Bureau of Land Management

Park Center Well
Primary and Secondary Valve Replacement – Statement of Work

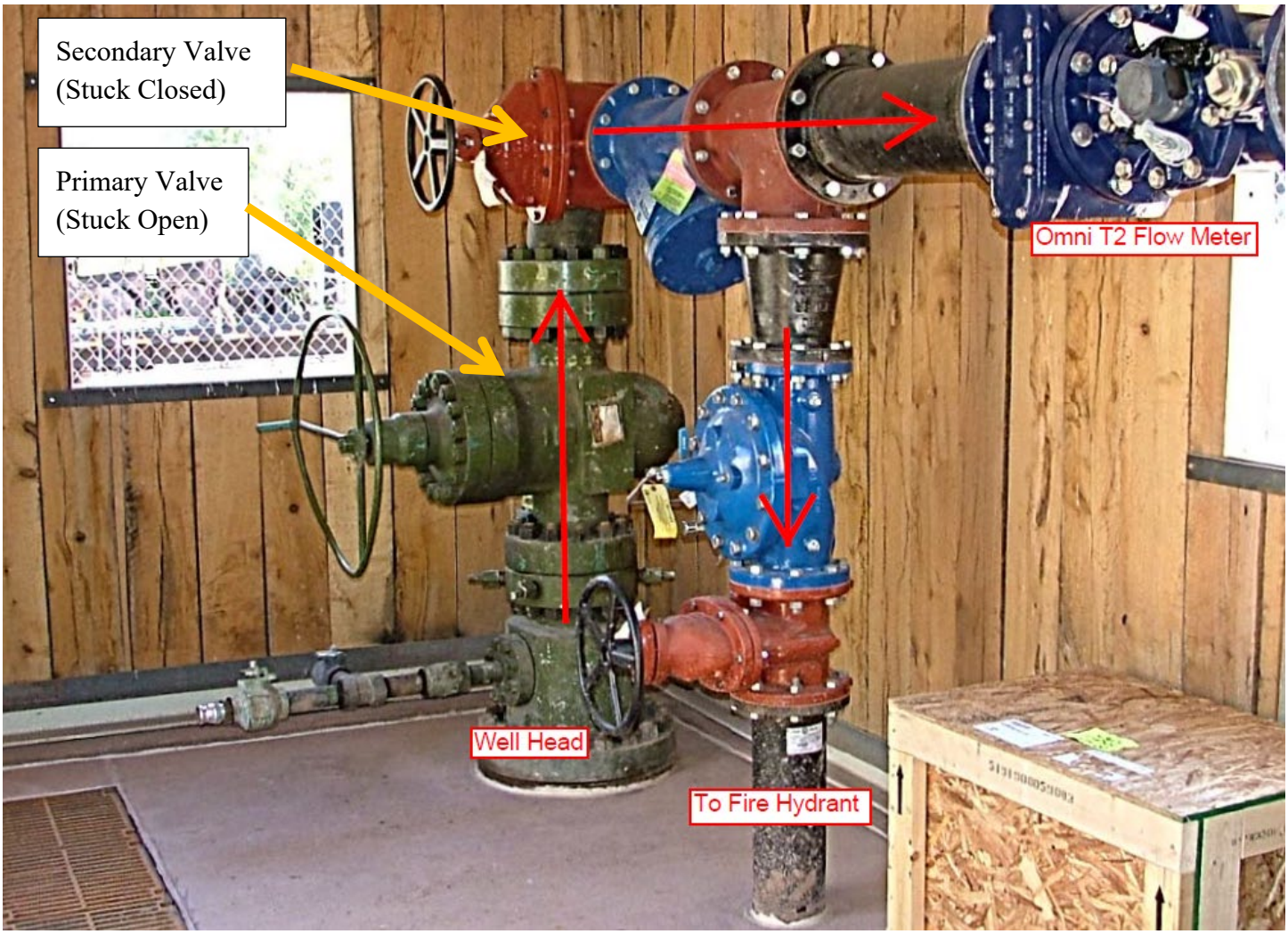
Tuesday, May 19, 2026

1.0 Project Overview and Location

The objective of this project is to replace the failed primary (green) and secondary (red) control valves and modify the manifold piping at the Park Center Well. The project requires a specialized "live-well" intervention to manage 200 PSI artesian flow without a functional primary shut-off. Work includes the temporary relocation of the existing well house via crane, manifold modification for future rig connectivity, and strict adherence to environmental discharge permits.

Google Map Link: https://maps.app.goo.gl/b6PjGe3ZHj6ipixQ9

The primary valve is the green gate valve just downstream of the wellhead. The secondary valve is the red gate valve just downstream from the primary green valve. This can be seen better in the picture below:



2.0 References and Standards

All work and materials shall comply with the following standards:

- ANSI B 16.1: Cast Iron Pipe Flanges and Flanged Fittings.
- ASTM A 536: Ductile Iron Castings.
- AWWA C 115/A 21.15: Flanged Ductile Iron or Gray Iron Threaded Flanges.
- AWWA C 515 / C 500: Resilient-Seated / Metal-Seated Gate Valves.
- State of Colorado 2 CCR 402-2: Rules and regulations for water well construction, pump installation, cistern installation, and monitoring and observation hole/well construction
- NPDES Permit CO-0035017: National Pollutant Discharge Elimination System requirements.
- 43 CFR 3176 Requirements
- OHSA

3.0 Submittals & Administrative Requirements

The Contractor shall submit the following for Government approval. No work shall commence until all submittals are approved.

- Identification of Submittals: Each submittal must include the project name, contract number, drawing number, and specification section.
- Review Period: Allow at least 10 working days for Government review of all submittals.

3.1 Submittals:

  - Work Schedule: Submit a progress schedule within 5 calendar days after the Notice to Proceed (NTP).
  - Critical Lift Plan: A formal rigging plan for the relocation of the well house, including crane capacity and internal bracing details.
  - Lower Explosive Limit (LEL) Plan
  - Barrier Management Plan: Pre Job, Active Job, Well Control Plan, and Post Job
  - Product Data/Cut Sheets
  - Restoration plan
  - Valve and System Maintenance Plan: Inspection methods and frequency, testing methods/testing parameters/testing frequency, and routine maintenance

4. Site and Well Conditions

Access to the project site is governed by FAR 52.236-10, with standard work hours restricted to Monday through Friday, 8:00 AM to 5:00 PM, excluding federal holidays and weekends unless prior written approval is granted by the COR. Additionally, all vehicles and heavy equipment must be cleaned of dirt and debris to prevent the spread of noxious weeds and must be inspected by the COR with at least 24 hours' notice prior to entering the work area.

The contractor must account for the following technical conditions when planning and executing the work:

- Well Type: High-pressure artesian well.
- Operating Pressure: 200 PSI.
- Water Temperature: Approximately 98°F.
- Water Chemistry: High arsenic content and presence of gases.
- Piping: 8-inch diameter primary delivery line.
- Well Depth: 2786 Feet

5.0 Technical Scope of Work

5.1 Structural Access and Crane Operations

The well house building is believed to be bolted to a stem wall foundation. The contractor can remove the building for valve replacement.

- Lifting Operations: The Contractor shall provide a crane of sufficient capacity to lift and temporarily relocate the existing well house building as a single unit.
- Rigging and Integrity: The Contractor is responsible for the structural integrity of the building during the lift. This includes the installation of temporary internal bracing, spreader bars, and lifting points to prevent racking or structural failure.
- Temporary Storage: The building shall be secured in a designated on-site area that does not interfere with rig operations or environmental containment zones.

5.2 Site Preparation and Subsurface Access

Following the successful relocation of the well house structure via crane, the Contractor is authorized to demolish the existing reinforced concrete pads, remove flowable fill (flowfill), and perform all necessary excavation required to expose the 8-inch manifold and wellhead assembly. Historical construction photos are provided in the attachments to illustrate the original installation process and the typical subsurface configuration; the Contractor shall utilize these references to inform their demolition and excavation strategies.

5.3 Flow Control and Isolation (Contractor's Risk)

The contractor is solely responsible for isolating the artesian flow to facilitate the safe removal of existing valves. The green primary valve is currently non-functional (will not close), and the red secondary valve is stuck closed.

- Methods: The contractor may propose methods such as cryogenic pipe freezing or "hot tapping" through the existing valves rr any other viable methods that can effectively promote safety and reduce costs.
- Risk: The contractor assumes all liability for the containment of the artesian flow (200 PSI) and any potential "blowout" or uncontrolled discharge during the repair process.
- Option: Displayed in the picture below, the red and blue circle show 3" pipes. If these 3" piping can gain access into the center wellbore, kill operations can be viable. QuartzPack (Flopetrol - Advanced Well Integrity Solutions) or approved equal could be used to kill the well.

5.4 Manifold Modification and Valve Replacement

- Primary Valve Replacement: Remove the failed 8" green gate valve (furthest downstream) and replace it with a new API 6D or equivalent gate valve.
- Secondary Valve Replacement: Remove the failed 8" red gate valve and replace it with a new API 6D or equivalent gate valve.
- Tree Modification: Remove the existing 90-degree elbow located between the primary and secondary valves. Install an 8" x 8" x 8" Flanged Tee in its place.
    - The branch of the Tee must be oriented to allow for future rig connection so that well reentry can occur to enable any workover operations.
    - The branch must be capped with a blind flange or a third high-pressure gate valve.
    - The existing 90-degree elbow can be seen circled in red below:

5.5 Site Restoration

Following successful installation and testing, the contractor must restore the site to "as-new" or original condition, including:

- Replacement of all concrete foundations and flooring if removed.
- Re-anchoring: Following the successful manifold replacement and concrete slab restoration, the Contractor shall reset the building onto the original footprint.
- Sealing and Integration: The Contractor shall provide new anchor bolts, sill sealers, and weatherproofing at the slab interface. All electrical and IT infrastructure (for flow meters and monitoring) must be reconnected and tested for functionality if disconnected.
- Backfilling and regrading the surrounding area to ensure proper drainage.
- Disposal of Debris: All removed infrastructure—including the primary and secondary 8-inch gate valves, manifold piping, and associated hardware—shall become the property of the Contractor upon removal. The Contractor is responsible for the characterization, manifesting, transportation, and legal disposal of all debris at a licensed facility. Bidders are advised that removed components likely contain accumulated arsenic scale; all disposal activities must be conducted in strict accordance with Colorado Department of Public Health and Environment (CDPHE) regulations and applicable state laws regarding industrial or hazardous waste.

6.0 Material Specifications

All materials must be of the highest industrial quality and compliant with the "Build America, Buy America" (BABA) or "American Iron and Steel" (AIS) requirements.

- Valves: 8-inch, Class 250 (or 300) gate valves. Due to the 98°F water and arsenic, valves should feature stainless steel stems and corrosion-resistant internals (e.g., 316 Stainless Steel or Duplex).
- Seals/Gaskets: High-temperature rated EPDM or Viton, capable of withstanding 200 PSI at 100°F+.
- Standards: Must meet or exceed AWWA C500 (Metal-Seated) or AWWA C515 (Reduced-Wall Resilient-Seated) gate valve standards.

Coatings: Internal and external Fusion Bonded Epoxy (FBE) coating to prevent scaling and corrosion

7.0 Permitting and Environmental Compliance

The contractor is responsible for identifying, applying for, and obtaining all necessary permits prior to starting work. These may include, but are not limited to:

- EPA Controlled Discharge Permit: For planned drainage of well water containing arsenic during the replacement process.
- EPA Uncontrolled Discharge Permit: Contingency permitting for accidental release during isolation.

- USACE Section 404 Permit: Required if any discharge or fill material enters nearby waters of the U.S. (e.g., Fourmile Creek).
- CDPHE/NPDES Permits: Compliance with Colorado Regulation No. 32 regarding arsenic and temperature standards for the Arkansas River Basin.

8.0 Performance Requirements

- Concrete Testing: The Contractor shall engage an independent testing laboratory to conduct required material tests (e.g., concrete slump/strength).
- Hydrostatic Testing: The new manifold assembly must be pressure tested to 1.5 times the operating pressure (300 PSI) for a minimum of 2 hours with zero leakage.
- Final Inspection: Notify the Contracting Officer in writing at least 5 working days prior to the completion date to schedule final inspection
- Warranty: A minimum 2-year manufacturer and installer warranty on all replaced components.

9.0 Construction Photos:

The photos below show the wellhead and piping during construction:

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