water**

- ☐ Documentation of valid water right(s)
- ☐ Recorded land use agreements, or documentation that the requirements for coverage under the City/County source protection ordinance have been met
- ☐ Design engineer's certification of conformance with plan approval conditions
- ☐ Design engineer's certification of rule conformance for any deviation from approved plans
- ☐ As-built or record drawings
- ☐ Evidence of O&M manual delivery to system owner
- ☐ Satisfactory bacteriological results as evidence of proper flushing and disinfection

## Utah Division of Drinking Water — Checklist for Issuing Operating Permits

Water System Name: \_\_\_\_\_ System Number: \_\_\_\_\_

Project Description: \_\_\_\_\_ File Number: \_\_\_\_\_

Items 1 through 8 below must be submitted to the Division and found to be acceptable prior to operating permit issuance (unless a water line project meets the requirements of R309-500-7 and is not required to obtain an Operating Permit).

Distribution lines (not including in-line booster pump stations) requiring Plan Approval may be placed into service prior to submitting all of the following items and receipt of Operating Permit if the water system has received items 1 and 4 below.

- ☐ 1. Certification of Rule Conformance by a professional engineer (P.E.) that all conditions of Plan Approval were accomplished, and if applicable, changes made during construction were in conformance with rules R309-500 through 550
- ☐ 2. As-built or record drawings incorporating all changes to approved plans and specifications (unless no changes were made to the previously approved plans during construction)
- ☐ 3. Confirmation that as-built or record drawings have been received by the water system
- ☐ 4. Satisfactory bacteriological samples as evidence of proper disinfection and flushing in accordance with the appropriate ANSI/AWWA standards:
  - ☐ ANSI/AWWA C651-14 AWWA Standard for Disinfecting Water Mains  
Two consecutive sample sets at least 16 hours apart, none positive (every 1200 feet, end-of-line, each branch, etc.)
  - ☐ ANSI/AWWA C652-11 AWWA Standard for Disinfection of Water-Storage Facilities  
One or more samples, none positive
  - ☐ ANSI/AWWA C653-13 AWWA Standard for Disinfection of Water Treatment Plants  
Two consecutive samples per unit, none positive, no less than 30 minutes apart
  - ☐ ANSI/AWWA C654-13 AWWA Standard for Disinfection of Wells  
Two consecutive samples, none positive, no less than 30 minutes apart
- ☐ 5. *Water quality data, where appropriate [For example, water quality data showing MCL compliance; raw and finished water data that demonstrate satisfactory performance of the new treatment facility.]*
- ☐ 6. If applicable, all other documentation that may have been required during the plan review process
- ☐ 7. If applicable, confirmation that the water system owner has received the O&M manual for the new facility
- ☐ 8. If applicable, location data of new storage tank, treatment facility, or source