

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	02/07/2023 through 02/08/2023	
Media Program:	Drinking Water	
Regulatory Program(s)	Safe Drinking Water Act (SDWA) – Lead and Copper Rule (LCR)	
System Owner:	Sandia Public Works Department	
Operator Name:	Pueblo of Sandia	
System Name:	Sandia Resort and Casino Public Water System	
System Physical Location:	481 Sandia Loop	
(city, state, zip code)	Bernalillo, New Mexico 87004	
Mailing address:	Same as physical	
(city, state, zip code)	Same as physical	
County/Parish:	Bernalillo County	
System Phone Number	505-259-2332	
System Contact:	Michael Rivera	Lead Operator/Lab Technician
	mriviera@sandiapueblo.nsn.us	
System Classification:	NTNC	
PWS ID:	63506114	
Personnel participating in inspection:		
Sami Doupnik	EPA Region 6	Enforcement Officer
Jessica Moore	EPA Region 6	Enforcement Officer
Craig Young	EPA Region 6	Enforcement Officer
Danny O'Connell	PG Environmental (EPA Contractor)	Inspector
Jake Okun	PG Environmental (EPA Contractor)	Inspector
Michael Rivera	Pueblo of Sandia	Operator/Lab Technician
Ken Garcia	Pueblo of Sandia	Public Works
Diana Aranda ¹	State of New Mexico	NM Drinking Water Bureau
EPA Lead Inspector Signature/Date	 Danny O'Connell, Inspector (PG Environmental)	03/03/2023 Date Delivered

¹ Allowed to participate from an observatory standpoint only, allowed by EPA R6 and Pueblo of Sandia.

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

On February 7-8, 2023, representatives from U.S Environmental Protection Agency (EPA) Region 6 and EPA contract inspectors from PG Environmental (hereinafter the EPA Inspection Team) conducted an announced Safe Drinking Water Act (SDWA), Lead and Copper Rule-focused (LCR-focused) compliance inspection of the Sandia Resort and Casino Public Water System (PWS) ID No. 63506114. The inspection began at approximately 8:40 a.m. on February 7, 2023 and finished at approximately 3:30 p.m. on February 8, 2023. The Pueblo of Sandia operates the PWS in conjunction with the Sandia Public Works Department. Representatives from the State of New Mexico also participated in the inspection as a training exercise.

Danny O’Connell of PG Environmental presented his SDWA inspector credential to the system representatives during the opening conference and informed them that this was an EPA inspection to determine compliance with the SDWA, LCR, and other applicable federal and state regulations. The EPA Inspection Team met with Michael Rivera, the system’s Lead Operator/Lab Technician, as well as Ken Garcia, the system’s Utility Operations Supervisor, for the opening conference.

This report summarizes observations made as part of the inspection, which consisted of the following major activities:

- Discussions with the Sandia Resort and Casino’s water system representatives regarding the operation and maintenance of the PWS.
- Site visits to both of the system’s groundwater wells:
 - **Casino Well No. 1 (W0001)**, 1200 gallons per minute (GPM) capacity
 - **Casino Well No. 2 (W0002)**, 980 GPM capacity
- Site visit to the system’s water treatment plant:
 - **ClorTec Unit**
 - **Caustic Soda (Sodium Hydroxide) Storage Room**
 - **Ferric Chloride Storage Room**
 - **Treatment/Injection Room**
 - **Two (2) Tonka Mixed Media (Anthracite, Sand and Gravel) Filter Units**
- Site visit to the following finished water storage tank:
 - **Sandia Casino Tank (ST001)**, 3 million gallons (MG)
- Site visit to the Sandia Resort and Casino including:
 - **The “Poker Pit” sink LCR sample point** (experienced a LCR exceedance in 2018)
 - **The four recreational vehicle (RV) parking spots** (each containing a direct water hookup to the system’s distribution line)

Photos taken during the inspection are included in [Appendix 1, Photograph Log](#).

SYSTEM DESCRIPTION

The Sandia Resort and Casino PWS is a non-transient, non-community (NTNC) system as defined by Title 40 of the Code of Federal Regulations (CFR), Part 141, Subpart A, and serves a daily non-transient population of approximately 1,730 and a transient population of 13,270, with ten (10) commercial service connections. The casino was constructed in late 1999-early 2000. There are also two residential

homes in the distribution system. The system draws water from two wells: Casino Well No. 1 (W0001) which has the capability to supply 1,200 GPM, and Casino Well No. 2 (W0002) which has the capability to supply 980 GPM. These wells are programed in a lead/lag manner based on the level in the 3 MG Sandia Casino Storage Tank (ST001). The wells generally run at night and are alternated regularly. The ST001 storage tank provides pressure to the distribution system. The tank has an overflow line that would send finished water through a manhole to an outfall in the event of an overflow. The outfall is located in a wash approximately 500 feet west of the ST001 tank.

The system's treatment process includes arsenic pretreatment, as both of the wells contain arsenic levels that exceed the maximum contaminant level (MCL) concentration of 10 parts per billion (ppb). The treatment facility treats the arsenic in approximately 90 percent of the raw well water from approximately 20 ppb down to approximately 5 ppb. Sodium hypochlorite (pre-chlorination) is used for pretreatment to oxidize the arsenic. Ferric chloride is then added to facilitate arsenic precipitation so that it can be filtered out. Two Tonka anthracite filters are used for the arsenic filtration, each with a 975 GPM capacity. The 10 percent of raw water bypassing the arsenic system is blended prior to final chemical treatment processes. Caustic soda (sodium hydroxide) is then added to the water for pH adjustment and corrosion control. Lastly, additional sodium hypochlorite (post-chlorination) is added for final disinfection. The sodium hypochlorite used for both initial arsenic oxidation and final disinfection is generated onsite at the treatment facility using a ClorTec unit. After final disinfection, treated produced/raw water blend discharged to the distribution system.

A new guard shack at the entrance to the Pueblo Village was constructed in 2021. This guard shack is now the first customer in the distribution system. The distribution system contains three pressure zones, which are separated by two mainline pressure reducing valves (PRVs). The three pressure zones include the Casino zone, the Sandia Lakes zone, and the Gas Station zone. The highest-pressure zone is the Sandia Casino Storage Tank zone, and the lower two zones are created and protected by PRVs.

A system diagram of the PWS, including treatment steps and distribution can be seen in [Appendix 2, Exhibit 1](#).

Staffing Information

The Pueblo of Sandia operates two drinking water systems: the Sandia Resort and Casino PWS (the "commercial" system), along with the Sandia Pueblo PWS (the "village" system). The Sandia Pueblo PWS was not evaluated during this inspection. The Pueblo also operates a wastewater treatment plant. Seven operators are employed by the Pueblo, and they are cross trained to operate both the drinking water and wastewater facilities. The facilities are operated seven days per week, with three of the operators working Sunday through Wednesday, 6:00 a.m. to 5:00 p.m., and three working Wednesday to Saturday, 6:00 a.m. to 5:00 p.m. The Lead Operator/Lab Technician Michael (Mike) Rivera works Monday through Friday from 7:00 a.m. to 4:00 p.m. and has both a lab technician and WS1 certification. The Sandia Public Works Department also employs 40 maintenance workers that support the Pueblo, including electricians, heating, ventilation, and air conditioning (HVAC) technicians, plumbers, heavy equipment operators maintaining commercial driver licenses (CDLs), and carpenters. The Pueblo operators are generally responsible for preventative maintenance (PM) activities, while the Public Works staff are responsible for corrective maintenance (CM) activities.

Section II – INSPECTION ACTIVITY SUMMARY

The EPA Inspection Team conducted an array of interviews and field activities to discuss and observe PWS operation and maintenance (O&M) and to assess the condition of drinking water system assets. The physical inspection occurred over two days. Documents were also provided beforehand by the Lead Operator and were reviewed prior to the inspection. The information in this report is based on document review, conversations with Pueblo representatives, and observations made during this inspection.

Supervisory Control and Data Acquisition (SCADA) System

The Pueblo of Sandia use a SCADA system to monitor, trend, and manipulate flow/pumping rates and run times for both of the two wells. The wells are programmed (through SCADA) to turn on at night and alternate between the two wells depending on demand. Generally, the lead well pump turns on to meet demand and the second (lag) well pump turns on if demand exceeds the lead pump capacity.

The SCADA system is also used to monitor the ST001 tank level. The well's operational feed to the treatment system is programmed by the operators based on the tank operational level set points. The "low level" operational set point (activating the lead well pump) for the ST001 tank is usually 18 feet of stored finished water but is changed (programmed level is increased) if operators want to test the well pumps during the day (i.e., manually activate the pumps).

Alarms are tied into the SCADA system to alert operators of a failure in the treatment system. Intrusion alarms for both of the well houses are also tied into the SCADA system. Operators indicated that chemical feed pumps were not connected to SCADA, and that local Programmable Log Control (PLC) screens are used to adjust chemical feeds.

Computerized Maintenance Management System (CMMS)

Infor EAM

The Pueblo of Sandia have been using a CMMS called Infor EAM to track assets and generate/assign PM and CM work orders since 2019. Approximately 1000-1200 assets were being tracked. Operators explained their work order generation process to the EPA Inspection Team. If a CM is needed, the supervisor will create a work order on Infor EAM. Depending on the work that needs to be done, the work order will be assigned to the appropriate staff member. Photos can also be uploaded to support work orders. The Pueblo of Sandia Public Works Department's work order system is separate from the casino maintenance staff's system, but the Pueblo can request assistance from the Casino's staff to complete a work order if necessary. Regular PMs are also tracked in Infor EAM and are assigned to the appropriate staff on a routine basis.

Use of Geographic Information System (GIS)

The system utilizes a GIS database to inventory and track assets in the distribution system. Valves, lines, air relief valves, and hydrants are mapped in their GIS, and it is primarily used as a tool to locate assets. The GIS also includes abandoned lines and assets in the distribution system.

Lead and Copper Rule (LCR) Evaluation

The EPA Inspection Team review of the Pueblo of Sandia's LCR program started prior to the onsite inspection. The process started with an informal phone conversation to serve as an introduction to the process as well as a follow-up electronic letter on January 12, 2023 (refer to Appendix 3, LCR Inspection

Information Request Letter) that outlined the materials requested for the LCR evaluation. A second call was conducted on January 18 to discuss any question(s) the Pueblo of Sandia Team had concerning the requested materials and timing of the submittals. The Pueblo of Sandia Team initiated requested materials submissions on January 19 for review and evaluation.

The onsite LCR evaluation focused on the sample plan, LCR monitoring activities, the analytical exceedances, and the corrective actions taken. The sample plan outlined the 35 possible sample points within the distribution system, as well maps showing the location of the sample points (refer to Appendix 4, Lead & Copper Sampling Plan). The plan outlines the criteria for designating a sample site as Tier 1 through Tier 3, but only Tier 2 sites are identified in the sampling plan due to the nature of the PWS and the resort/casino.

As the result of a 2016 monitoring period exceedance, the Pueblo of Sandia was also required to specify optimal corrosion control treatment to EPA within 24 months of the end of the monitoring period that the exceedance occurred. The system's Optimal Corrosion Control Treatment (OCCT) plan was submitted May 23, 2018 and involved adjusting the caustic soda dosage to reach a new targeted pH range of 8.0-8.4. The OCCT plan was approved by EPA, and the approval letter outlining the new process was provided to the EPA Inspection Team (refer to Appendix 5, OCCT Plan Approval Letter).

In addition to the resort and casino, the description of the distribution system included in EPA Region 6's 2021 Sanitary Survey stated there were also two homes in the Sandia Lakes pressure zone. At the time of the inspection, System operators indicated that there are two homes located in the Sandia Resort and Casino distribution system, but they are not sampled as a component of the LCR sampling plan. During the inspection, one of the operators contacted the Pueblo Housing Manager and found that one of the houses was constructed in 2016 using PVC and PEX plumbing. Operators were unable to obtain/provide information about the second, older home. The Lead Operator/Lab Technician who was also the LCR program application lead shared his LCR sampling instructions, as well as directions for Sandia employees on how to properly flush their taps before the sampler arrives (refer to Appendix 6, LCR Sample Instructions and Tap Flushing Protocol). The LCR contact stated that when a sample site has been selected for sampling, he uses red tape to seal off the taps and displays a sign stating that the tap cannot be used. An example of the sign is included with Appendix 6. An example "Notice of Lead Tap Water Results" form was also provided to the EPA Inspection Team (refer to Appendix 7, Notice of Lead Tap Water Results), which is used by the Pueblo to inform users of the Sandia Resort and Casino water system of the results of a LCR sample test.

As a result of Sandia Resort & Casino LCR exceedances during the June to September 2016 monitoring period, the Pueblo of Sandia were required to submit 20 LCR samples taken within the distribution system in 2018. On June 12, 2018, one of the system's sample points ("The Poker Pit – Sample Site LCR010") experienced an LCR lead exceedance with a concentration of 0.029 mg/L. A report from EPA Region 6's Houston Laboratory outlining the exceedance was sent to the Pueblo of Sandia on September 10, 2018 (refer to Appendix 8, Lead and Copper Results from Semiannual Sampling Letter). The letter reviewed the LCR requirement to post lead analytical results at the detection location for at least two weeks. The non-detect results were required to be posted in conspicuous locations throughout the facility. In response to the June 12 lead exceedance, the sink in the Poker Pit was re-plumbed with all new components.

A repeat sample was collected on December 12, 2018 from the "Thru Pa Main Bar Storage Room," Sample Site LCR030. The sample was analyzed on December 27, 2018 and documented a lead

concentration of 0.0048 mg/l at the sample site. A report from EPA Region 6's Houston Laboratory outlining the elevated lead concentration was sent to the Pueblo of Sandia on February 20, 2019 (refer to [Appendix 9, Lead and Copper Exceedance Letter](#)).

As a result of the Pueblo of Sandia LCR monitoring results in 2019 and 2020 that documented no exceedances, the system was granted permission to return to their reduced sampling schedule of 10 samples once per every three years.

In addition to required compliance sampling, the operators indicated that parameters such as residual chlorine, pH, alkalinity, and hardness are tested daily as a component of their process control. These parameters were reported be used to calculate approximate LCR values, alerting operators of potential compliance deficiencies. The Lead Operator also has a Lab Technician certification and conducts this sampling in-house.

Flushing

Facility representatives explained their flushing procedures to the EPA Inspection Team. They said that flushing occurred once per year, and that they had a standard operating procedure (SOP) for flushing that was distributed to team members when flushing occurs. The operators are grouped into teams which are each led by a supervisor. Commercial flushing (i.e., for the casino PWS) is conducted during the day.

Previous Sanitary Surveys

The EPA Inspection Team reviewed a document titled "EPA R6 Sanitary Survey Significant Deficiencies Corrective Action Form" that was generated as a result of the last sanitary survey that was conducted at the Sandia Resort and Casino PWS on August 4, 2021. The team reviewed the document with the site representatives to ensure that the corrective actions had been taken.

FACILITY WALKTHROUGH

Old Casino Well and Abandoned Water Storage Tank

A smaller tent-like casino structure was in place prior to the new casino, and it had its own well, water storage tank, and chemical storage tank (refer to [Appendix 1, Photograph 1](#)). The old casino was located west of the new casino across Interstate 25, and adjacent to an old police station that is no longer present. New wells were constructed around the same time that the new casino was built, and the old well and water tank associated with the old casino were taken offline and decommissioned. Operators stated that the old well was abandoned, and a record of the abandoning process was provided to the EPA Inspection Team (refer to [Appendix 10, Old Casino Well Plugging Record](#)). According to the record, the well was disconnected from the distribution system on March 7, 2013. The abandoned well was not visible since it was buried with sand. An abandoned water storage tank and chemical storage tank were observed, and they were both offline and isolated from the distribution system.

Casino Well Nos. 1 and 2

Both of the casino wells are programmed through SCADA to start pumping based the level of the finished water in the Sandia Casino ST001 water storage tank. The wells are generally operated during

the evening hours, between 11:00 p.m. and 5:00 a.m. The wells are alternated automatically on a regular basis. Weekly process testing is conducted at each of the wells, during which the wells are manually started, and the well/pump components are inspected using a checklist. The checklist also includes sampling the raw well water for arsenic, iron, and residual chlorine. During the inspection, several of these checklists from 2022 and early 2023 were observed (refer to [Appendix 2, Exhibit 2](#)). In every sheet that was reviewed, "Filter Influent" iron value was below the targeted range of 2.8-3.2 mg/L. Additionally the "Finished (Blended Water)" pH was measured to be below the targeted range on December 28, 2022 and January 15, 2023, and above the targeted range on January 22, 2023. The targeted ranges for both iron and pH are established in the system's operation and maintenance (O&M) manual, which was reviewed by the EPA Inspection Team.

Operators stated that they allow the wells to run for approximately 30 minutes before testing the water. Under normal demand, only one well is pumped at a time, but the lag pump will automatically start if demand becomes high enough. Additionally, if the lead pump fails, the lag pump will automatically activate to meet the demand. Operators stated that the wells are pumped for approximately 4 hours every night during the summer months, and approximately 2 hours every other night during the winter months.

Casino Well No. 1 (W0001)

Casino Well No. 1 has an intake that is 480-1160 feet deep, and the soft start pump in the well building has a 1100 GPM capacity. The pump is lubricated using food-grade machinery mineral oil (Clarion A/W 32 Machinery Oil), and the EPA Inspection Team observed the lube line connection to the mechanical seal of the pump (refer to [Appendix 1, Photograph 2](#)). An air relief valve drain line along the pump line was not screened (refer to [Appendix 1, Photographs 3 and 4](#)). When operators became aware of this, a screen was placed on the valve drain line. The pump was not on at the time of the inspection, and the pressure gauges in the line downstream of the check valve read approximately 160 psi (refer to [Appendix 1, Photograph 5](#)).

The second pressure gauge on the raw water line had an air relief valve and an available access port that did not contain screening or backflow prevention (refer to [Appendix 1, Photograph 6](#)). A sign was strapped to the well raw water line that incorrectly labeled it as "potable water," and it was removed after the operator was asked to confirm raw water flow (refer to [Appendix 1, Photograph 7](#)). The operator stated that the sign was from a prior treatment system. A chlorination injection point was present on the line just prior to it going underground, and operators said that this was where "pre-chlorination" (i.e., chlorination to help oxidize the arsenic) took place. There were two access ports at this point on the pump line that did not contain screening or backflow prevention (refer to [Appendix 1, Photograph 8](#)).

A pump-to-waste line extended off the raw water pump line immediately downstream of the check valve. A PRV was positioned on the waste line to regulate pressure being experienced by the well pump. There was rust present at the point where the pump-to-waste pipe met the W0001 line (refer to [Appendix 1, Photograph 3](#)). The pump-to-waste pipe extended underground to the outside of the well building, discharging into a small concrete basin several feet away (refer to [Appendix 1, Photograph 9](#)). Operators explained that the PRV was rebuilt on May 18, 2021, and documentation was provided to the EPA Inspection Team outlining the valve re-installation process (refer to [Appendix 11, PRV Installation Outline](#)). The outline describes that the pressure relief set point was approximately 172-174 psi.

During the inspection, approximately an inch of water was present in the pump-to-waste line extending outside of the well building, and when the flapper was opened, water was continuously flowing into the concrete basin (refer to [Appendix 1, Photograph 10](#)). When the flapper was closed, water was still leaking, and a small amount of rust/peeling paint was attached in the area where the water was dripping from (refer to [Appendix 1, Photograph 11](#)). Vegetation (that appeared to be cattails) had also grown in the basin, and the ground in the basin was wet. It appeared that the vegetation had recently been burned. Operators were unaware that water was flowing through the line, and upon further inspection discovered that the PRV was not operating properly. In response to the finding, the operations team isolated the line and said that they were beginning the process of having contractors come onsite to inspect the PRV. On the second day of the inspection, the EPA Inspection Team revisited the pump-to-waste line and found that it was no longer leaking.

A fire hydrant was also present outside of the well building, and operators said that it was attached to the water distribution system. A PRV was present on the finished water line in the W0001 building to help regulate flow entering the distribution system. A pressure gauge on this line was reading 160 psi during the inspection.

Casino Well No. 2 (W0002)

Casino Well No. 2 has an intake that is 480-1160 feet deep, and the soft start pump in the well building has a 980 GPM capacity. The pump is lubricated using food-grade machinery mineral oil. The W0002 well is set up similarly to W0001, with a pump, raw water line, and a pump-to-waste line with a PRV (refer to [Appendix 1, Photographs 12 and 13](#)). Air relief valve drain lines at W0002 were screened with mesh (refer to [Appendix 1, Photographs 14 and 15](#)).

Additionally, a check valve release inside of the building had an air gap and drained into a pipe that led to the outside of the building (refer to [Appendix 1, Photograph 16](#)). The discharge end of the pipe was screened. Water bibs were present in the W0002 building, and operators stated that they were used to hose off equipment/the floor in the building. The bibs contained backflow prevention (refer to [Appendix 1, Photograph 17](#)).

Unlike W0001, there was no chlorination injection point on the W0002 line. The pump-to-waste line at W0002 extended underground and discharged into a concrete basin several feet away from the well building, similarly to the W0001 pump-to-waste line (refer to [Appendix 1, Photograph 18](#)). The line did not contain water (refer to [Appendix 1, Photograph 19](#)). The pipe's flapper provided a tight/weighted seal, and no access gaps were observed (refer to [Appendix 1, Photograph 20](#)). The pump inside of the building was not operating, but the pressure gauges in the line downstream of the check valve read approximately 160 psi (refer to [Appendix 1, Photographs 21 and 22](#)). A raw water sample tap was leaking into a bucket from the raw water line (refer to [Appendix 1, Photograph 23](#)). Operators stated that they had parts on hand to make the repair, but that they were waiting until after the inspection to do it.

A switch gear control cabinet was present in the building's electrical room (refer to [Appendix 1, Photograph 24](#)). The connection box for a trailered backup generator was located on the exterior of the building; the box was not setup with a socket for quick connection and required manual wiring (refer to [Appendix 1, Photograph 25](#)). Additionally, a new communications jack had been installed inside of the building's electrical room so that a laptop computer could be used to observe and control W0002 operations (refer to [Appendix 1, Photograph 26](#)).

A hydrant was located just outside of the W0002 building. A valve was positioned next to the hydrant, and it was in the “closed” position. Operators said that unlike the W0001 hydrant, which is located on the finished water distribution line, this hydrant could be used to blow off raw water, and the valve and hydrant would need to be opened to do so.

Water Treatment

ClorTec Unit

A ClorTec unit located in the W0001 building converts brine to a hypochlorite (chlorine) solution for pre- and post-chlorination in the water treatment process (refer to [Appendix 1, Photograph 27](#)). Operators stated that the unit was brought online within the last year, and that it produces a hypochlorite solution using 0.07 GPM of brine mixed with 0.7 GPM of softened water. The solution was stored in a hypochlorite storage tank, located adjacent to the ClorTec unit. Two chlorine pumps were present, one for pre-chlorination and one for post (refer to [Appendix 1, Photograph 28](#)). Pre-chlorine injection point is on the raw water line immediately downstream of the confluence of the Casino Well Nos. 1 and 2 raw water lines. The post-chlorine injection (disinfection) point was immediately downstream of the confluence filter produced water and the 10 percent raw water bypass line. Salt for the chlorine generation process was being stored in the W0001 building.

Ferric Chloride Storage and Pump Room

The ferric chloride storage and pump room was located in a building immediately to the west of the treatment building and north of the filter pad. The room contained several empty ferric chloride barrels, along with a semi-full tote. The barrels and tote were positioned over secondary containment (refer to [Appendix 1, Photograph 29](#)). There was some brown staining on the secondary containment around the barrels. Two ferric chloride pumps were also present in this room, with one pump being a lead and the other a lag. The pumps were placed on a pump skid over secondary containment, and there were brown stains on the wall and skid, indicating past spills or leaks (refer to [Appendix 1, Photograph 30](#)). Operators said that the pumps were rotated regularly. Ferric chloride is used to facilitate arsenic precipitation so that it can be filtered out by the Tonka anthracite filters. A hose bib present in this room contained a vacuum break for backflow prevention. The metal on the hose bib showed discoloration (refer to [Appendix 1, Photograph 31](#)).

Sodium Hydroxide (Caustic Soda) Storage and Pump Room

The sodium hydroxide/caustic soda storage and pump room was located directly adjacent to the ferric chloride room, and contained several empty caustic soda barrels, alongside a semi-full tote. On the tote, operators had written that the freezing point for sodium hydroxide was 53° F (refer to [Appendix 1, Photograph 32](#)). A thermometer in the room indicated that the temperature was 64° F (refer to [Appendix 1, Photograph 33](#)). The barrels and tote were placed on secondary containment. Two sodium hydroxide pumps were also present in this room, with one pump being a lead and the other a lag. The pumps were placed on a pump skid over secondary containment, and there did not appear to be any signs of spills or leaks (refer to [Appendix 1, Photograph 34](#)). Operators stated that the pumps were rotated regularly.

Sodium hydroxide was used for pH adjustment and corrosion control. A hose bib that was present in this room contained a vacuum break for backflow prevention (refer to [Appendix 1, Photograph 35](#)).

Emergency Eyewash/Shower

An emergency eyewash/shower was present on the exterior of the chemical building between the two chemical storage/injection rooms. The piping to this eyewash/shower did not appear to be winterized (refer to [Appendix 1, Photograph 36](#)).

Treatment Room

The EPA Inspection Team observed the water treatment room and its various components (refer to [Appendix 1, Photograph 37](#)). Food grade lubricant was being stored in this room (refer to [Appendix 1, Photographs 38 and 39](#)). The treatment system was not in operation during the inspection due to a valve actuator failure on the filter discharge main line prior to final chemical injection (refer to [Appendix 1, Photograph 40 and 41](#)). The valve was referred to as the “effluent valve.” Operators stated that early Sunday morning, prior to the inspection (February 5, 2023), at approximately 5:00 a.m., the SCADA system alerted operators of the failed valve.

The SCADA programming automatically shut down the well pumping system so that untreated water could not enter the distribution system. When operators arrived onsite on the morning of February 5, they were able to use the local PLC in the treatment room to assess what the issue was. Due to the SCADA lockout, the wells could only be pumped in “manual” mode. System representatives stated that W0001 was run manually late Sunday night/early Monday morning due to the valve failure. The well was run manually for part of the day Monday, and operators said that it had not been run after that prior to the inspection. Operators indicated that the valve actuator was scheduled to be repaired on February 10, 2023. Work orders for the failed valve and the actuator associated with it were provided to the EPA Inspection Team as an example of how work orders are generated in the Infor EAM system (refer to [Appendix 12, Example Work Orders](#)).

During normal operation, raw water enters the treatment building through a raw water influent line (refer to [Appendix 1, Photograph 42](#)). A control valve was present on the raw water influent line, and it was in the “closed” position during the inspection (refer to [Appendix 1, Photograph 43](#)). The raw water filter line is initially injected with ferric chloride for arsenic precipitation (refer to [Appendix 1, Photograph 44](#)). There was brown staining on the infrastructure surrounding the ferric chloride injection point, as well as on valves, piping, nuts/bolts, and the floor (refer to [Appendix 1, Photographs 45 and 46](#)). The staining was indicative of a ferric chloride release. Following ferric chloride injection, the water flows through two Tonka filters. The filter media includes anthracite, sand, and gravel. There was one filter for each well, and each filter contained two cells. Each filter contains two air relief ports which extend out of the top of the filter units, one for each cell. Three of the air relief ports contained piping which extended out and downturned, with a screen placed over the end. However, one of the air relief ports for Filter No. 2 had been recently replaced and did not contain a downturned pipe or a screen over its opening (refer to [Appendix 1, Photograph 47](#)).

Filtered water then enters an effluent line (valved by the failed effluent valve), prior to entering a pipe where it is injected with sodium hypochlorite for disinfection (post-chlorination), as well as caustic soda for pH regulation. The system’s process flow diagram (refer to [Appendix 2, Exhibit 1](#)) indicates that sodium hydroxide (caustic soda) is injected upstream of the sodium hypochlorite; however, the reverse was observed. Additionally, the sodium hypochlorite injection line was labeled, but the caustic soda line was not labeled. There was brown staining on the chemical mixing pipe, a further indication of ferric chloride spills/leaks (refer to [Appendix 1, Photograph 48](#)). A filter bypass line extends around the ferric chloride injection line and joins the filtered water immediately upstream of the final chemical injection point (refer to [Appendix 1, Photograph 49](#)). Ten percent (10%) raw water is mixed through the bypass line with the filtered effluent prior to entering the distribution system. The bypass line was valved and

metered. A “finished water” pH probe and pressure gauge (reading 0 psi during the inspection) were present at the end of the treatment line, and a sample tap was present on the pipe elbow extending into the distribution system (refer to [Appendix 1, Photographs 50 and 51](#)). This sample point represents the water treated by Filter Nos. 1 and 2, as well as the water contributed by the raw water bypass.

A sampling sink was present next to the treatment infrastructure, and there were several sample lines taken from various points in the treatment process (refer to [Appendix 1, Photograph 52](#)). These points include raw influent, water post filtration from Filter Nos. 1 and 2, and final treated effluent. The interior of the tubing from the samples for Filter Nos. 1 and 2 was stained red-brown due to the addition of ferric chloride (refer to [Appendix 1, Photograph 53](#)).

All of the sample ports contained vacuum breaks for backflow prevention. The system has filter backwash procedures which the EPA Inspection Team reviewed. Backwash occurs automatically based on head loss, or manually if operators want to backwash at a higher frequency. During backwashes, the pipes are automatically valved to prevent backwash water from entering the distribution system. A valve logic chart described how the valves opened and closed during backwash cycles, and it was reviewed by the EPA Inspection Team. The backwash phases and time set points were recorded in the system’s SCADA system. The backwash phases and time set points included the following:

Table 1. Backwash Phases and Time Set Points

Phase	Time Set Point (Minutes)
Isolation	2.0
Draindown	3.0
Simul-Wash	10.0
Purge	4.0
Refill	4.0
Restratification	8.0
Repressurization	3.0
Filter to Waste 1	3.0
Minimum Restratification	3.0

Reconditioned/recycled treated water is mixed with the backwash product and wasted via a wasting pipe to the sanitary sewer system. An air compressor was present in the treatment room, and operators stated that it was used to facilitate filter cleaning during backwash cycles.

An operator logbook was present in the treatment room, and it contained information regarding operational setpoints, operational activities, dosage rates, and backwash cycles. A page between an entry dated February 3, 2019 and February 4, 2019 was ripped out. In addition, an entry from February 13, 2019 describes a raw water bypass flow being set to 20% (refer to [Appendix 2, Exhibit 3](#)). During the inspection, operators stated that they bypassed at a rate of 10%. It was unclear when this rate was changed. The EPA Inspection Team reviewed the filters operational protocols as a component of understanding the operators process control approach and options available to them concerning arsenic removal efficiencies.

Finished Water Storage Tank

Sandia Casino Tank (ST001)

The ST001 tank is a 3 MG tank, and operators said that their target level in the tank was 18-20 feet. Operators indicated that they had approximately 7-14 days' worth of water storage if there was an issue with the wells. The tank was last inspected (by divers) on March 5, 2022 (refer to [Appendix 1, Photograph 54](#)). On the second day of the inspection, the tank level was at approximately 18.5 feet (refer to [Appendix 1, Photograph 55](#)). During normal operation, the lead well pump is programmed through SCADA to start pumping if the tank level gets below 18 feet, and the lag pump is programmed to turn on at 17 feet. However, due to the failed effluent valve in the treatment system, the operators changed the set points for the lead and lag well pumps in SCADA to 16 and 15 feet, respectively, until the valve was repaired. This was to ensure that the wells pumps would not turn on while the repair was taking place.

The tank is located in a small depression and is therefore hidden from view. The tank appeared to be in good condition; however, there was some staining/algal growth on the tank sides where it appeared that water would frequently run off (refer to [Appendix 1, Photograph 56](#)). Since the ground surrounding the tank slopes inward, a drainage system is in place to collect flow and send it to an outfall located approximately 500 feet west of the tank. An overflow line extends from the top of the tank and discharges into a manhole below grade (refer to [Appendix 1, Photograph 57](#)). The drainage system surrounding the tank also drains into this manhole. There was no screen over the overflow pipe in the manhole, nor was there an air gap (refer to [Appendix 1, Photograph 58](#)). A second, larger diameter pipe was also present in the manhole, and the drainage/overflow flows through this pipe to get to the outfall (refer to [Appendix 1, Photograph 59](#)). A computerized alarm system communication cabinet was present next to the tank, and operators said that in the event of a power loss, the system would send an alarm to their SCADA system alerting them of the issue. The EPA Inspection Team observed the outfall (refer to [Appendix 1, Photograph 60](#)). The point where the outfall daylighted was covered by a mesh screen that contained some mud/dirt on the bottom. There also appeared to be four different water level marks on the screen (refer to [Appendix 1, Photograph 61](#)).

Casino

"Poker Pit" LCR Exceedance Sampling Point

The "Poker Pit" LCR sampling point (identified as station LCR010) at the casino was observed as a component of the inspection. The location was at a sink where casino employees used water to make drinks. The plumbing under the sink consisted of copper lines (refer to [Appendix 1, Photograph 62](#)). All of the visual piping joints were compressed joints, and no solder was observed. Lead monitoring and analytical data was reported to be posted on the wall near the sink (refer to [Appendix 1, Photograph 63](#)) after monitoring events.

RV Parking Spots

The EPA Inspection Team observed the four RV parking spots in the casino parking lot that were each serviced with potable water and a sewer connection. The water connections did not contain backflow prevention. The sanitary sewer cleanout locations at each parking spot were within three feet of the potable water connections (refer to [Appendix 1, Photograph 64](#)).

Section III – SUMMARY OF OBSERVATIONS

The following observations pertain to the SDWA.

- Observation 1.** A new guard shack at the entrance of the Village of Pueblo was constructed in 2021, and it contains a bathroom with a sink. This is now the first customer on the distribution system, as they are using potable water which could potentially be consumed. The Sandia Resort and Casino system diagram lists the Tiwa 66 Gas Station as the first customer on the distribution system (refer to [Appendix 2, Exhibit 1](#)).
- Observation 2.** During the LCR component of the inspection, operators indicated that there were two homes on their commercial distribution line, and that neither of them were evaluated or sampled as a component of LCR monitoring plan. System representatives were able to find information about the newer of the two homes, which was built in 2016. The plumbing in this home was PVC and PEX. System representatives were unable to gain information about the older home.
- Observation 3.** Process control “checklists” used by operators during well checks/pH, arsenic, iron, and residual chlorine sampling indicate several instances of iron in the “Filter Influent” being below the target range (refer to [Appendix 2, Exhibit 2](#)). Checklists from 2022 and 2023 were reviewed. The checklists had values that were lower than the target range that is outlined in the system’s O&M manual.
- Observation 4.** Several of the checklists showed “Finished (Blended Water)” pH values that were above or below the target range outlined in the O&M manual. It is unclear why these values were outside of the target range or the impact on the finished water quality.

Additionally, the EPA approval for the OCCT plan (dated June 19, 2018) stated that the pH range should be between 8.0-8.4 (refer to [Appendix 5, OCCT Plan Approval Letter](#)).

- Observation 5.** The following observations pertain to Casino Well No. 1 (W0001) and its associated apparatuses:
- An air relief valve on the pump line was not screened (refer to [Appendix 1, Photographs 3 and 4](#)). When the operator was made aware of this, he covered the valve with a screen.
 - An open port branching off of an operational air relief valve did not contain a screen or backflow prevention (refer to [Appendix 1, Photograph 6](#)).
 - A sign strapped to the pump line read “potable water,” which incorrectly labeled the raw W0001 well water contained in the line (refer to [Appendix 1, Photograph 7](#)). Operators indicated that this sign was a relic of a past treatment process, and it was removed after describing well raw water flows.
 - Two ports on the pump line near the chlorine injection point did not contain screens or backflow prevention (refer to [Appendix 1, Photograph 8](#)).
 - A pump-to-waste line was discharging water from the W0001 line during the inspection (refer to [Appendix 1, Photographs 9 and 10](#)). Approximately an inch of water was present in the pipe, and it was continuously flowing into the discharge basin. When the flapper was closed, water was still dripping from the pipe (refer to [Appendix 1, Photograph 11](#)). The ground in the basin was wet, and vegetation had grown in the basin. It appeared that the cattails had been recently burned. Upon further investigation, operators learned that the PRV on the pump-to-waste line was not functioning properly. They indicated that the

PRV had been rebuilt in May 2021 (refer to Appendix 11, PRV Installation/Rebuild Outline).

- Observation 6.** A raw water sample tap on the Casino Well No. 2 (W0002) pump line was leaking into a bucket (refer to Appendix 1, Photograph 23). Operators indicated that they had the parts on hand necessary to repair the leak, but that they were waiting until the conclusion of the inspection to make the repair.
- Observation 7.** The two ferric chloride pumps and the skid they were on in the ferric chloride storage/pump room were stained brown, and there appeared to have been ferric chloride releases in the past (refer to Appendix 1, Photograph 30). The floor and walls around the pumps were also stained.
- Observation 8.** There did not appear to be heat in in the sodium hydroxide (caustic soda) storage/pump room to prevent caustic soda from freezing. The tote carrying the caustic soda was labeled to have a freezing point of 53° F. A wall thermometer in the room indicated that the temperature was 64° F at the time of the inspection (refer to Appendix 1, Photographs 32 and 33).
- Observation 9.** The emergency eyewash/shower apparatus that was present on the exterior of the chemical building between the two chemical storage/pump rooms contained exposed metal pipes that did not appear to be winterized (refer to Appendix 1, Photograph 36). Freezing in the pipes could inhibit the delivery of water to the shower head/eyewash.
- Observation 10.** There was brown staining on the infrastructure at the ferric chloride injection point in the treatment system, including on valves, piping, nuts/bolts, and the floor (refer to Appendix 1, Photographs 44, 45, 46, 48, and 50). The staining was indicative of a ferric chloride release.
- Observation 11.** One of the air relief ports on top of Filter No. 2 was recently replaced and did not contain mesh screening over its opening (refer to Appendix 1, Photograph 47).
- Observation 12.** On Sunday, February 5, 2023, a valve and actuator on the filtered water discharge main line that sends water to final chemical treatment failed (refer to Appendix 1, Photographs 40 and 41). Once the valve failed, the SCADA system automatically locked out both of the well pumps, disallowing raw water from entering the treatment system. It is unclear what position the valve failed in, but according to SCADA logs and conversations with operators, W0001 was run manually on Sunday (February 5) and Monday (February 6).

As a result of the failed valve, the operators changed the well pump set points (which activate based on the ST001 tank level) for the lead and lag well pumps to 16 and 15 feet, respectively. The set points are normally 18 and 17 feet. This was to ensure that the wells pumps would not turn on while the repair was taking place.

- Observation 13.** The system's process flow diagram (refer to Appendix 2, Exhibit 1), indicates that caustic soda is injected upstream of the sodium hypochlorite, inspectors observed the

opposite in the field (refer to [Appendix 1, Photographs 48 and 49](#)). The process flow diagram also represents pre-chlorine being injected after the raw water bypass, but in reality, it is injected before (refer to [Appendix 2, Exhibit 1](#)). Additionally, the sodium hypochlorite injection line was labeled, but the caustic soda line was not labeled. The two injection lines were positioned next to each other and are responsible for final chemical treatment on the effluent discharge line. There was also visible brown staining on the pipes and infrastructure around the chemical injection area.

Observation 14. An operator logbook that was in the treatment room contained a missing/ripped page between February 3, 2019 and February 4, 2019 entries (refer to [Appendix 2, Exhibit 3](#)). It is unclear why the page was ripped out. The logbook also described a 20% raw water blend procedure on February 13, 2019, although operators indicated that they were blending at a 10% rate.

Observation 15. The following observations pertain to the Sandia Casino (ST001) Tank:

- There was some algal growth/staining around the ST001 tank (refer to [Appendix 1, Photograph 56](#)). It appeared that water drained in certain areas on top of the tank and consistently ran off in the same places.
- The overflow pipe extending from the top of the ST001 tank discharged into a drainage manhole below grade (refer to [Appendix 1, Photograph 57](#)). The opening in the manhole that the line discharges through was uncovered and did not contain an air gap (refer to [Appendix 1, Photograph 58](#)). A second, larger diameter pipe was also present in the manhole (refer to [Appendix 1, Photograph 59](#)). This pipe is where the flow goes after discharging from the tank before ultimately discharging through a nearby outfall. The opening of the outfall was screened (refer to [Appendix 1, Photographs 60 and 61](#)).

Observation 16. The potable water connections at the four RV parking spots outside of the casino did not contain backflow prevention (refer to [Appendix 1, Photograph 64](#)). Also, the water connections were located approximately three feet away from sanitary sewer cleanout locations.

Closing Conference

On February 8, 2023, the EPA Inspection Team met with the Lead Operator and Utility Operations Supervisor for a closing conference at approximately 3:15 p.m. System representatives, Michael Rivera and Ken Garcia were present for the closing conference. Danny O'Connell reviewed all observations with the Facility representatives and explained that all observations were preliminary and did not constitute any formal compliance determination. Pueblo team members expressed some concern associated with photographs that had been collected as a component of the inspection process. The Pueblo and casino had rules on photographs and their publication. The EPA Inspection Team agreed to forward a copy of photographs that would be in the report prior to its completion so that discussions can be had if necessary.

Section IV – FOLLOW UP

There has been no follow up since the conclusion of the inspection on February 8, 2023.

Section V – LIST OF APPENDICES

Appendix 1: Photograph Log

Appendix 2: Exhibit Log

- **Exhibit 1-** Sandia Resort and Casino PWS System Diagram
- **Exhibit 2-** Well Checklists/Process Control Sampling Sheets
- **Exhibit 3-** Operator Logbook- Treatment Room

Appendix 3: LCR Inspection Information Request Letter

Appendix 4: Lead & Copper Sampling Plan

Appendix 5: OCCT Plan Approval Letter

Appendix 6: LCR Sample Instructions and Tap Flushing Protocol

Appendix 7: Notice of Lead Tap Water Results

Appendix 8: Lead and Copper Results from Semiannual Sampling Letter

Appendix 9: Lead and Copper Exceedance Letter

Appendix 10: Old Casino Well Plugging Record

Appendix 11: PRV Installation/Rebuild Outline

Appendix 12: Example Work Orders

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 1. Abandoned Water Storage and Chemical Storage Tanks View of the abandoned water storage tank and chemical storage tank which were used to support the old casino that was located on the western side Interstate 25 from the new casino, and adjacent to the site of the old police station. The EPA Inspection Team could not locate the abandoned well associated with assets, but they received a well plugging record that documented removing the asset connections to the distribution system.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 2. Well No. 1 (W0001) Pump View of the food-grade lube line connection to the pump in the W0001 building. Some excess lube was observed.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 3. Air Relief Valve, W0001 Line View of an unscreened air relief valve on the W0001 pump line. Also visible in this image is rust (immediately under the PRV) at the point where the W0001 line connects to the pump-to-waste line.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 4. Air Relief Valve, W0001 Line Close up view of an unscreened air relief valve discharge on the W0001 pump line.

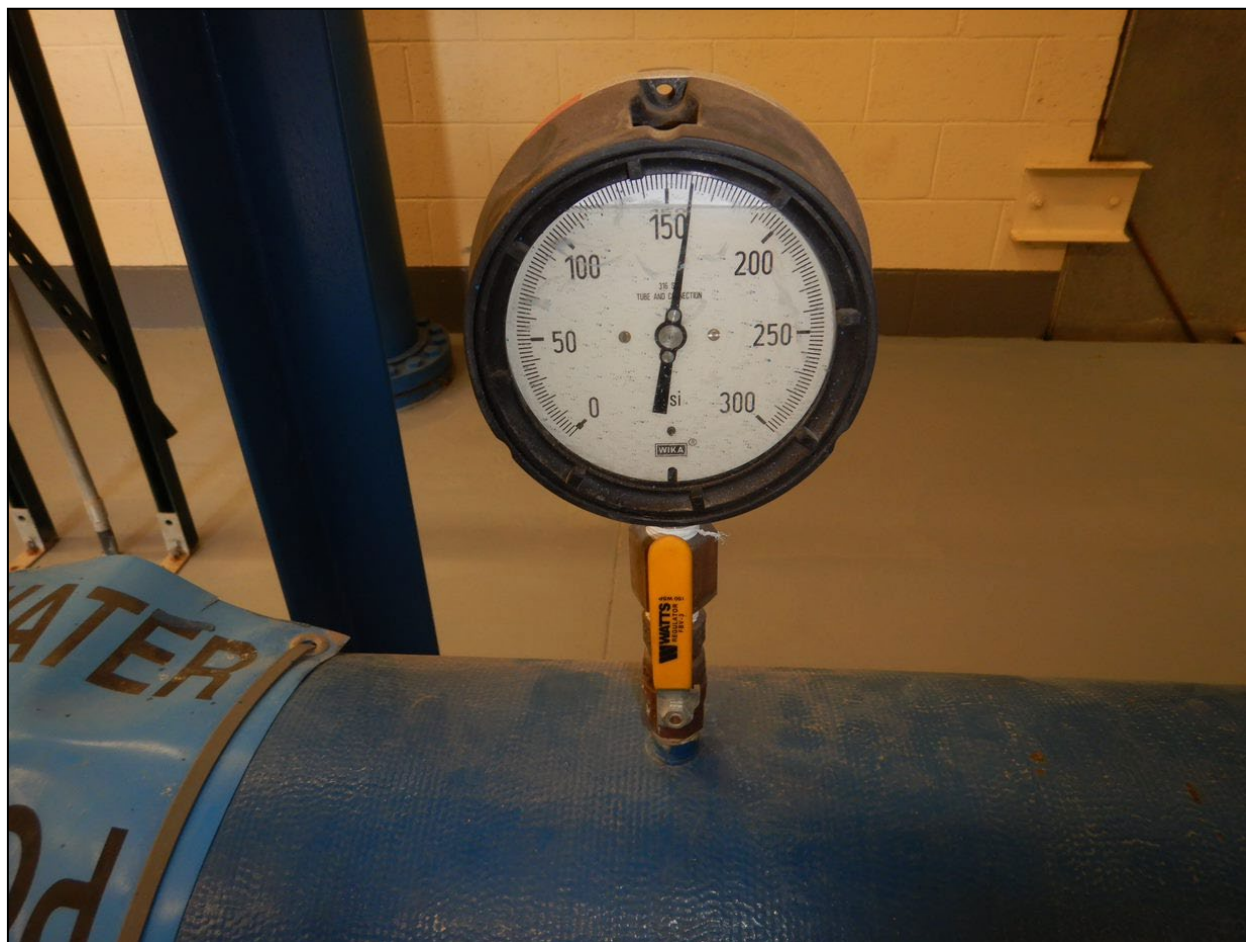


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 5. Pressure Gauge, W0001 Line View of a pressure gauge on the W0001 line that read approximately 160 psi on February 7, 2023, the first day of the inspection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Sandia Resort and Casino Public Water System

Pueblo of Sandia

County: Bernalillo

State: New Mexico



Photograph 6. Operational Valve on Air Relief Valve/Pressure Gauge Port, W0001 Line View of an air relief valve with an additional operational port with valve. The operational valve contained a pressure gauge and an open port that was unscreened and did not contain backflow prevention.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 7. Incorrect Sign W0001 Line View of a sign that read “potable water” on the W0001 pump line. This line actually conveys raw well water from Casino Well No. 1 to the connection with the raw water from Casino Well No. 2 and then to the water treatment system. The sign was removed after the operator was asked to confirm the raw water flow route.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 8. Chlorine Injection Point W0001 Line View of the pre-chlorine injection point into the W0001 line, just after W0002 line connection and before the line goes underground to the water treatment system. There were two accessory ports at this point that did not contain screening or backflow prevention. This injection point was located before the raw water bypass. In the system's process flow diagram (refer to [Appendix 2, Exhibit 1](#)) the pre-chlorine injection point is identified to be after the raw water bypass.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 9. W0001 Pump-to-Waste Discharge Pipe View of the pump-to-waste discharge pipe and outfall area west of the W0001 building. There appeared to be cattails growing in the discharge basin, and the ground was wet. It appeared that the cattails had been recently burned. Water was dripping from the pipe, even with the flapper valve in the closed position.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 10. W0001 Pump-to-Waste Discharge Pipe View of the open flapper on the discharge port west of the W0001 building. Water was continuously flowing out of the pipe when the flapper was open. There was approximately one inch of water in the pipe, and we observed a flow of approximately 3-4 gallons per minute.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 11. W0001 Pump-to-Waste Discharge Pipe Close up view of the underside of the W0001 pump-to-waste discharge pipe. Water was dripping out of the pipe even when the flapper was closed. There appeared to be bio growth/debris attached to the bottom of the pipe.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 12. Well No. 2 (W0002) View of the W0002 line, including the pump, air relief valves, check valve and pump-to-waste line that had an isolation valve.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 13. W0002 PRV View of the PRV on the pump-to-waste line extending from the W0002 pump raw water line.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 14. W0002 Air Relief Valve View of a screened air relief valve at Wellhead Casing No. 2.

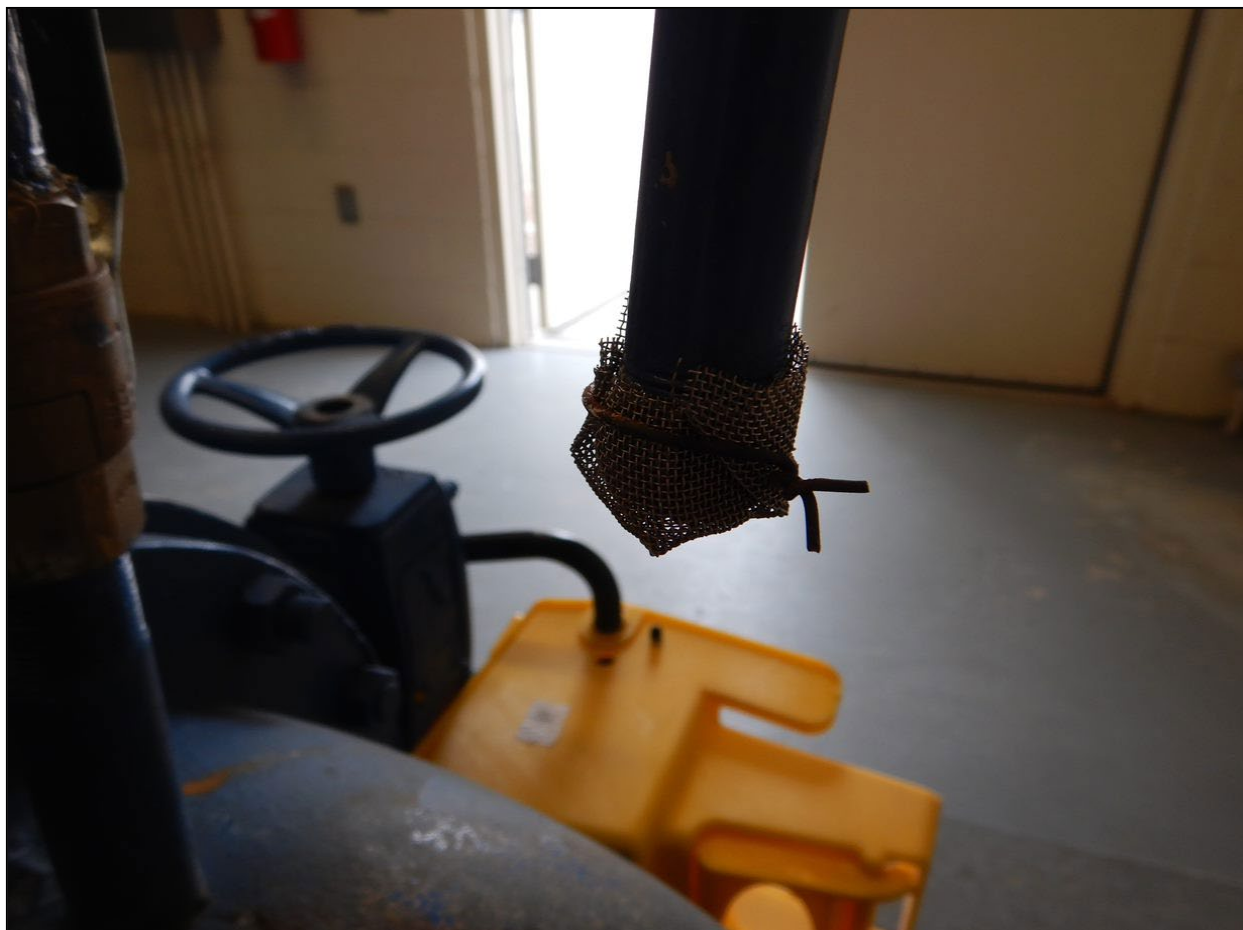


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 15. W0002 Air Relief Valve View of a screened air relief valve on the W0002 pump raw water line.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 16. Check Valve Release Pipe (W0002 Building) View of the check valve release pipe leading to the outside of the W0002 building. The opening of the pipe was screened.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 17. Hose Bib, W0002 Building Hose bib with vacuum backflow protection and the backflow assembly for the non-potable water line servicing the well house.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 18. W0002 Pump-to-Waste Discharge Pipe View of the pump-to-waste discharge pipe northwest of the W0002 building. The pipe discharged into a concrete walled basin which was dry.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 19. W0002 Pump-to-Waste Discharge Pipe Opening View of the open W0002 pump-to-waste discharge pipe. The pipe did not contain water, moisture, or debris in the invert.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 20. W0002 Pump-to-Waste Discharge Pipe Opening (Flapper) Close up view of the W0002 discharge flapper that had a tight seal with no space for insect or debris entry.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 21. W0002 Pump Line Pressure Gauge View of one of the pressure gauges on the W0002 pump raw water line, downstream of the check valve. The W0002 pump was not operating during the inspection. The gauge read approximately 162 psi.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 22. W0002 Pump Line Pressure Gauge View of an additional pressure gauge on the W0002 pump line, immediately prior to the raw water being transferred to the W0001 building. The W0002 pump was not operating during the inspection. This gauge also read approximately 158 psi.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 23. W0002 Pump Line Sample Tap View of the W0002 pump line and raw water sample tap that was leaking into a bucket during the inspection. Operators indicated that they had the parts on hand to make the repair.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 24

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 24. Switch Gear Control Cabinet, W0002 Building View of a switch gear control cabinet that was present in the W0002 building.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 25

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 25. Switch Gear MCC Box, W0002 Building View of the inside of the switch gear connection cabinet where a trailer generator could be wired up to provide power in the event of a power loss/failure.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 26

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 26. Communications Jack, W0002 Building View of a newly installed communications jack so that a laptop computer could be used to observe and control W0002 operations.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 27

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 27. ClorTec Unit, W0001 Building View of the ClorTec unit, located in the W0001 building. The unit converts brine to a hypochlorite solution used for disinfection of raw and produced water.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 28

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 28. Chlorine Pump, W0001 Building View of one of the two chlorine pumps associated with the ClorTec unit, located in the W0001 building. Two pumps were present, one for pre-chlorination and one for post-chlorination.

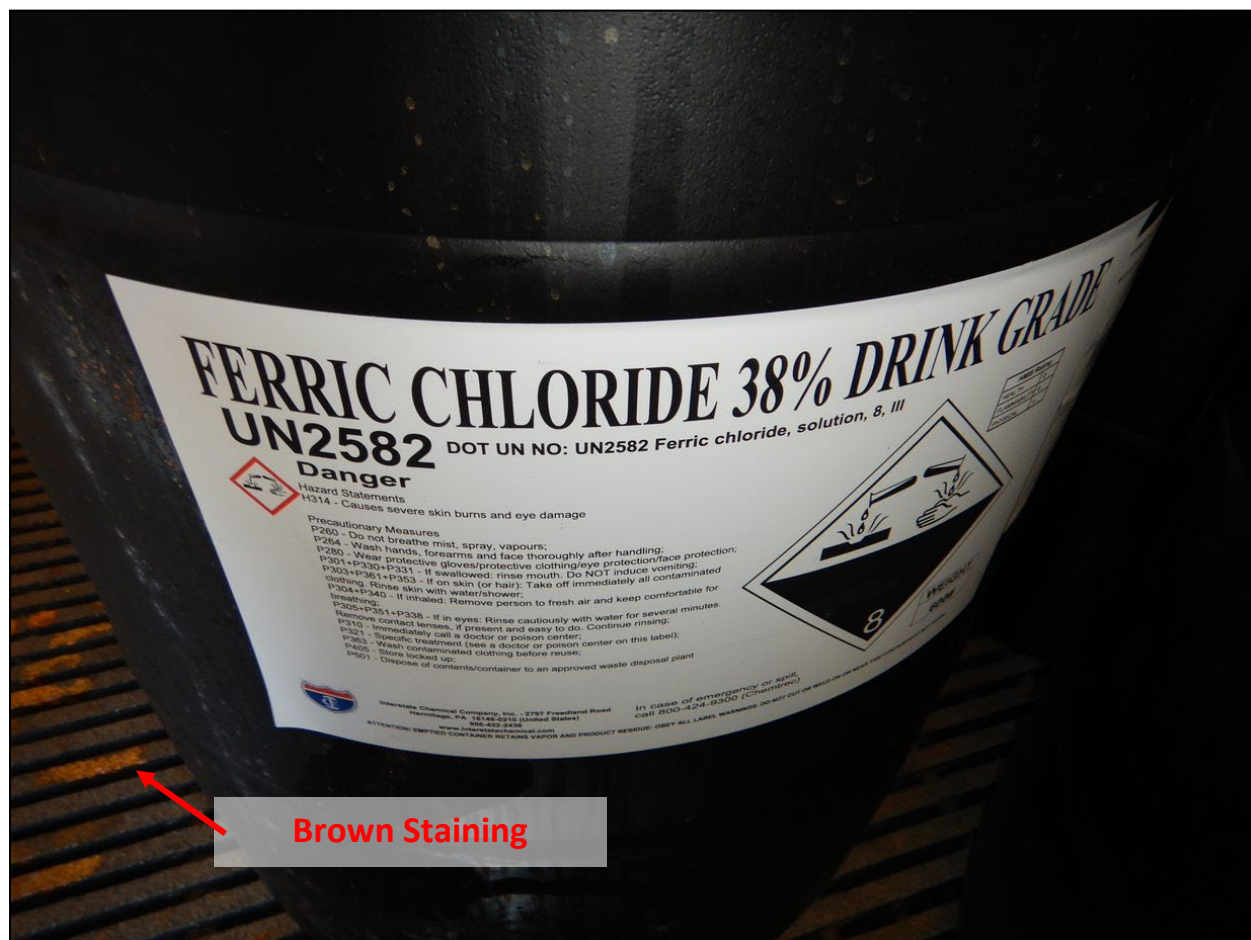


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 29

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 29. Ferric Chloride Barrel, Ferric Chloride Storage/Pump Room View of one of the empty 38% ferric chloride barrels in the ferric chloride room. The barrel was sitting on secondary containment. There was some brown staining on the containment around the barrels.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 30

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 30. Ferric Chloride Pumps/Pump Skid View of the two ferric chloride pumps in the ferric chloride room. The pumps were positioned on a skid over secondary containment. There was brown staining on the walls, pumps, and skid, indicating past spills or leaks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 31

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 31. Hose Bib, Ferric Chloride Room View of a hose bib in the ferric chloride room. The bib contained backflow prevention. The hose bib was discolored/stained brown.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 32

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 32. Sodium Hydroxide Tote, Sodium Hydroxide Storage/Pump Room View of the sodium hydroxide (caustic soda) storage tote in the sodium hydroxide room. The tote was labeled with a marker stating a freezing point of 53° F.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 33

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 33. Thermometer, Sodium Hydroxide Storage/Pump Room View of a thermometer on the wall of the sodium hydroxide room. The thermometer read 64° F.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 34

Location: Sandia Resort and Casino Public Water System

Pueblo of Sandia

County: Bernalillo

State: New Mexico



Photograph 34. Sodium Hydroxide Pumps, Sodium Hydroxide Storage/Pump Room View of the sodium hydroxide pumps in the room. The pumps were positioned on a pump skid over secondary containment. There did not appear to be signs of spills/leaks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 35

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 35. Hose Bib, Sodium Hydroxide Storage/Pump Room View of a hose bib inside of the sodium hydroxide storage room. The bib contained backflow prevention.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 36

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 36. Emergency Shower/Eyewash View of the emergency shower/eyewash station located between the two chemical rooms. The station was not winterized.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 37

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 37. Treatment Room View of the treatment room for the Sandia Resort and Casino PWS. The filter units were located on the exterior of the building.

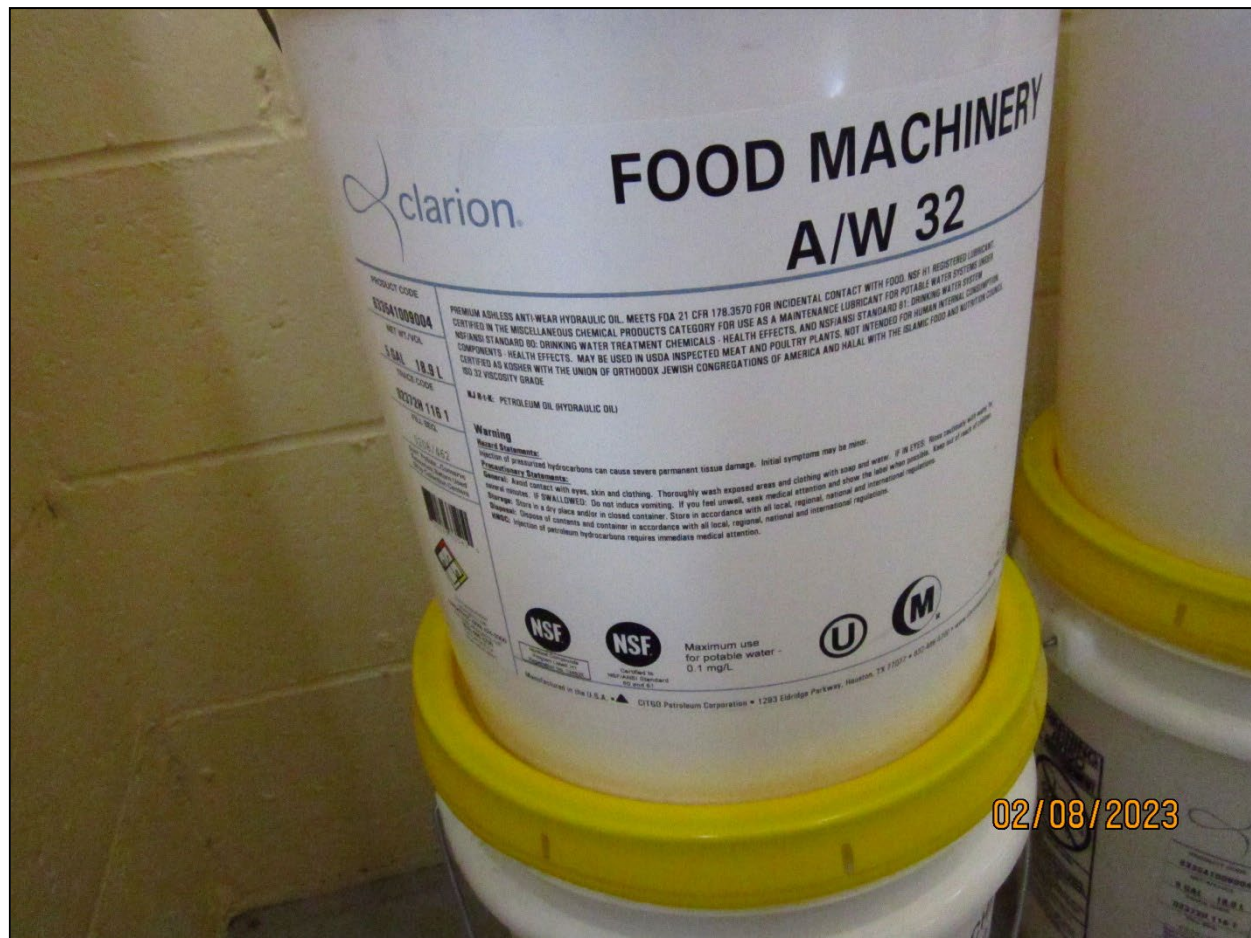


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 38

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 38. Food Grade Lubricant, Treatment Room View of the Clarion food grade machinery lubricant that was being stored in the treatment room.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 39

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 39. Food Grade Lubricant, Treatment Room Close up view of the Clarion food grade machinery lubricant label that was being stored in the treatment room. The lubricant was NSF/ANSI 60 and 61 standard certified.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 40

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 40. Failed Effluent Valve, Treatment Room View of the failed effluent valve in the treatment room. This valve is on the filter produced water discharge main line, immediately prior to produce water blending with bypassed water and receiving final chemical treatment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 41

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 41. Failed Effluent Valve Actuator, Treatment Room View of the failed actuator to the failed effluent valve in the treatment room. The actuator was supported by bailing wire above the valve waiting on repair.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 42

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 42. Raw Water Influent Line, Treatment Room View of the raw well water influent line in the treatment room. Water enters through this line before the bypass line, filtration units, and chemical addition treatment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 43

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 43. Control Valve, Raw Water Influent Line Close up view of the control valve on the raw well water influent line into the treatment system. The valve was in the “closed” position.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 44

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 44. Ferric Chloride Injection, Treatment Room View of the ferric chloride injection point in the treatment system prior to filters. There was brown staining/rust around the injection point.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 45

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 45. Ferric Chloride Injection, Treatment Room Close up view of the ferric chloride injection pipe. The injection point was labeled with black marker, and there was brown staining/corrosion around the injection point that appears to drip downward.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 46

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 46. Raw Water Pipe, Treatment Room View of the raw water bypass pipe in the treatment room. This pipe runs beneath the ferric chloride injection point, and there was evidence of brown staining and corrosion on the floor, piping, and nuts and bolts, possibly indicative of a ferric chloride spill.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 47

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 47. Filter Unit No. 2 View of mixed media (anthracite, sand, and gravel) Filter No 2. The air relief port at the right of the image was recently replaced and did not contain a screen over its opening or an extension line so that releases would not drain on tank.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 48

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 48. Chemical Injection Point, Treatment Room View of the chemical injection point on the chemical mixing line. The system's process flow diagram indicates that the caustic soda injection is upstream of the sodium hypochlorite when in reality the opposite was observed. The caustic soda line was not labeled. Also visible in this image is brown staining on the pipes/infrastructure around the chemical injection point.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 49

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 49. Bypass Line, Treatment Room View of where the raw water bypass line meets the produced filter water immediately upstream of the chemical injection point. Also visible in this image is the missing chemical label on the caustic soda line. The image also shows that the position and order of the chemical injection lines. The treatment diagram has the chemical injection points reverse of what was observed in the field.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 50

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 50. pH Probe, Treatment Room View of the “finished water” pH probe located at the end of the treatment system, after chemical injection. There was also a pressure gauge present at this location which was reading 0 psi. Brown staining can also be seen on the floor and infrastructure in this image.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 51

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 51. Sample Tap, Treatment Room View of a finished water sample tap at the end of the treatment system. This sample point represents the water treated by Filter Nos. 1 and 2, as well as the water contributed by the raw water bypass line.

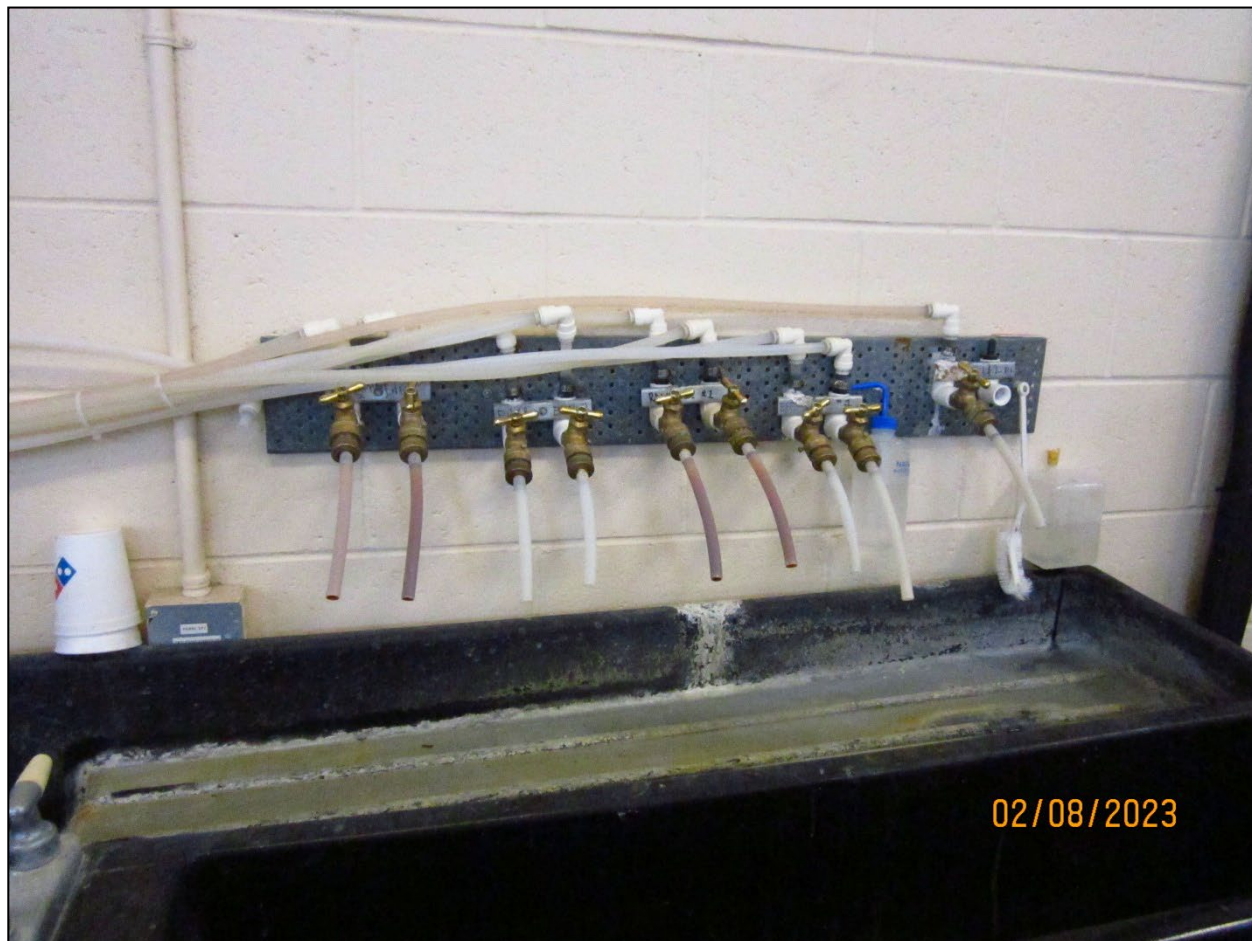


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 52

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 52. Sampling Sink, Treatment Room View of the sampling sink in the treatment room. There were several sample lines taken from various points in the treatment process. These points include raw influent, water post filtration from Filter Nos. 1 and 2, and Entry Point 1, the entry point into the distribution system.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 53

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 53. Filter Nos. 1 and 2 Influent Sample Ports Close up view of the Filter Nos. 1 and 2 influent sample ports. The ports were stained brown from ferric chloride. The sample ports contained backflow prevention.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 54

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 54. Sandia Casino Tank (ST001) View of the diver inspection sticker on the outside of the ST001 tank. The last inspection took place on March 5, 2022.

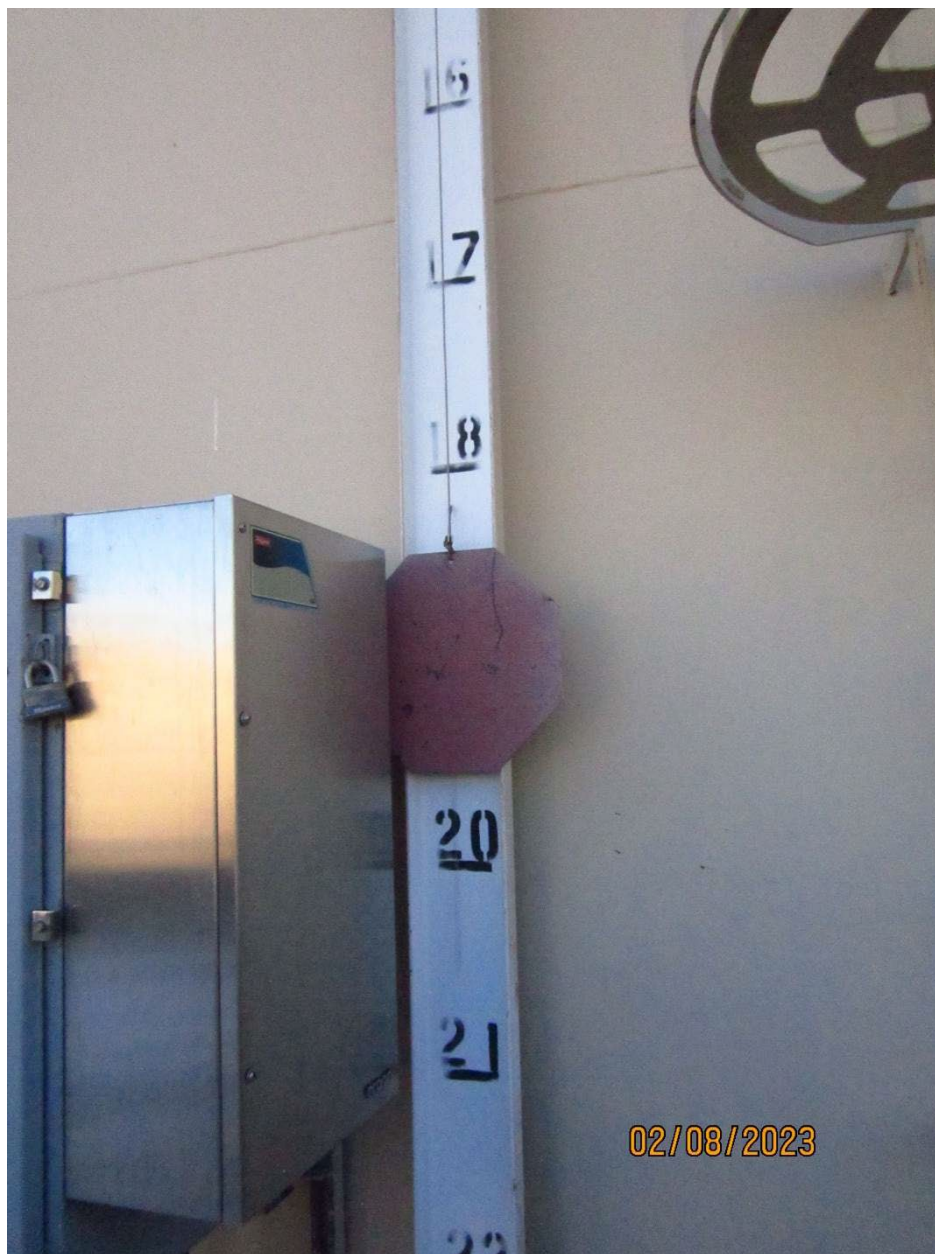


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 55

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 55. Sandia Casino Tank (ST001) View of the tank level indicator at the ST001 tank. The tank level was at 18.5 feet on February 8, 2023. During normal operation, the lead well pump is programmed through SCADA to start pumping if the tank level gets below 18 feet, and the lag pump is programmed to turn on at 17 feet. However, due to the failed effluent valve in the treatment system, the operators changed the set points for the lead and lag well pumps to 16 and 15 feet, respectively until the valve was repaired.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 56

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 56. Sandia Casino Tank (ST001) View of the side of the ST001 tank. The tank had spots where it appeared that water on top of the tank ran off causing algal growth.

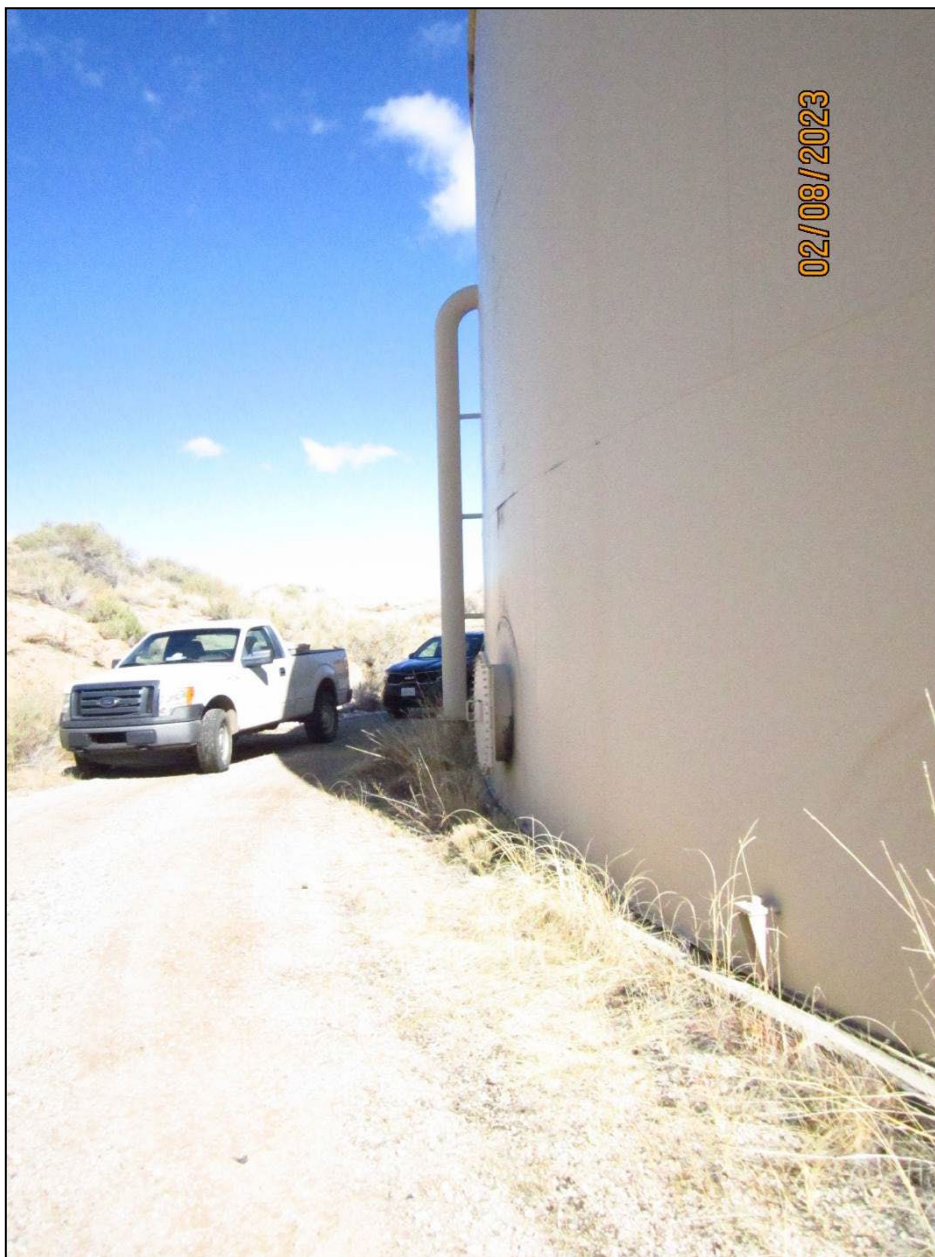


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 57

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 57. Sandia Casino Tank (ST001) View of the overflow line extending from the top of the tank. The overflow line goes below grade and discharges into a circular concrete basin.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 58

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 58. Underground ST001 Overflow Pipe Discharge View of the ST001 overflow pipe discharge point below grade into the drainage basin. The opening of the overflow pipe was unscreened.

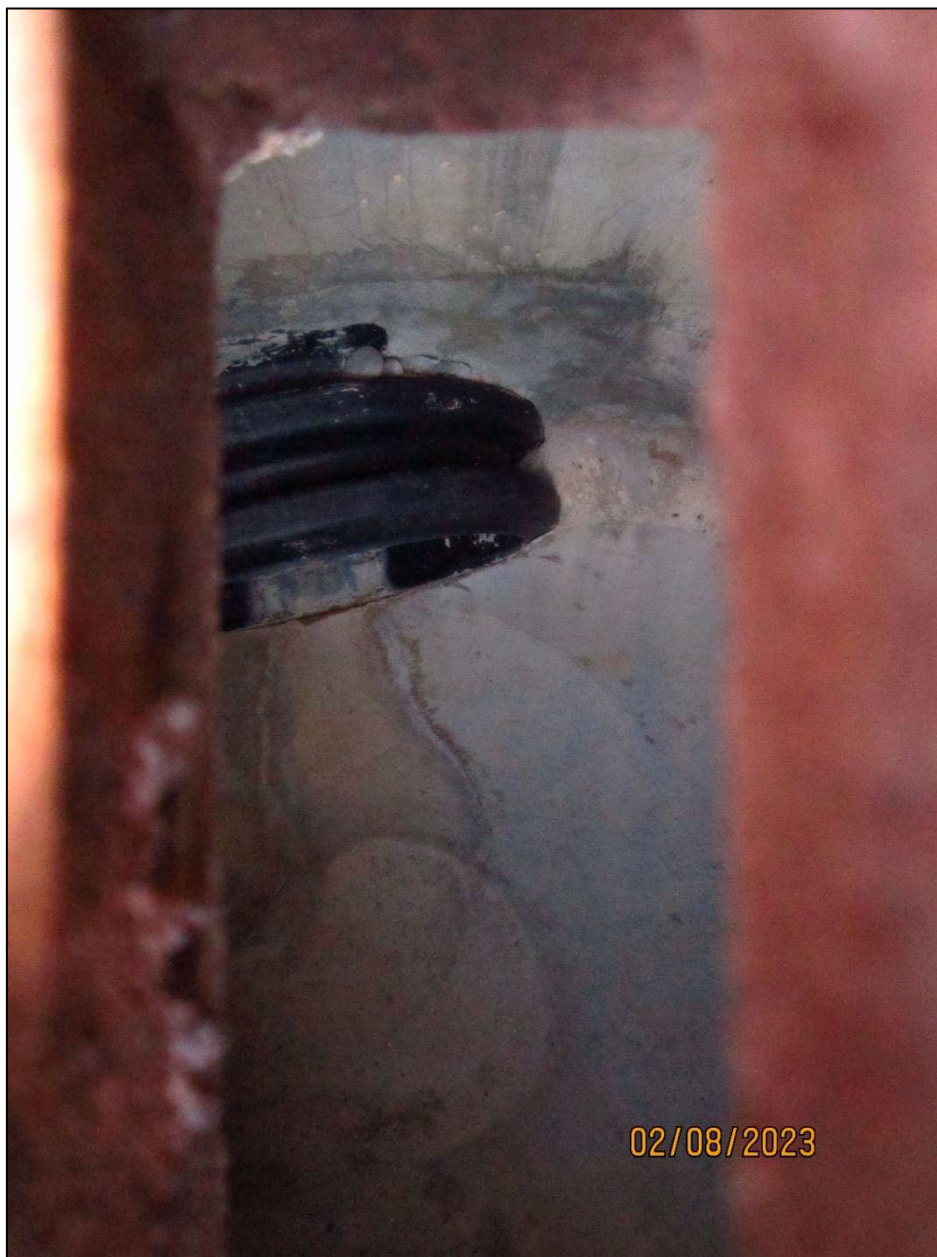


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 59

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 59. Underground ST001 Overflow Pipe Discharge View of the larger diameter discharge pipe in the concrete basin that flows toward the outfall, approximately 500 feet from the ST001 tank.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 60

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 60. ST001 Tank Overflow Outfall View of the overflow outfall for the ST001 tank, located approximately 500 feet west of the tank. The opening to the outfall pipe was screened.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 61

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 61. ST001 Tank Overflow Outfall Close up view of the overflow outfall pipe screen. There was mud/dirt at the bottom of the screen, and there appeared to be four different water mark levels on the screen.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 62

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 62. "Poker Pit" LCR Sample Point, Casino View of the copper lines at the Poker Pit LCR010 sampling point at the Casino. All of the visual piping joints were copper compression joints, and no solder was observed.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 63

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 63. "Poker Pit" LCR Sample Point, Casino View of the Poker Pit sink area where the LCR010 sample is taken. Lead monitoring and analytical data was posted on the wall immediately to the left of the paper towel dispenser.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 64

Location: Sandia Resort and Casino Public Water System		
Pueblo of Sandia	County: Bernalillo	State: New Mexico



Photograph 64. RV Potable Water and Sanitary Sewer Clean-Out Hookups, Casino Area View of one of the four RV parking spot potable water and sewer hookups outside of the casino. The RV parking spots were each serviced with a potable water and sewer connection. The potable water connections did not contain backflow prevention. The sanitary sewer clean-out locations at each parking spot were within three feet of the potable water connections.

Appendix 2

Exhibit Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

Exhibit 1

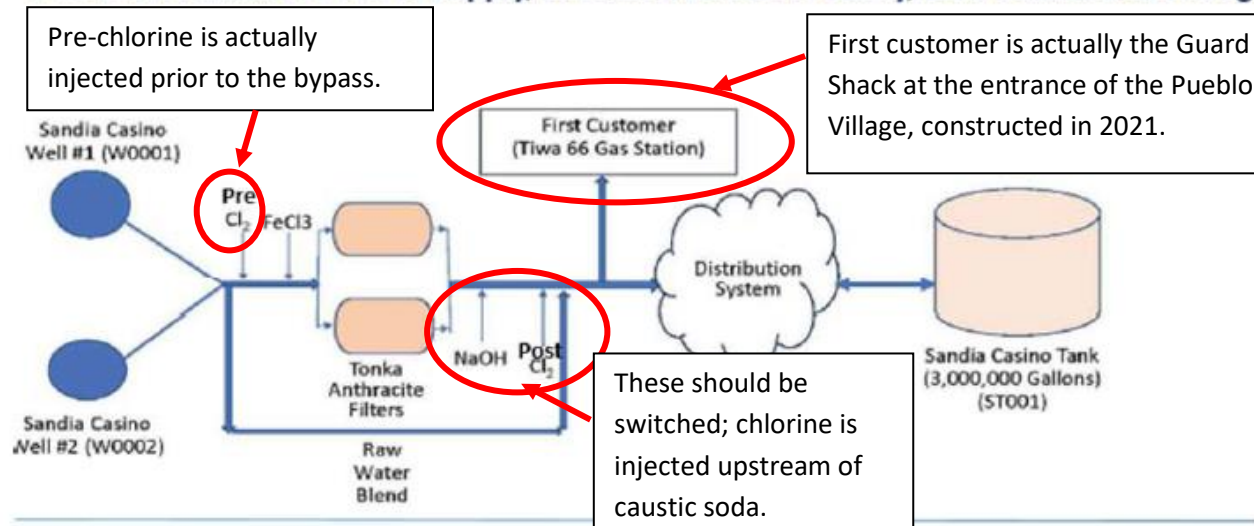
Sandia Resort and Casino PWS System Diagram



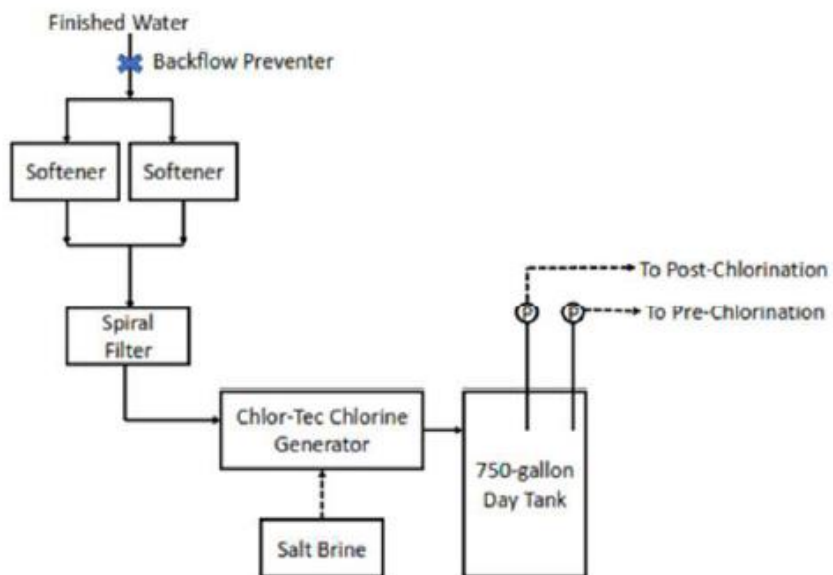
Exhibit Log

Description of Sandia Resort and Casino PWS & treatment Process

Process Schematic of Water Supply, Arsenic Treatment Facility, Distribution and Storage



Process Schematic of Onsite Chlorine Generation System





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

Exhibit 2

Well Checklists/Process Control Sampling Sheets



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

02/08/2023

Amps
2373PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEM

Operator: MR
Date-Time: 3-16-22 / 1300
Well #(s) Tested: 2

Flow Well(s): 1080 gpm Bypass: 140 gpm
Diff Pressure(Headloss): 2.4 psi
Oil Drip Rate: 34 drips/min

Test Results

Raw Water (from Wellhead)

Arsenic	<u>2.0</u>	ppb	
pH/Temp	<u>8.26</u>	su / °C	<u>12.4</u>

Filter Influent

Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	<u>.29</u>	mg/L
Iron	2.8-3.2	<u>1.73</u>	mg/L
pH/Temp	<u>7.77</u>	<u>12.8</u>	su / °C

Filter Effluent

Parameter	Target	Result	Units
Arsenic	<1	<u>5</u>	ppb
Free Cl ₂	0.1-0.2	<u>.21</u>	mg/L
Iron	<0.3	<u>0.03</u>	mg/L

Finished (Blended Water)

Parameter	Target	Result	Units
Arsenic	<5	<u>8</u>	ppb
Free Cl ₂	1.0-1.5	<u>1.35</u>	mg/L
Iron	<0.3	<u>0.02</u>	mg/L
pH/Temp	8.0-8.4	<u>8.3</u>	su <u>12.7</u>

Chemical Feed Information

Sodium Hypochlorite (NaOCl) Feed System

Pre (#1)	Post (#2)	
<u>50</u>	<u>50</u>	Stroke Length %
<u>25</u>	<u>40</u>	Stroke Speed %
<u>14.7</u>	<u>6.44</u>	Gallons/Hour
		Dosage mg/L
	<u>51%</u>	Chem Tank Level

Ferric Chloride (FeCl₃) Feed System

West (#1)	East (#2)	
<u>60</u>		Stroke Length %
<u>30</u>	<u>38</u>	Stroke Speed %
<u>.45</u>		Gallons/Hour
		Dosage mg/L
<u>75%</u>		Chem Tank Level

Sodium Hydroxide (NaOH) Feed System

West (#1)	East (#2)	
	<u>60</u>	Stroke Length %
	<u>12</u>	Stroke Speed %
	<u>.23</u>	Gallons/Hour
		Dosage mg/L
	<u>75%</u>	Chem Tank Level

Comments:

Online Hach Meter Readout (pH / Temp)

Filter In: 6.77 Blend: 7.83Notes: FeCl₃ decreases pH, NaOH caustic increases pH6.77



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEM

Operator: MR Date-Time: 12-28-22 1114 Well #(s) Tested: 2

Flow Well(s): 989 gpm Bypass: gpm
Diff Pressure(Headloss): 3.2 psi
Oil Drip Rate: 36 drips/min

Test Results			
Raw Water (from Wellhead)			
Arsenic	<u>20</u>	ppb	
pH/Temp	<u>7.99</u>	su / °C	<u>78.10.6</u>
Filter Influent			
Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	<u>2.6</u>	mg/L
Iron	2.8-3.2	<u>1.73</u>	mg/L
pH/Temp	<u>7.5</u>	<u>10.3</u>	su / °C
Filter Effluent			
Parameter	Target	Result	Units
Arsenic	<1	<u>5</u>	ppb
Free Cl ₂	0.1-0.2	<u>.23</u>	mg/L
Iron	<0.3	<u>.06</u>	mg/L
Finished (Blended Water)			
Parameter	Target	Result	Units
Arsenic	<5	<u>5</u>	ppb
Free Cl ₂	1.0-1.5	<u>1.14</u>	mg/L
Iron	<0.3	<u>.03</u>	mg/L
pH/Temp	8.0-8.4	<u>7.9</u>	su / °C

Chemical Feed Information			
Sodium Hypochlorite (NaOCl) Feed System			
Pre (#1)	Post (#2)	Stroke Length %	
<u>50</u>	<u>50</u>	<u>25</u>	<u>40</u>
<u>14.7</u>	<u>6.49</u>	Gallons/Hour	
		Dosage mg/L	
<u>425 gal</u>	<u>85%</u>	Chem Tank Level	
Ferric Chloride (FeCl ₃) Feed System			
West (#1)	East (#2)	Stroke Length %	
	<u>55</u>	<u>30</u>	
		Gallons/Hour	
	<u>.60</u>	Dosage mg/L	
	<u>25</u>	Chem Tank Level	
Sodium Hydroxide (NaOH) Feed System			
West (#1)	East (#2)	Stroke Length %	
<u>100</u>		<u>12</u>	
		Gallons/Hour	
	<u>.65</u>	Dosage mg/L	
<u>55 gal</u>	<u>25</u>	Chem Tank Level	

Comments: _____

Online Hach Meter Readout (pH / Temp)
Filter In: 7.29 Blend: 8.17 MR 8.07
Notes: FeCl₃ decreases pH, NaOH caustic increases pH



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEM

Operator: C. Brown
Date-Time: 1-15-2023
Well #(s) Tested: #1

Flow Well(s): gpm 170 Bypass: 0 gpm
Diff Pressure(Headloss): 2.50 psi
Oil Drip Rate: 34 drips/min

Test Results			
Raw Water (from Wellhead)			
Arsenic	<u>4</u>	ppb	
pH/Temp	<u>8.7</u>	su / °C	<u>96°C</u>

Filter Influent			
Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	<u>0.33</u>	mg/L
Iron	2.8-3.2	<u>1.63</u>	mg/L
pH/Temp	<u>7.66</u>	<u>10.1°C</u>	su / °C

Filter Effluent			
Parameter	Target	Result	Units
Arsenic	<1	<u>0</u>	ppb
Free Cl ₂	0.1-0.2	<u>0.26</u>	mg/L
Iron	<0.3	<u>0.02</u>	mg/L

pH 7.68 Temp 10.0°C

Finished (Blended Water)			
Parameter	Target	Result	Units
Arsenic	<5	<u>0</u>	ppb
Free Cl ₂	1.0-1.5	<u>0.96</u>	mg/L
Iron	<0.3	<u>0.02</u>	mg/L
pH/Temp	8.0-8.4	<u>7.6/87°C</u>	su

Chemical Feed Information			
Sodium Hypochlorite (NaOCl) Feed System			
Pre (#1)	Post (#2)		
<u>50%</u>	<u>50%</u>	Stroke Length %	
<u>25%</u>	<u>40%</u>	Stroke Speed %	
<u>14.7</u>	<u>6.49</u>	Gallons/Hour	
		Dosage mg/L	
		Chem Tank Level	
Ferric Chloride (FeCl ₃) Feed System			
West (#1)	East (#2)		
	<u>55%</u>	Stroke Length %	
	<u>30%</u>	Stroke Speed %	
	<u>.60</u>	Gallons/Hour	
		Dosage mg/L	
		Chem Tank Level	
Sodium Hydroxide (NaOH) Feed System			
West (#1)	East (#2)		
<u>100%</u>		Stroke Length %	
<u>16%</u>		Stroke Speed %	
<u>1.02</u>		Gallons/Hour	
		Dosage mg/L	
		Chem Tank Level	

Comments: HACH METER NOT SHOWING
BLIND PH OR TEMP (FLASHING)

Online Hach Meter Readout (pH / Temp)
Filter In: 7.67/97.7°C Blend: FLASHING
Notes: FeCl₃ decreases pH, NaOH caustic increases pH



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEM

Operator: G. B. C. 2020
Date-Time: 1-27-2023
Well #(s) Tested: #1

Flow Well(s): gpm/158 Bypass: 41 gpm
Diff Pressure(Headloss): 2.47 psi
Oil Drip Rate: 22 drips/min

Test Results

Raw Water (from Wellhead)

Arsenic	<u>2</u>	ppb	
pH/Temp	<u>8.05/10</u>	su / °C	

Filter Influent

Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	<u>0.34</u>	mg/L
Iron	2.8-3.2	<u>1.68</u>	mg/L
pH/Temp	<u>7.58</u>	<u>10</u>	su / °C

Filter Effluent

Parameter	Target	Result	Units
Arsenic	<1	<u>0</u>	ppb
Free Cl ₂	0.1-0.2	<u>0.22</u>	mg/L
Iron	<0.3	<u>0.03</u>	mg/L

7.59/10

Finished (Blended Water)

Parameter	Target	Result	Units
Arsenic	<5	<u>0</u>	ppb
Free Cl ₂	1.0-1.5	<u>0.95</u>	mg/L
Iron	<0.3	<u>0.03</u>	mg/L
pH/Temp	8.0-8.4	<u>8.10/10</u>	su

Chemical Feed Information

Sodium Hypochlorite (NaOCl) Feed System

Pre (#1)	Post (#2)	
<u>50%</u>	<u>50%</u>	Stroke Length %
<u>25%</u>	<u>40%</u>	Stroke Speed %
	<u>6.49</u>	Gallons/Hour
		Dosage mg/L
		Chem Tank Level

Ferric Chloride (FeCl₃) Feed System

West (#1)	East (#2)	
	<u>55%</u>	Stroke Length %
	<u>30%</u>	Stroke Speed %
	<u>0.60</u>	Gallons/Hour
		Dosage mg/L
		Chem Tank Level

Sodium Hydroxide (NaOH) Feed System

West (#1)	East (#2)	
<u>100%</u>		Stroke Length %
<u>21%</u>		Stroke Speed %
<u>1.35</u>		Gallons/Hour
		Dosage mg/L
		Chem Tank Level

Comments: _____

Online Hach Meter Readout (pH / Temp)

Filter In: 7.15/12.9 Blend: 8.51/12.9Notes: FeCl₃ decreases pH, NaOH caustic increases pH



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEM

Operator: C. B. Brown
Date-Time: 1-22-2023
Well # (s) Tested: # 2

Flow Well(s): gpm/1.00 Bypass: gpm
Diff Pressure (Headloss): 1.85 psi
Oil Drip Rate: 28 drips/min

Test Results

Raw Water (from Wellhead)

Arsenic	<u>3</u>	ppb	
pH/Temp	<u>8.25/9.7</u>	su / °C	

Filter Influent

Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	<u>0.39</u>	mg/L
Iron	2.8-3.2	<u>1.65</u>	mg/L
pH/Temp	<u>7.73/9.7</u>		su / °C

Filter Effluent

Parameter	Target	Result	Units
Arsenic	<1	<u>0</u>	ppb
Free Cl ₂	0.1-0.2	<u>0.33</u>	mg/L
Iron	<0.3	<u>0.03</u>	mg/L

Finished (Blended Water)

Parameter	Target	Result	Units
Arsenic	<5	<u>0</u>	ppb
Free Cl ₂	1.0-1.5	<u>1.07</u>	mg/L
Iron	<0.3	<u>0.02</u>	mg/L
pH/Temp	8.0-8.4	<u>8.45/9.7</u>	su

Online Hach Meter Readout (pH / Temp): cFilter In: 7.05/18.9 Blend: 8.67/9.5
Notes: FeCl₃ decreases pH, NaOH caustic increases pH

Chemical Feed Information

Sodium Hypochlorite (NaOCl) Feed System

Pre (#1)	Post (#2)	Stroke Length %
<u>50%</u>	<u>50%</u>	
<u>25%</u>	<u>40%</u>	
<u>6.49</u>	<u>6.49</u>	Gallons/Hour
<u>4.00</u>	<u>6.49</u>	Dosage mg/L
<u>6.49</u>	<u>6.49</u>	Chem Tank Level

Ferric Chloride (FeCl₃) Feed System

West (#1)	East (#2)	Stroke Length %
	<u>55%</u>	
	<u>30%</u>	
	<u>.60</u>	Gallons/Hour
	<u>1.60</u>	Dosage mg/L
	<u>1.60</u>	Chem Tank Level

Sodium Hydroxide (NaOH) Feed System

West (#1)	East (#2)	Stroke Length %
<u>100%</u>		
<u>14%</u>		
<u>.89</u>		Gallons/Hour
<u>.85</u>		Dosage mg/L
<u>.85</u>		Chem Tank Level

Comments:

WCS FE DRAW DOWN 1.2 GPH



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEMOperator: MRDate-Time: 1-30-23 / 1030Well #(s) Tested: 1 + 2

Test Results

Raw Water (from Wellhead)

Arsenic	<u>20</u>	ppb	
pH/Temp	<u>8.07</u>	su / °C	<u>10.1</u>

Filter Influent

Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	<u>.26</u>	mg/L
Iron	2.8-3.2	<u>1.71</u>	mg/L
pH/Temp	<u>7.58</u>	<u>10.3</u>	su / °C

Filter Effluent

Parameter	Target	Result	Units
Arsenic	<1	<u><1</u>	ppb
Free Cl ₂	0.1-0.2	<u>.18</u>	mg/L
Iron	<0.3	<u>.04</u>	mg/L

Finished (Blended Water)

Parameter	Target	Result	Units
Arsenic	<5	<u>5</u>	ppb
Free Cl ₂	1.0-1.5	<u>.86</u>	mg/L
Iron	<0.3	<u>.06</u>	mg/L
pH/Temp	8.0-8.4	<u>8.01</u>	su / °C

Online Hach Meter Readout (pH / Temp)

Filter In: 7.43 Blend: 8.38Notes: FeCl₃ decreases pH, NaOH caustic increases pH2100
Flow Well(s): 2100 gpm Bypass: 2100 gpm
Diff Pressure(Headloss): 2.6 psi
Oil Drip Rate: 40 32 drips/min
Well #1 Well 2

Chemical Feed Information

Sodium Hypochlorite (NaOCl) Feed System

Pre (#1)	Post (#2)	
<u>50</u>	<u>50</u>	Stroke Length %
<u>55</u>	<u>75</u>	Stroke Speed %
<u>32.7</u>	<u>12.7</u>	Gallons/Hour
<u>VFP</u>		Dosage mg/L
<u>440gAl</u>	<u>87.4</u>	Chem Tank Level

Ferric Chloride (FeCl₃) Feed System

West (#1)	East (#2)	
	<u>55</u>	Stroke Length %
	<u>58</u>	Stroke Speed %
	<u>1.5</u>	Gallons/Hour
		Dosage mg/L
	<u>75%</u>	Chem Tank Level

Sodium Hydroxide (NaOH) Feed System

West (#1)	East (#2)	
<u>100%</u>		Stroke Length %
<u>35</u>		Stroke Speed %
<u>2.24</u>		Gallons/Hour
		Dosage mg/L
<u>60%</u>		Chem Tank Level

Comments:

PUEBLO OF SANDIA ARSENIC REMOVAL FACILITY
COMMERCIAL WATER SYSTEM

Operator: B. Beard

Date-Time: 3/20/2023 10:30

Well #(s) Tested: #1

Flow Well(s): 111 gpm Bypass: 169 gpm

Diff Pressure(Headloss): 1.25 psi

Oil Drip Rate: 57 drips/min

Test Results

Raw Water (from Wellhead)			
Arsenic	8	ppb	
pH/Temp	8.4/4.8	su / °C	

Filter Influent			
Parameter	Target	Result	Units
Free Cl ₂	0.25-0.40	0.52	mg/L
Iron	2.8-3.2	1.99	mg/L
pH/Temp	7.31/4.9		su / °C

Filter Effluent			
Parameter	Target	Result	Units
Arsenic	<1	Ø	ppb
Free Cl ₂	0.1-0.2	0.45	mg/L
Iron	<0.3	0.02	mg/L
		7.55/14.8	

Finished (Blended Water)			
Parameter	Target	Result	Units
Arsenic	<5	Ø	ppb
Free Cl ₂	1.0-1.5	1.52	mg/L
Iron	<0.3	0.02	mg/L
pH/Temp	8.0-8.4	8.21/14.7	su

Chemical Feed Information

Sodium Hypochlorite (NaOCl) Feed System

Pre (#1)	Post (#2)	
		Stroke Length %
25.0%	55.0%	Stroke Speed %
	7.25	Gallons/Hour
		Dosage mg/L
		Gallons Used

Ferric Chloride (FeCl₃) Feed System

West (#1)	East (#2)	
60%		Stroke Length %
30%		Stroke Speed %
0.65		Gallons/Hour
		Dosage mg/L
		Gallons Used

Sodium Hydroxide (NaOH) Feed System

West (#1)	East (#2)	
	60%	Stroke Length %
	23%	Stroke Speed %
	0.46	Gallons/Hour
		Dosage mg/L
		Gallons Used

Comments: _____

Online Hach Meter Readout (pH / Temp)

Water In: 7.22 Blend: 8.05

Notes: FeCl₃ decreases pH, NaOH caustic increases pH



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

Exhibit 3

Operator Logbook- Treatment Room



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

RAW Flow Pump 2/22/19
2.19 1.07 1.09
02/08/2023
11/28/18 set NaOH pump #2/E to 100% (20 turns) & left speed @ 70%
KLG
11/28/18 KLG lowered NaOH speed for well #2 to 60% - 10:11 pH on blended water 8.59
12-20-18 NaOH
Set Point Changed for pH control running 7.0 pH
Reduced % speed set points 5% now
Well #1 65% Well #2 55% Well #3 85% Speeds
12/26/2018 N. Gachupin 0850 - NaOH
Well #1 - 60% Well #2 - 50% Well #3 - 80%
12/27/2018 - 0844 M. Gachupin
Back Wash initiated
12/21/18 - Lowered pressure on raw for BLDG water supply to stop vibration on pipe
1/2/19 Lowered NaOH
Well #1 - 55% Well #2 - 45% Well #3 - 75%
1/3/19 Initiated back wash per scheduled day
1/7/19 lowered NaOH Well #1 - 50% Well #2 - 45% Well #3 - 75%
1/10/19 Raised NaOH Well #1 Well #2 Well #3 75%
1/10/19 CHANGED BACK TO 1/7/19 SET POINTS
01/14/19 B.R. K.L.
CHANGED NaOH pump SETTINGS BY 10% Well #1 40%, Well #2 30%
AND WELL #1 AND 2 TO 60%
2/3/19 SET New NaOH 75 40 65
50/45/70 KLG



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Exhibit Log

02/08/2023

2/4/19 - Recalibrated pH MTR SC-200 for
EFFLUENT - LWS reading 7.65 mtr vs
lab 8.65. KLG

2-13-19 Z, GB, BR, MR, DM & KC

Changed the Salt Bridges today

Isolated Lookout Wells 1 & 2, Isolated Casin ATF at the main isolation valve
Relieved Water pressure from the System at the SCADA -

Manually opened at SCADA Filter 1 & 2 Cells 1 & 2 RWI & BWE valves.
Manually opened FTW & CFWE valves. 1

Relieved the water pressure from potable water at the sink.

Removed & Cleaned the probes. Changed the Salt bridges.

Reversed order to place ATF back in operation.

Wells 1 & 2 raw bypass flow set to 20%.

Well 1 bypass flow set to 20%, Well 2 bypass set to 20%. KLG

* Filter 2 Cell 1 BWE valve may not be fully closing treated water
is leaking by to sewer drain.

2/19/19 - Covered WADH From 45/40/65 to 40/35/60
pH @ Lab is 8.4. KLG

2/21/19 - BR, MR - Tested both wells.

2/27/19 Z/KG FLUSHED WADH LINE FOR PROCEED
2/28/19 KLG - CALIBRATE EFF pH METER READING WAS
8.75 - LAB READING 8.52

3/2/19 Z BACKWASH ON FILTER #1

3/6/19 KLG - RAISED IRON FOR WELL #2 FROM 20/30.

Iron residual was 1.0 before → 1.5 after

Appendix 3

LCR Inspection Information Request Letter

LCR Inspection Information Request Letter

SENT VIA E-MAIL

Donald Avila
Public Works Director
Pueblo of Sandia, Sandia Public Works Department
481 Sandia Loop
Bernalillo, NM 87004
doaavila@sandiapueblo.nsn.us

Re: Request for Information Pursuant to Section 1445 of the Safe Drinking Water Act
Sandia Resort and Casino, PWS ID: 063506114

Dear Mr. Avila:

The United States Environmental Protection Agency (EPA) is responsible for assuring public water systems (PWSs) provide safe drinking water in accordance with the Safe Drinking Water Act (SDWA or Act), 42 U.S.C. §§300f - 300j-26, and the regulations promulgated pursuant to the Act. SDWA Section 1445 and 40 Code of Federal Regulations (C.F.R.) Part 141 Subpart D (§141.31) authorizes the EPA to require the submittal of information so it can determine a PWS's compliance with federal drinking water regulations. Under the authority of Section 1445(a)(1)(B) of the SDWA, as amended, 42 U.S.C. §300j-4(a)(1)(B), EPA Region 6 hereby requests that Sandia Resort and Casino Public Water System provide the information described below within the indicated time frame. EPA seeks this information to determine whether the system referenced above is in compliance with the requirements of the Lead and Copper Rule (LCR).

Based on information contained in the Safe Drinking Water Information System (SDWIS), Sandia Resort and Casino is a non-transient non-community water system, serving a daily non-transient population of 1,730 people and transient population of 13,270 people within Albuquerque, New Mexico. Sandia Resort and Casino is therefore subject to the requirements of the Lead and Copper Rule, as per 40 C.F.R. Part 141 Subpart I. EPA Region 6, in coordination with PG Environmental (PG) contractors, will conduct an onsite inspection February 7-9, 2023 focused on the system's Lead and Copper Rule implementation. The inspection will also serve as on-the-job training for EPA Region 6 inspectors.

Within 15 days of receipt of this letter, EPA requests Sandia Resort and Casino submit the following information:

1. A description of the Sandia Resort and Casino PWS and treatment processes, including schematics and maps and a list of all water sources (active and inactive) and associated treatment plants.
2. Information on corrosion control treatment (CCT), if applicable, including, but not limited to, a description of the CCT treatment, date of installation, and primacy agency-

designated ranges or minimum values for optimal water quality parameters (40 C.F.R. 141.84(e) and 141.82).

3. The name and PWSID of any consecutive system Sandia Resort and Casino supplies water to.
4. Approval documents from EPA Region 6 for the existing corrosion control treatment installed, if applicable.
5. Copies of the materials evaluation and the pool of identified targeted sampling sites (including tier designation) for all lead and copper monitoring conducted during 2018 to present (40 C.F.R. 141.86(a)(1) and 141.86(a)(6)).
6. Copies of lead and copper rule monitoring plans used from 2018 to present. Include a supplemental document with a list of locations if the sample locations are difficult to read.
7. Description and/or standard operating procedure for modification of the lead and copper tap sampling plan including the basis for adding/deleting sites from the sampling pool and the EPA Region 6 approval process for modifications to the monitoring plan.
8. Copies of all analytical reports for lead and copper tap sampling conducted from 2018 to present, including all chains of custody (completed by customers, lab personnel, and/or PWS Personnel) and 90th percentile calculations (40 C.F.R. 141.80(c)). In addition, provide an explanation as to how these samples were used in the 90th percentile calculation.
9. Copies of LCR tap sampling instructions provided to customers for tap monitoring conducted from 2018 to present.
10. Copies of public education conducted from 2018 to present in response to a lead action level exceedance, if applicable.
11. Copies of analytical reports for water quality parameter monitoring conducted from 2018 to present, if applicable (40 C.F.R. 141.87).
12. Copies of analytical reports for source water monitoring in response to an action level exceedance from 2018 to present, if applicable (40 C.F.R. 141.88).
13. Historical lead service line replacement (partial and full) information, including location and date of replacement (40 C.F.R. 141.84).

Please submit this information, in hardcopy or electronic format, to:

Sami Doupnik
Water Resources Section

Enforcement and Compliance Assurance Division
U.S. EPA, Region 6
1201 Elm Street, Suite 500
Dallas, TX 75270
(214) 665-7495
doupnik.sami@epa.gov

Please be advised that, under Section 1445(c) of the SDWA, 42 U.S.C. §300j-4(c), and 40 C.F.R. §19.4, Table 1, failure to provide information required by this letter may result in a civil penalty of up to \$37,500. In addition, under SDWA Section 1414(g), 42 U.S.C. §300g-3(g), failure to provide the information required by this letter may result in an order requiring compliance. Violation of such order may lead to sanctions under SDWA Section 1414, 42 U.S.C. §300g-3 and 40 C.F.R. §19.4, Table 1, which include penalties of up to \$32,500 per day of violation. The information provided in response to this letter may be used by the United States in administrative, civil or criminal proceedings.

You may, if you so desire, assert a confidential business information (CBI) claim covering any or all of the information furnished to EPA in response to this letter. Every CBI claim must be made in a manner described in 40 C.F.R. Part 2, Subpart B, and must be fully substantiated with documentary evidence which shows how the claim meets each and every criterion listed in 40 C.F.R. §§2.208 and 2.304. If no CBI claim accompanies your information when it is received by EPA, it may be made available to the public by EPA without further notice to you.

This request for information is not subject to review by the Office of Management and Budget (OMB) under the Paper Reduction Act because it is not an “information collection request” within the meaning of 44 U.S.C. §§3502(4) & (11), 33507, 3512 and 3518. Furthermore, it is exempt from OMB review under the Paper Reduction Act because it is directed to fewer than 10 persons. 44 U.S.C. §§3502(4), (11); 5 C.F.R. §1320.5(a).

If you have any questions regarding this matter, please call PG point of contact Danny O’Connell at 720-789-8032 or EPA Region 6 point of contact Sami Doupnik at 214-665-8192.

Sincerely,

Sami Doupnik
Physical Scientist, U.S. EPA – Region 6
Water Resources Section
Enforcement and Compliance Assurance Division

cc: Kenneth Garcia, Utilities Operations Supervisor, Sandia Public Works Department
Michael Rivera, Water Quality Technician, Sandia Public Works Department
Curry Jones, Drinking Water Section Manager, EPA Region 6
Craig Young, Enforcement Officer, EPA Region 6
Jessica Moore, Enforcement Officer, EPA Region 6
Danny O’Connell, Contractor, PG Environmental
Jake Okun, Contractor, PG Environmental

Appendix 4

Lead & Copper Sampling Plan

Sandia Resort & Casino

Lead & Copper Sampling Plan

Updated – May 2018

Section 1 – System Information

Organization Name:	PWS Name:	PWS ID#:	
Pueblo of Sandia	Sandia Resort & Casino	063506114	
Shipping Address:	Phone Number(s)	System Classification	
30 Rainbow Rd Albuquerque, NM 87113	505-771-5187	Non Transient, Non Community	
	Population Served		
	Residential: -	Non-Transient: 1,730	Transient: 13,270
	Description of Disinfection /Treatment Processes		
	<i>Cl2/Ferric Cl/Filter/Post chlorination</i>		
Lead & Copper Compliance Sampling Schedule			
	Sampling Frequency: Every 6 months	Number of Samples: 20 samples	*Sampling Window: Baseline / Increased Sampling

***Reduced Monitoring Sampling Window:**

June 1 – September 30

***Baseline / Increased Sampling Window:**

As instructed by EPA

Section 2 – Sample Site Selection Information

*** Instructions for Selecting Sample Sites in Accordance with the EPA Lead and Copper Regulations – Community System**

1. Identify single family structures with copper pipes and lead solder installed after 1982 (but before State's ban) or contain lead pipes; and/or served by a lead service line (Tier 1 sites).
2. Of these Tier 1 sites, select homes distributed throughout the water system and collect samples at these sites.
3. If you do not have enough homes in this category, use buildings, including multi-family residences with copper pipes and lead solder installed after 1982 (but before State's ban) or contain lead pipes; and/or served by a lead service line (Tier 2 sites).
4. If you do not have enough sample sites in the above two categories include single family structures with copper pipes having lead solder installed before 1983 (Tier 3 sites).
5. Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants.

*** Instructions for Selecting Sample Sites in Accordance with the EPA Lead and Copper Regulations – NTNC Systems**

1. Identify buildings with copper pipes with lead solder installed after 1982 (but before State's ban) or contain lead pipes; and/or are served by a lead service line. (Tier 1 sites).
2. Of these Tier 1 sites, select sites at buildings distributed throughout the water system and collect samples at these sites.
3. If you do not have enough sample sites in the above category include buildings with sampling sites that contain copper pipes with lead solder installed before 1983 (Tier 2 sites). If additional sites are needed to complete the sampling pool use representative sites throughout the distribution system. A representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the system.
4. Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants.

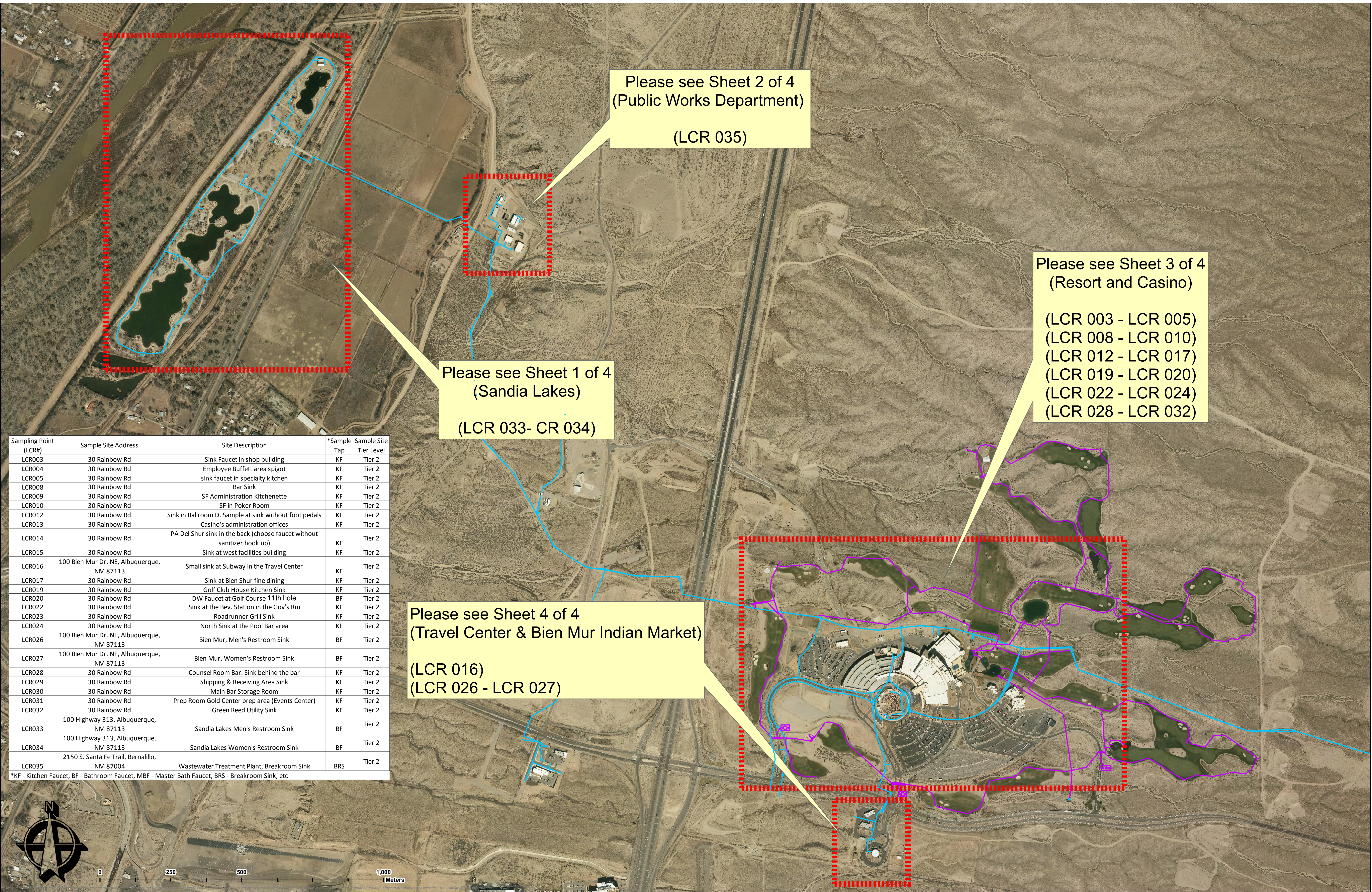
***Note:** Recent studies indicate that galvanized piping can contribute to lead levels in drinking water. Therefore, sample site selection should take this into consideration and locations with galvanized service lines or galvanized piping in the home/building should be included.

Section 3 – LCR Sample Locations

Sampling Point ID (LCR#)	Sample Site Address	Site Description	*Sample Tap	Sample Site Tier Level
LCR003	30 Rainbow Rd	Sink Faucet in shop building	KF	Tier 2
LCR004	30 Rainbow Rd	Employee Buffett area spigot	KF	Tier 2
LCR005	30 Rainbow Rd	sink faucet in specialty kitchen	KF	Tier 2
LCR008	30 Rainbow Rd	Bar Sink	KF	Tier 2
LCR009	30 Rainbow Rd	SF Administration Kitchenette	KF	Tier 2
LCR010	30 Rainbow Rd	SF in Poker Room	KF	Tier 2
LCR012	30 Rainbow Rd	Sink in Ballroom D. Sample at sink without foot pedals	KF	Tier 2
LCR013	30 Rainbow Rd	Casino's administration offices	KF	Tier 2
LCR014	30 Rainbow Rd	PA Del Shur sink in the back (choose faucet without sanitizer hook up)	KF	Tier 2
LCR015	30 Rainbow Rd	Sink at west facilities building	KF	Tier 2
LCR016	100 Bien Mur Dr. NE Abq, NM 87113	Small sink at Subway in the Travel Center	KF	Tier 2
LCR017	30 Rainbow Rd	Sink at Bien Shur fine dining	KF	Tier 2
LCR019	30 Rainbow Rd	Golf Club House Kitchen Sink	KF	Tier 2
LCR020	30 Rainbow Rd	DW Faucet at Golf Course 11 th hole	BF	Tier 2
LCR022	30 Rainbow Rd	Sink at the Bev. Station in the Gov's Rm	KF	Tier 2
LCR023	30 Rainbow Rd	Roadrunner Grill Sink	KF	Tier 2
LCR024	30 Rainbow Rd	North Sink at the Pool Bar area	KF	Tier 2

LCR026	100 Bien Mur Dr. NE Abq, NM 87113	Bien Mur, Men's Restroom Sink	BF	Tier 2
LCR027	100 Bien Mur Dr. NE Abq, NM 87113	Bien Mur, Women's Restroom Sink	BF	Tier 2
LCR028	30 Rainbow Rd	Counsel Room Bar. Sink behind the bar	KF	Tier 2
LCR029	30 Rainbow Rd	Shipping & Receiving Area Sink	KF	Tier 2
LCR030	30 Rainbow Rd	Main Bar Storage Room	KF	Tier 2
LCR031	30 Rainbow Rd	Prep Room Gold Center prep area (Events Center)	KF	Tier 2
LCR032	30 Rainbow Rd	Green Reed Utility Sink	KF	Tier 3
LCR033	100 Highway 313 Abq, NM 87113	Sandia Lakes Men's Restroom Sink	BF	Tier 2
LCR034	100 Highway 313 Abq, NM 87113	Sandia Lakes Women's Restroom Sink	BF	Tier 2
LCR035	2150 S. Santa Fe Trail Bernalillo, NM 87004	Wastewater Treatment Plant, Breakroom Sink	BRS	Tier 2

*KF – Kitchen Faucet, BF – Bathroom Faucet, MBF – Master Bath Faucet, etc



Please see Sheet 2 of 4
(Public Works Department)

(LCR 035)

Please see Sheet 1 of 4
(Sandia Lakes)

(LCR 033- CR 034)

Please see Sheet 3 of 4
(Resort and Casino)

(LCR 003 - LCR 005)
(LCR 008 - LCR 010)
(LCR 012 - LCR 017)
(LCR 019 - LCR 020)
(LCR 022 - LCR 024)
(LCR 028 - LCR 032)

Please see Sheet 4 of 4
(Travel Center & Bien Mur Indian Market)

(LCR 016)
(LCR 026 - LCR 027)

Sampling Point (LCR#)	Sample Site Address	Site Description	*Sample Tap	Sample Site Tier Level
LCR003	30 Rainbow Rd	Sink Faucet in shop building	KF	Tier 2
LCR004	30 Rainbow Rd	Employee Buffett area spigot	KF	Tier 2
LCR005	30 Rainbow Rd	sink faucet in specialty kitchen	KF	Tier 2
LCR008	30 Rainbow Rd	Bar Sink	KF	Tier 2
LCR009	30 Rainbow Rd	SF Administration Kitchenette	KF	Tier 2
LCR010	30 Rainbow Rd	SF in Poker Room	KF	Tier 2
LCR012	30 Rainbow Rd	Sink in Ballroom D. Sample at sink without foot pedals	KF	Tier 2
LCR013	30 Rainbow Rd	Casino's administration offices	KF	Tier 2
LCR014	30 Rainbow Rd	PA Del Shur sink in the back (choose faucet without sanitizer hook up)	KF	Tier 2
LCR015	30 Rainbow Rd	Sink at west facilities building	KF	Tier 2
LCR016	100 Bien Mur Dr. NE, Albuquerque, NM 87113	Small sink at Subway in the Travel Center	KF	Tier 2
LCR017	30 Rainbow Rd	Sink at Bien Shur fine dining	KF	Tier 2
LCR019	30 Rainbow Rd	Golf Club House Kitchen Sink	KF	Tier 2
LCR020	30 Rainbow Rd	DW Faucet at Golf Course 11th hole	BF	Tier 2
LCR022	30 Rainbow Rd	Sink at the Bev. Station in the Gov's Rm	KF	Tier 2
LCR023	30 Rainbow Rd	Roadrunner Grill Sink	KF	Tier 2
LCR024	30 Rainbow Rd	North Sink at the Pool Bar area	KF	Tier 2
LCR026	100 Bien Mur Dr. NE, Albuquerque, NM 87113	Bien Mur, Men's Restroom Sink	BF	Tier 2
LCR027	100 Bien Mur Dr. NE, Albuquerque, NM 87113	Bien Mur, Women's Restroom Sink	BF	Tier 2
LCR028	30 Rainbow Rd	Counsel Room Bar. Sink behind the bar	KF	Tier 2
LCR029	30 Rainbow Rd	Shipping & Receiving Area Sink	KF	Tier 2
LCR030	30 Rainbow Rd	Main Bar Storage Room	KF	Tier 2
LCR031	30 Rainbow Rd	Prep Room Gold Center prep area (Events Center)	KF	Tier 2
LCR032	30 Rainbow Rd	Green Reed Utility Sink	KF	Tier 2
LCR033	100 Highway 313, Albuquerque, NM 87113	Sandia Lakes Men's Restroom Sink	BF	Tier 2
LCR034	100 Highway 313, Albuquerque, NM 87113	Sandia Lakes Women's Restroom Sink	BF	Tier 2
LCR035	2150 S. Santa Fe Trail, Bernalillo, NM 87004	Wastewater Treatment Plant, Breakroom Sink	BRS	Tier 2

*KF - Kitchen Faucet, BF - Bathroom Faucet, MBF - Master Bath Faucet, BRS - Breakroom Sink, etc

Index Map for LCR Sampling Plan 2018

Created By: GIS Team – Lands Department	Date: 03/19/2018
Checked By: GIS Team – Lands Department	Index Sheet
Approved By: N/A	Project Manager: N/A

Coordinate System: Pueblo of Sandia Ground
Projection: Transverse Mercator
Datum: NAD 1983
Units: Foot US

Data Sources: PoS, MRCOG 2016



Pueblo of Sandia

Lands Department
481 Sandia Loop
Bernalillo, NM 87004



Sandia Lakes LCR Sampling Map 2018

Created By: GIS Team – Lands Department
Checked By: GIS Team – Lands Department
Approved By: N/A

Date: 03/19/2018
Sheet 1 of 4
Project Manager: N/A



Lands Department
481 Sandia Loop
Bernalillo, NM 87004



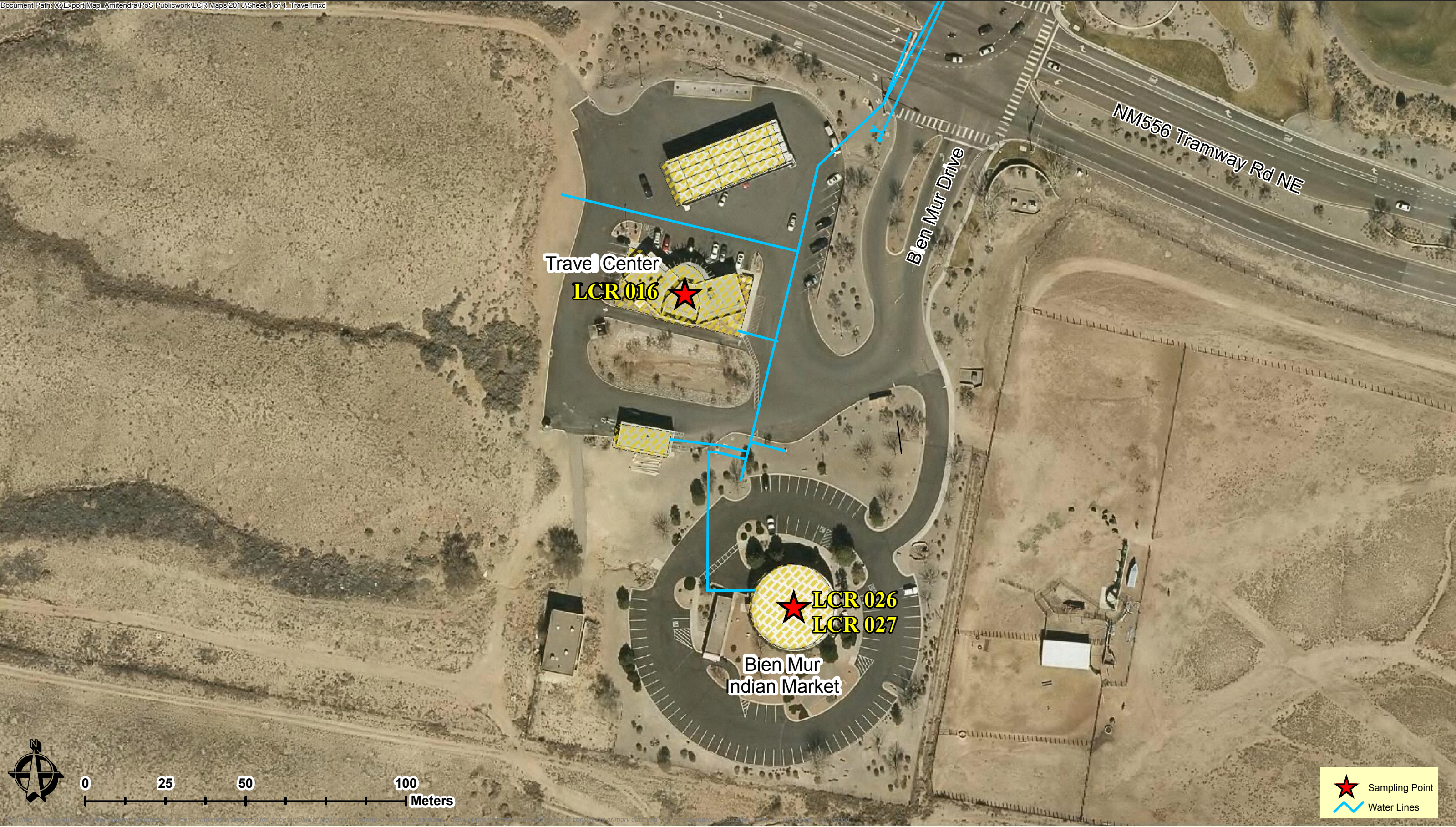
Public Works Department LCR Sampling Map 2018

Created By: GIS Team – Lands Department	Date: 03/19/2018
Checked By: GIS Team – Lands Department	Sheet 2 of 4
Approved By: N/A	Project Manager: N/A



Pueblo of Sandia

Lands Department
481 Sandia Loop
Bernalillo, NM 87004



Appendix 5

OCCT Plan Approval Letter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202 – 2733

JUN 19 2018

Honorable Richard Bernal
Governor
Pueblo of Sandia
481 Sandia Loop
Bernalillo, NM 87004

RE: Lead and Copper Rule Recommended Optimal Corrosion Control Treatment for Sandia Resort & Casino (PWS ID # 063506114)

Dear Governor Bernal:

On May 3, 2018, EPA sent you a letter notifying you of a violation for failure to submit the recommendation for optimal corrosion control treatment to EPA for the Sandia Resort & Casino Water System. We would like to commend your staff for the prompt response in issuing the required public notice and submitting an optimal corrosion control treatment recommendation.

The Lead and Copper Rule requires EPA to specify optimal corrosion control treatment within 24 months after the end of the monitoring period during which the given system exceeds the lead or copper action level. Because the lead action level exceedance occurred during the June to September 2016 monitoring period, the deadline to specify optimal corrosion control treatment is September 2018.

The submitted optimal corrosion control recommendation is to increase the pH and adjust the alkalinity by raising the caustic soda feed rate to the dosage recommended when the Arsenic Treatment Facility was installed. Based on the information provided, EPA is, therefore, approving the Recommended Optimal Corrosion Control Plan (to adjust the pH and alkalinity) submitted with your letter dated May 23, 2018. As stated in the Recommended Optimal Corrosion Control Plan, the caustic soda is currently being adjusted to reach the targeted pH range of 8.0 – 8.4 and should be in place by July 1, 2018.

As stated in §141.81(e)(6) of the Lead and Copper Rule, the system shall complete follow-up sampling (§141.86(d)(2) and §141.87(c)) within 12 months after the optimal corrosion control treatment designated by EPA is installed. §141.86(d)(2) requires lead and copper sampling at the tap during two consecutive six-month monitoring periods after the installation of optimal corrosion control treatment. **The Sandia Resort and Casino Water System will, therefore, be required to collect lead and copper samples during the July – December 2018 and January – June 2019 monitoring periods.** In addition, §141.87(c) requires the water system to monitor for the following water quality parameters if the lead or copper action level is exceeded during any of those two monitoring periods.

- (1) At taps (2 taps), two samples per tap for:
 - (i) pH and
 - (ii) Alkalinity;

two weeks (biweekly) for:

- (i) pH and
- (ii) When alkalinity is adjusted as part of optimal corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity, and the alkalinity concentration.

As part of the Recommended Optimal Corrosion Control Plan, a monitoring plan that includes water quality parameters sampling was submitted. The water quality parameters monitored should, at a minimum, include pH, temperature, alkalinity and conductivity. While not required by the Lead and Copper Rule, EPA recommends that the sampling plan be implemented to assure the effectiveness of the recommended optimal corrosion control treatment.

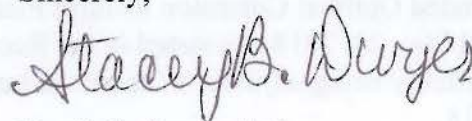
After completion of the monitoring specified above for two consecutive six-month monitoring periods, EPA will evaluate the system's installation of treatment and designate optimal water quality control parameters as required by §141.82(f) of the Lead and Copper Rule. EPA will notify the Sandia Resort and Casino Water System of the designated optimal water quality parameters and the monitoring schedule once the above steps have been completed.

EPA Region 6 invites you and your designated representative(s) to government to government consultation. Consultation will be conducted in accordance with the *EPA Policy on Consultation and Coordination with Indian Tribes* (www.epa.gov/tribal/consultation/consult-policy.htm).

If you need additional technical support you may consult with Mr. Matt Ziegler, Tribal Drinking Water Program, Environmental Finance Center, of whom I am apprising of this determination by copy of this letter. Mr. Ziegler's telephone number is (505) 681-7435. My staff also is available to provide consultation and advice.

If you have any questions, please do not hesitate to contact me at (214) 665-7101, or Mr. José G. Rodriguez of my staff at (214) 665-8087.

Sincerely,



 David F. Garcia, P.E.
Acting Director
Water Division

cc: Mr. Orlando Archuleta
olarchuleta@sandiapueblo.nsn.us

Mr. Kenneth Garcia
kgarcia@sandiapueblo.nsn.us

Mr. James Leija
jleija@sandiapueblo.nsn.us

Mr. Matt Ziegler
mattz@unm.edu (via email)

Appendix 6

LCR Sample Instructions and Tap Flushing Protocol

J.O.
2/4/2023

Enclosure 1
Instructions for Collecting Samples in Accordance with the EPA
Lead and Copper Regulations

For the **SANDIA RESORT AND CASINO PWS ID # 063506114**, it is necessary that ~~20~~ sites, used for human consumption, be sampled and analyzed for lead/copper.

I Selecting sample sites by tribe/pueblo representative.

1. Identify buildings installed after 1982 that contain copper pipes with lead solder. (Tier 1 sites)
2. Of these select ~~20~~ sites at buildings distributed throughout the water system and collect samples at these sites.
3. If you do not have enough sample sites in the above category, include sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete the sampling pool use representative sites throughout the distribution system. A representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the system.
4. Sampling sites may not include faucets that have point-of-use or point-of-entry - treatment devices designed to remove inorganic contaminants.
5. Mail or distribute Site Sampling Instruction Sheet with sample cubitainers to the designated building or facility manager.

II Sample collection.

1. First-draw samples shall be collected from the cold water kitchen sink tap or the bathroom sink tap. First draw samples from other locations shall be drawn at an interior tap from which water is typically drawn for consumption.
2. Samples must be first-draw samples. Each first draw sample for lead and copper shall be water that has stood motionless in the plumbing system for at least six hours. The most convenient time to collect this sample is usually first thing in the morning by the resident.
3. Inflate the 1 quart cubitainer before collecting the sample.
4. Hold the 1 quart cubitainer under the faucet before turning the faucet on. Fill the 1 quart cubitainer and attach the cap securely on the cubitainer.
5. Complete the label using a waterproof marker. Please be certain that the LCR number that you place on the label corresponds with the site number for that specific site on the

sampling plan. This site number must be confirmed by the monitoring coordinator. An example is: LCR001.

6. Collect all samples within one week of receiving the sample bottles.

III Record-keeping

1. To get proper credit for collecting the sample it is essential that the LCR number placed on the label be identical to the LCR number on the sampling plan for that particular site. If it isn't, the laboratory results will be erroneously attributed to the site with the LCR number on the label.
2. Make sure that the location of the tap is descriptive enough so that it can be relocated. Use street address or lot number where possible, as names of occupants are subject to change. Specify collection point in the house (i.e., kitchen or bathroom.)
3. Complete the Sample Identification Sheet.
4. Mail the original completed Resident's Sampling Instruction Sheets, the Sample Site Description Sheets and Sample Identification Sheet, with the sample bottles, to the Houston Laboratory.
5. Make copies of these sheets for your records.

IV Shipping of Water Samples.

1. Please ship samples to the Houston Laboratory via UPS, the General Services Administration national government contractor for overnight deliveries. General information number (800) 742-5877
2. Return the bottles and the Sample Identification Sheet to the Houston laboratory within 2 days of completing sampling. Samples that arrive at the Laboratory more than 14 days after collection will not be analyzed.
3. Use bubble wrap or packing material to secure the sample bottles in the container. Use strapping tape to secure the lid to the container.
4. Attach the prepaid mailing label on the container. Hazardous chemical labels are not required to be displayed in the shipment of these water samples.
5. Mail the container to: Christy Warren, US EPA, 10626 Fallstone Road, Houston, TX 77099. Phone number 281-983-2137.

Should you have any questions, please call: Rose Afandi at (505) 620-5191 or John Baker at (214) 665-7542.

J.O.
2/7/2023

Directions for **Homeowner** for Water Sample Collection

Routine water samples are being collected to ensure water quality. Samples must be collected from a cold water tap that has not been used for at least 6 hours, but not more than 18 hours. Taps which are not connected to a water softener are preferred. To ensure the water has not been used for at least 6 hours, the best time to collect samples is early in the morning. The Pueblo of Sandia will send a representative to collect the samples on the morning of **Wednesday the 4th of October.**

How you can help

- Please run the cold water tap for 4 minutes tonight, **the 3rd of October.**
- Write down the time on the bottom of this sheet.
- Discontinue using this tap until the water sample is collected the next morning.
- Note if your sample was collected from a tap with a water softener.
- Report **any plumbing repairs or replacement done in the last two years.**

Results from sampling will be provided to you as soon as practical, but no later than 30 days. If you have any question or concerns please call Monika Spurlock (505) 934 - 5408

TO BE COMPLETED BY **RESIDENT**

Water tap was last used: Time: _____ Date: _____

Print name _____ Signature _____

TO BE COMPLETED BY THE SAMPLER

Sample was collected: Time: _____ Date: _____

Sample Location: _____

J.O.
2/7/2023

Directions for Sandia Employee for Tap Isolation

Routine lead and copper water samples are being collected for compliance. Samples must be collected from a cold water tap that has not been used for at least 6 (but not more than 18) hours. To inconvenience the staff the least the sample technicians will sample early in the morning of Tuesday the 12th of December.

What we need from you, our esteemed Sandia Employee

- Please run the cold water tap for 4 minutes tonight, the 11th of December.
- Write down the times on the bottom of this sheet.
- Discontinue using this tap until the water sample is collected the next morning.
- Isolate the tap by taping provided sign to the tap, and taping an X across sink basin
- Fix the tamper seal on the faucet handles

Should any results which may affect the health and safety of the populace be discovered, you will be notified as soon as practical, but no later than 30 days.

If you have any question or concerns please call Monika Spurlock 505-934 - 5408

TO BE COMPLETED BY THE SANDIA EMPLOYEE

Water tap was flushed: Start Time: _____ End Time: _____ Date: _____

Print name _____ Signature _____

TO BE COMPLETED BY THE SAMPLER

Sample was collected: Time: _____ Date: _____

Sample Location: _____

If for any reason this tap was used, please inform the sample technician, Russell Daniels by leaving a note, in person, or by phone at 505-771-5188 or 845-270-9814. If leaving a message please note the sample site and time of use. The sink may need to be isolate again and sampled at a later time.

Appendix 7

Notice of Lead Tap Water Results

S.O.
2/7/2023

Notice of Lead Tap Water Results

Sample Location: Sandia Resort and Casino PWSID 063506114 Date Collected: 9-14,9-15 2020

Dear Sandia Resort and Casino Water system customers___,

We would like to thank you for your participation in the lead tap monitoring program. Below is the lead result for the sample location listed above. Additional general information concerning lead in drinking water follows. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you need more information concerning this result, please call the Sandia Resort and Casino water system at 505 771 5188 _____ and ask for Michael Rivera ____.

ONLY the statement that is checked below is applicable to your sample location.

☒ X Lead was NOT DETECTED at this sample location.

____ Lead was detected at _____ parts per million (ppm). This result is BELOW the lead action level of 0.015 mg/L parts per million.

____ Lead was detected at _____ parts per million (ppm). This result is ABOVE the lead action level of 0.015 mg/L parts per million.

The 90 percentile value for lead for our water system was 0.0013 mg/L (ppm).

What Does This Mean?

Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 0.015 mg/L ppm. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

If detected, your lead level may be due to conditions unique to your home, such as the presence of lead solder or brass faucets, fittings and valves that may contain lead. Our system works to keep the corrosivity of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead) and there are actions you can take to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

Should the current (or if in the future) lead 90 percentile for the community water supply exceeds the lead action level, you can rest assure that we are taking a number of steps to correct the problem. Such steps will or would include; monitor our source water, initiate controls to reduce the corrosivity of our

J.O.
2/7/2023

water (corrosive water can cause lead to leach from plumbing materials that contain lead) and initiate lead service line replacement if needed.

What Are The Health Effects of Lead?

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What Are The Sources of Lead?

The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Lead is rarely found in source water, but enters tap water through corrosion of plumbing materials. Homes built before 1986 are more likely to have lead pipes, fixtures and solder.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

If you are concerned about the lead levels at your location, there are several things you can do:

- ***Run your water to flush out lead.*** If water hasn't been used for several hours, run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This will help flush lead-containing water from the pipes.
- ***Use cold water for cooking and preparing baby formula.*** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- ***Do not boil water to remove lead.*** Boiling water will not reduce lead.
- ***Look for alternative sources or treatment of water.***
- ***Test your water for lead.*** Call us at the number above to find out how to get your water tested for lead.
- ***Identify if your plumbing fixtures contain lead.*** New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Section 1417 of the Safe Drinking Water Act (SDWA) establishes the definition for "lead free" as a weighted average of 0.25% lead calculated across the wetted surfaces of a pipe, pipe fitting, plumbing fitting, and fixture and 0.2% lead for solder and flux. The Act also provides a methodology for calculating the weighted average of lead content for wetted surfaces to be labeled as "lead free." Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Notice delivered by Michael Rivera, Date:
12/9/2020

Appendix 8

Lead and Copper Results from Semiannual Sampling Letter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

September 10, 2018

Orlando L. Archuleta
Utility Operations Supervisor
Pueblo of Sandia
Public Works Department
481 Sandia Loop
Bernalillo, NM 87004

RE: Lead and Copper Results from Semiannual Sampling June 2018 for Sandia Resort and Casino PWSID # 063506114

Dear Mr. Archuleta:

Enclosed is a copy of EPA Region 6's Houston Laboratory Report dated July 23, 2018, showing the analytical results of lead and copper samples that were collected on June 11 through June 13, 2018, at the Water System listed below. The 90th percentile concentrations in milligrams per liter (mg/L) are also listed. The EPA allowable action levels for lead and copper are, less than 0.015 mg/L and less than 1.3 mg/L, respectively. In this round of sampling there were no exceedances of the action levels. For 20 samples, the 90th percentile concentration is determined by taking the 18th highest result.

<u>System</u>	<u>PWS ID</u>	<u>90th Lead</u>	<u>90th Copper</u>
Sandia Resort and Casino	063506114	0.000 mg/L	0.0618 mg/L

Eighteen (18) of the twenty (20) semiannual samples taken were below the detection limit of our Houston Laboratory testing limits. While there is no lead action level exceedance, the remaining two samples (LCR026 and LCR 010) had elevated concentrations of lead with one sample above the lead action level. Sample site LCR010 had a lead concentration of 0.029 mg/L. You may want to take extra measures to evaluate this site to determine the cause of the high lead concentration.

The Lead and Copper Rule requires you notify the consumers of the lead results regardless of whether there was a lead action level exceedance. Attached is a notification template which you may use to post results. The notice must be posted above the two sample sites where lead was detected for at least two weeks from date of posting. The non-detect results can be posted on conspicuous locations throughout the facility such as bulletin boards. After you post results please complete the Lead Consumer Notice Certification Form (attached) and returned the completed form within 60 days to our office.

Your next sampling period will be effective June 1 through December 31, 2018.

We will request that the Houston Laboratory send sample containers to you for sampling as soon as possible. I will notify you when your sample bottles are due to be shipped from our Houston laboratory. Sandia Resort and Casino will remain on semiannual sampling at least through June 30, 2019.

We appreciate your assistance in this round of sampling and look forward to your continued participation. If you have questions please call José G. Rodriguez at 214-665-8087.

Sincerely,



James R. Brown, P.G.
Associate Director
Safe Drinking Water Branch

Encl: (3) Final Laboratory Results
Site result notification forms
Lead Consumer Notice Certification Form

cc: The Honorabe Richard Bernal
Governor
Pueblo of Sandia
481 Sandia Loop
Bernalillo, NM 87004

Mr. Kenneth Garcia
klgarica@sandiapueblo.nsn.us

Mr. James Leija
jleija@sandiapueblo.nsn.us

Notice of Lead Tap Water Results

Sample Location: _____ Date Collected: _____

Dear _____,

We would like to thank you for your participation in the lead tap monitoring program. Below is the lead result for the sample location listed above. Additional general information concerning lead in drinking water follows. For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you need more information concerning this result, please call the _____ community water supply at _____ and ask for _____.

ONLY the statement that is checked below is applicable to your sample location.

☐ Lead was NOT DETECTED at this sample location.

☐ Lead was detected at _____ parts per billion (ppb). This result is BELOW the lead action level of 15 parts per billion.

☐ Lead was detected at _____ parts per billion (ppb). This result is ABOVE the lead action level of 15 parts per billion.

The 90 percentile value for our community water supply was _____ parts per billion (ppb).

What Does This Mean?

Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

If detected, your lead level may be due to conditions unique to your home, such as the presence of lead solder or brass faucets, fittings and valves that may contain lead. Our system works to keep the corrosivity of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead) and there are actions you can take to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

Should the current (or if in the future) lead 90 percentile for the community water supply exceeds the lead action level, you can rest assure that we are taking a number of steps to correct the problem. Such steps will or would include; monitor our source water, initiate controls to reduce the corrosivity of our

water (corrosive water can cause lead to leach from plumbing materials that contain lead) and initiate lead service line replacement if needed.

What Are The Health Effects of Lead?

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What Are The Sources of Lead?

The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Lead is rarely found in source water, but enters tap water through corrosion of plumbing materials. Homes built before 1986 are more likely to have lead pipes, fixtures and solder.

What Can I Do To Reduce Exposure to Lead in Drinking Water?

If you are concerned about the lead levels at your location, there are several things you can do:

- ***Run your water to flush out lead.*** If water hasn't been used for several hours, run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This will help flush lead-containing water from the pipes.
- ***Use cold water for cooking and preparing baby formula.*** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- ***Do not boil water to remove lead.*** Boiling water will not reduce lead.
- ***Look for alternative sources or treatment of water.***
- ***Test your water for lead.*** Call us at the number above to find out how to get your water tested for lead.
- ***Identify if your plumbing fixtures contain lead.*** New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Section 1417 of the Safe Drinking Water Act (SDWA) establishes the definition for "lead free" as a weighted average of 0.25% lead calculated across the wetted surfaces of a pipe, pipe fitting, plumbing fitting, and fixture and 0.2% lead for solder and flux. The Act also provides a methodology for calculating the weighted average of wetted surfaces lead to be labeled as "lead free." Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Lead Consumer Notice Certification Form

System: Name: Sandia Resort and Casino PWS 063506114

County: Sandoval

Monitoring Period to which the notice applies JANUARY – JUNE 2018.

The water system named above hereby certifies that its lead consumer notice has been provided to each person it serves at the specific sampling site from which the sample was tested. The water system also certifies that these results and the following information were provided to such persons within 30 days of receiving the test results from the laboratory.

Individual tap results from lead tap water monitoring carried out under the requirements of 40 CFR 141.86.

An explanation of the health effects of lead.

Steps that consumers can take to reduce exposure to lead in drinking water.

Contact information for our water utility.

The maximum contaminant level goals and action levels for lead, and the definitions of these two terms from 40 CFR 141.153(c).

Certified by:

Signature _____

Name _____ Title _____
(please print)

Phone # _____ Date _____

*** You are not required by EPA rules to report the following information, but you may want to provide it to your State. Check all items that apply. ***

Notice was distributed by mail or other direct delivery. Specify other direct delivery methods:

Electronic Mail

Posting the notice on the internet at:

Posting the notice in public places (attach a list of locations)

Delivery of multiple copies to single bill addresses serving several persons such as: apartments, businesses, and large private employers

Other methods



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road

Houston, Texas 77099

Final Analytical Report

Site Name: Sandia - Resort & Casino (PWS 063506114)

Sample Collection Date(s): 06/11/18- 06/13/18

Contact: John Baker (6WQ-SD)

Report Date: 07/23/2018

Project#: 18SDWA081

Work Order: 1806007

Analyses included in this report:

Metals DW Pb&Cu ICP-MS 200.8 Metals Tur 200.8 DW

Report Narrative

Metals ICP-MS:

Sample 1806007-18: The concentration of lead (29.0 ug/L) exceeds the Treatment Technique limit of 15 ug/L.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

For a list of ISO 17025 accredited methods go to:

<http://region6a.epa.gov/intranet/6md/lab/labisocertification2018.pdf>

Report Approvals:

RICHARD MCMILLIN

Digitally signed by RICHARD MCMILLIN
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff,
cn=RICHARD MCMILLIN, dnQualifier=0000B651b
Date: 2018.07.23 08:55:31 -05'00'

Richard McMillin
Region 6 Laboratory Technical Manager

DAVID MCQUIDDY

Digitally signed by DAVID
MCQUIDDY
Date: 2018.07.23 09:01:39 -05'00'

David W. McQuiddy
Region 6 Laboratory Branch Chief



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road
Houston, Texas 77099

Sample Receipt and Disposal

Data Management Coordinator: Christy Warren

Data Management Coordinator Signature

Date

Date Transmitted: ____/____/____

Please have the U.S. EPA Project Manager/Officer call the Data Management Coordinator at 3-2137 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Christy Warren
Data Management Coordinator
Region 6 Laboratory
6MD-HS

Received by and Date

Comments:

The laboratory routinely disposes of samples 90 days after all analyses have been completed. If you have a need to hold these samples in custody longer than 90 days, please sign below.

Signature

Date

Reason for hold request:



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

ANALYTICAL REPORT FOR SAMPLES

Station ID	Laboratory ID	Matrix	Date Collected	Date Received
LCR035	1806007-01	Liquid	06/11/18	06/18/18 09:10
LCR034	1806007-02	Liquid	06/11/18	06/18/18 09:10
LCR032	1806007-03	Liquid	06/11/18	06/18/18 09:10
LCR031	1806007-04	Liquid	06/11/18	06/18/18 09:10
LCR026	1806007-05	Liquid	06/11/18	06/18/18 09:10
LCR016	1806007-06	Liquid	06/12/18	06/18/18 09:10
LCR004	1806007-07	Liquid	06/12/18	06/18/18 09:10
LCR022	1806007-08	Liquid	06/12/18	06/18/18 09:10
LCR012	1806007-09	Liquid	06/12/18	06/18/18 09:10
LCR033	1806007-10	Liquid	06/12/18	06/18/18 09:10
LCR027	1806007-11	Liquid	06/12/18	06/18/18 09:10
LCR008	1806007-12	Liquid	06/12/18	06/18/18 09:10
LCR030	1806007-13	Liquid	06/12/18	06/18/18 09:10
LCR028	1806007-14	Liquid	06/12/18	06/18/18 09:10
LCR024	1806007-15	Liquid	06/12/18	06/18/18 09:10
LCR023	1806007-16	Liquid	06/12/18	06/18/18 09:10
LCR014	1806007-17	Liquid	06/12/18	06/18/18 09:10
LCR010	1806007-18	Liquid	06/12/18	06/18/18 09:10
LCR029	1806007-19	Liquid	06/12/18	06/18/18 09:10
LCR015	1806007-20	Liquid	06/13/18	06/18/18 09:10



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS

Sample Type: Liquid

Lab Number	Station ID	Analyzed	COPPER			LEAD			TURBIDITY Result (NTU)	Analyzed
			Result (µg/L)	Reporting Limit	Qual	Result (µg/L)	Reporting Limit	Qual		
1806007-01	LCR035	06/29/18	57.8	4.0		U	2.0		0.0	06/20/18
1806007-02	LCR034	06/29/18	24.3	4.0		U	2.0		0.0	06/20/18
1806007-03	LCR032	06/29/18	79.6	4.0		U	2.0		0.02	06/20/18
1806007-04	LCR031	06/29/18	61.8	4.0		U	2.0		0.0	06/20/18
1806007-05	LCR026	06/29/18	36.2	4.0		2.8	2.0		0.0	06/20/18
1806007-06	LCR016	06/29/18	12.0	4.0		U	2.0		0.0	06/20/18
1806007-07	LCR004	06/29/18	9.1	4.0		U	2.0		0.0	06/20/18
1806007-08	LCR022	06/29/18	29.9	4.0		U	2.0		0.0	06/20/18
1806007-09	LCR012	06/29/18	28.9	4.0		U	2.0		0.0	06/20/18
1806007-10	LCR033	06/29/18	31.5	4.0		U	2.0		0.07	06/20/18
1806007-11	LCR027	06/29/18	9.3	4.0		U	2.0		0.0	06/20/18
1806007-12	LCR008	06/29/18	40.3	4.0		U	2.0		0.0	06/20/18
1806007-13	LCR030	06/29/18	7.5	4.0		U	2.0		0.1	06/20/18
1806007-14	LCR028	06/29/18	35.5	4.0		U	2.0		0.0	06/20/18
1806007-15	LCR024	06/29/18	36.4	4.0		U	2.0		0.0	06/20/18
1806007-16	LCR023	06/29/18	35.5	4.0		U	2.0		0.0	06/20/18
1806007-17	LCR014	06/29/18	12.0	4.0		U	2.0		0.0	06/20/18
1806007-18	LCR010	06/29/18	121	4.0		29.0	2.0		0.0	06/20/18
1806007-19	LCR029	06/29/18	34.3	4.0		U	2.0		0.2	06/20/18
1806007-20	LCR015	06/29/18	15.2	4.0		U	2.0		0.1	06/20/18

spc

MJF

Turbidity measurements are for the sole purpose of determining if an acid digestion is required for each sample.
Samples with an NTU>1 are digested.



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone: (281) 983-2100 Fax: (281) 983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS - Quality Control

Batch: B8F2805

Blank (B8F2805-BLK1)

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits	RPD Limit
Copper	U		1.0				
Lead	U		0.5				

LCS (B8F2805-BS1)

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits	RPD Limit
Copper	101		1.0	100	101	85-115	
Lead	101		0.5	100	101	85-115	

Matrix Spike (B8F2805-MS1)

Source: 1806007-01

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits
Copper	437		4.0	400	57.8	94.9 70-130
Lead	400		2.0	400	0.2	100 70-130

Matrix Spike (B8F2805-MS2)

Source: 1806007-11

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits
Copper	387		4.0	400	9.3	94.5 70-130
Lead	405		2.0	400	0.3	101 70-130

Matrix Spike Dup (B8F2805-MSD1)

Source: 1806007-01

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits	RPD Limit
Copper	438		4.0	400	57.8	95.2 70-130	0.272 20
Lead	403		2.0	400	0.2	101 70-130	0.666 20



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone: (281) 983-2100 Fax: (281) 983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS - Quality Control

Batch: B8F2805

Matrix Spike Dup (B8F2805-MSD2)

Source: 1806007-11

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Copper	384		4.0	400	9.3	93.7	70-130	0.775	20
Lead	403		2.0	400	0.3	101	70-130	0.440	20

Notes and Definitions

AES Atomic Emission Spectrometer

CVAA Cold Vapor Atomic Absorption

ECD Electron Capture Detector

GC Gas Chromatograph

GFAA Graphite Furnace Atomic Absorption

ICP Inductively Coupled Plasma

MS Mass Spectrometer

NA Not Applicable

NPD Nitrogen Phosphorous Detector

NR Not Reported

U Undetected

Out of QC limits

SAMPLE IDENTIFICATION SHEET
LEAD COPPER RULE
(To be completed and returned to EPA Houston Laboratory)

SANDIA RESORT AND CASINO PWS ID # 063506114

Sample No.	Date Collected/Site Description	Time Collected	Lead Solder	
			Yes	No
LCR035	06-11-18 / WWTP Breakroom - KF	13:53		X
LCR034	06-11-18 / Sandia Lakes Wmns Restroom - BF	14:21		X
LCR 032	06-11-18 / Green Reed Spa - Utility sink	14:39		X
LCR031	06-11-18 / Events Center - KF	14:47		X
LCR026	06-11-18 / Bicu Murs Mens Restrm - BF	15:30		X
LCR016	06-12-18 / Subway in Travel Center - KF	05:28		X
LCR004	06-12-18 / Employee Buffet - KF	05:55		X
LCR022	06-12-18 / Bev. Station in Gov. Rm - KF	06:02		X
LCR012	06-12-18 / Ballroom D - KF	07:06		X
LCR033	06-12-18 / Sandia Lakes Men's Restroom - BF	07:29		X
LCR027	06-12-18 / Bicu Mur Women's Restroom - BF	08:45		X
LCR008	06-12-18 / Tlur Pa Lounge Bar Sink - KF	09:37		X
LCR030	06-12-18 / Tlur Pa Main Bar Storage Room - KF	09:34		X
LCR028	06-12-18 / Counsel Rm Bar Sink - KF	11:37		X
LCR024	06-12-18 / Pool Bar Sink - KF	11:41		X
LCR023	06-12-18 / Roadrunner Grill - KF	11:51		X

Jeff Smith 6/18/18 9:10

Enclosure 4

**SAMPLE IDENTIFICATION SHEET
LEAD COPPER RULE**

(To be completed and returned to EPA Houston Laboratory)

SANDIA RESORT AND CASINO PWS ID # 063506114

Sample No.	Date Collected/Site Description	Time Collected	Lead Solder	
			Yes	No
LCR014	06-12-18 / PA Del Shur Deli - KF	11:54		X
LCR010	06-12-18 / SF in Poker Room - KF	11:44		X
LCR029	06-12-18 / Shipping and Receiving - KF	12:02		X
LCR015	06-13-18 / Golf Main Maint. West Bldg - KF	02:00		X

Jeff Smith 6/18/18 9:10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road
Houston, Texas 77099

Final Analytical Report

Site Name: Sandia - Resort & Casino (PWS 063506114)

Sample Collection Date(s): 06/11/18- 06/13/18

Contact: John Baker (6WQ-SD)

Report Date: 07/23/2018

Project#: 18SDWA081

Work Order: 1806007

Analyses included in this report:

Metals DW Pb&Cu ICP-MS 200.8 Metals Tur 200.8 DW

Report Narrative

Metals ICP-MS:

Sample 1806007-18: The concentration of lead (29.0 ug/L) exceeds the Treatment Technique limit of 15 ug/L.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

For a list of ISO 17025 accredited methods go to:

<http://region6a.epa.gov/intranet/6md/lab/labisocertification2018.pdf>

Report Approvals:

RICHARD MCMILLIN

Digitally signed by RICHARD MCMILLIN
DN: cn=US, o=U.S. Government, ou=USEPA, ou=Staff,
c=RICHARD MCMILLIN, dnQualifier=0200038516
Date: 2018.07.23 08:55:31 -05'00'

Richard McMillin
Region 6 Laboratory Technical Manager

DAVID MCQUIDDY

Digitally signed by DAVID
MCQUIDDY
Date: 2018.07.23 09:01:39 -05'00'

David W. McQuiddy
Region 6 Laboratory Branch Chief



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road
Houston, Texas 77099

Sample Receipt and Disposal

Data Management Coordinator: Christy Warren

Data Management Coordinator Signature

Date

Date Transmitted: ____/____/____

Please have the U.S. EPA Project Manager/Officer call the Data Management Coordinator at 3-2137 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Christy Warren
Data Management Coordinator
Region 6 Laboratory
6MD-HS

Received by and Date

Comments:

The laboratory routinely disposes of samples 90 days after all analyses have been completed. If you have a need to hold these samples in custody longer than 90 days, please sign below.

Signature

Date

Reason for hold request:



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

ANALYTICAL REPORT FOR SAMPLES

Station ID	Laboratory ID	Matrix	Date Collected	Date Received
LCR035	1806007-01	Liquid	06/11/18	06/18/18 09:10
LCR034	1806007-02	Liquid	06/11/18	06/18/18 09:10
LCR032	1806007-03	Liquid	06/11/18	06/18/18 09:10
LCR031	1806007-04	Liquid	06/11/18	06/18/18 09:10
LCR026	1806007-05	Liquid	06/11/18	06/18/18 09:10
LCR016	1806007-06	Liquid	06/12/18	06/18/18 09:10
LCR004	1806007-07	Liquid	06/12/18	06/18/18 09:10
LCR022	1806007-08	Liquid	06/12/18	06/18/18 09:10
LCR012	1806007-09	Liquid	06/12/18	06/18/18 09:10
LCR033	1806007-10	Liquid	06/12/18	06/18/18 09:10
LCR027	1806007-11	Liquid	06/12/18	06/18/18 09:10
LCR008	1806007-12	Liquid	06/12/18	06/18/18 09:10
LCR030	1806007-13	Liquid	06/12/18	06/18/18 09:10
LCR028	1806007-14	Liquid	06/12/18	06/18/18 09:10
LCR024	1806007-15	Liquid	06/12/18	06/18/18 09:10
LCR023	1806007-16	Liquid	06/12/18	06/18/18 09:10
LCR014	1806007-17	Liquid	06/12/18	06/18/18 09:10
LCR010	1806007-18	Liquid	06/12/18	06/18/18 09:10
LCR029	1806007-19	Liquid	06/12/18	06/18/18 09:10
LCR015	1806007-20	Liquid	06/13/18	06/18/18 09:10



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS

Sample Type: Liquid

Lab Number	Station ID	Analyzed	COPPER			LEAD			TURBIDITY Result (NTU)	Analyzed
			Result (µg/L)	Reporting Limit	Qual	Result (µg/L)	Reporting Limit	Qual		
1806007-01	LCR035	06/29/18	57.8	4.0		U	2.0		0.0	06/20/18
1806007-02	LCR034	06/29/18	24.3	4.0		U	2.0		0.0	06/20/18
1806007-03	LCR032	06/29/18	79.6	4.0		U	2.0		0.02	06/20/18
1806007-04	LCR031	06/29/18	61.8	4.0		U	2.0		0.0	06/20/18
1806007-05	LCR026	06/29/18	36.2	4.0		2.8	2.0		0.0	06/20/18
1806007-06	LCR016	06/29/18	12.0	4.0		U	2.0		0.0	06/20/18
1806007-07	LCR004	06/29/18	9.1	4.0		U	2.0		0.0	06/20/18
1806007-08	LCR022	06/29/18	29.9	4.0		U	2.0		0.0	06/20/18
1806007-09	LCR012	06/29/18	28.9	4.0		U	2.0		0.0	06/20/18
1806007-10	LCR033	06/29/18	31.5	4.0		U	2.0		0.07	06/20/18
1806007-11	LCR027	06/29/18	9.3	4.0		U	2.0		0.0	06/20/18
1806007-12	LCR008	06/29/18	40.3	4.0		U	2.0		0.0	06/20/18
1806007-13	LCR030	06/29/18	7.5	4.0		U	2.0		0.1	06/20/18
1806007-14	LCR028	06/29/18	35.5	4.0		U	2.0		0.0	06/20/18
1806007-15	LCR024	06/29/18	36.4	4.0		U	2.0		0.0	06/20/18
1806007-16	LCR023	06/29/18	35.5	4.0		U	2.0		0.0	06/20/18
1806007-17	LCR014	06/29/18	12.0	4.0		U	2.0		0.0	06/20/18
1806007-18	LCR010	06/29/18	121	4.0		29.0	2.0		0.0	06/20/18
1806007-19	LCR029	06/29/18	34.3	4.0		U	2.0		0.2	06/20/18
1806007-20	LCR015	06/29/18	15.2	4.0		U	2.0		0.1	06/20/18

spc

MJF

Turbidity measurements are for the sole purpose of determining if an acid digestion is required for each sample.
Samples with an NTU>1 are digested.



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone: (281) 983-2100 Fax: (281) 983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS - Quality Control

Batch: B8F2805

Blank (B8F2805-BLK1)

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits	RPD Limit
Copper	U		1.0				
Lead	U		0.5				

LCS (B8F2805-BS1)

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits	RPD Limit
Copper	101		1.0	100	101	85-115	
Lead	101		0.5	100	101	85-115	

Matrix Spike (B8F2805-MS1)

Source: 1806007-01

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits
Copper	437		4.0	400	57.8	94.9 70-130
Lead	400		2.0	400	0.2	100 70-130

Matrix Spike (B8F2805-MS2)

Source: 1806007-11

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits
Copper	387		4.0	400	9.3	94.5 70-130
Lead	405		2.0	400	0.3	101 70-130

Matrix Spike Dup (B8F2805-MSD1)

Source: 1806007-01

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC Limits	RPD Limit
Copper	438		4.0	400	57.8	95.2 70-130	0.272 20
Lead	403		2.0	400	0.2	101 70-130	0.666 20



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS - Quality Control

Batch: B8F2805

Matrix Spike Dup (B8F2805-MSD2)

Source: 1806007-11

Prepared: 06/28/18 Analyzed: 06/29/18

ANALYTE	Result µg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Copper	384		4.0	400	9.3	93.7	70-130	0.775	20
Lead	403		2.0	400	0.3	101	70-130	0.440	20

Notes and Definitions

AES	Atomic Emission Spectrometer
CVAA	Cold Vapor Atomic Absorption
ECD	Electron Capture Detector
GC	Gas Chromatograph
GFAA	Graphite Furnace Atomic Absorption
ICP	Inductively Coupled Plasma
MS	Mass Spectrometer
NA	Not Applicable
NPD	Nitrogen Phosphorous Detector
NR	Not Reported
U	Undetected
#	Out of QC limits

**SAMPLE IDENTIFICATION SHEET
LEAD COPPER RULE**

(To be completed and returned to EPA Houston Laboratory)

SANDIA RESORT AND CASINO PWS ID # 063506114

Sample No.	Date Collected/Site Description	Time Collected	Lead Solder	
			Yes	No
LCR035	06-11-18 / WWTP Breakroom - KF	13:53		X
LCR034	06-11-18 / Sandia Lakes Wmns Restroom - BF	14:21		X
LCR 032	06-11-18 / Green Reed Spa - Utility sink	14:39		X
LCR031	06-11-18 / Events Center - KF	14:47		X
LCR026	06-11-18 / Bien Murs Mens Restrm - BF	15:30		X
LCR016	06-12-18 / Subway in Travel Center - KF	05 :28		X
LCR004	06-12-18 / Employee Buffet - KF	05:55		X
LCR022	06-12-18 / Bev. Station in Gov. Rm - KF	06:02		X
LCR012	06-12-18 / Ballroom D - KF	07:06		X
LCR033	06-12-18 / Sandia Lakes Men's Restroom - BF	07:29		X
LCR027	06-12-18 / Bien Mur Women's Restroom - BF	08:45		X
LCR008	06-12-18 / Tlur Pa Lounge Bar Sink - KF	09:37		X
LCR030	06-12-18 / Tlur Pa Main Bar Storage Room - KF	09:34		X
LCR028	06-12-18 / Counsel Rm Bar Sink - KF	11:37		X
LCR024	06-12-18 / Pool Bar Sink - KF	11:41		X
LCR023	06-12-18 / Roadrunner Grill - KF	11:51		X

Jeff Smith 6/18/18 9:10

SAMPLE IDENTIFICATION SHEET

LEAD COPPER RULE

SANDIA RESORT AND CASINO PWS ID # 063506114

[illegible]

Jeff Smith 6/18/18 9:10
Page 8 of 8

Appendix 9

Lead and Copper Exceedance Letter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

February 20, 2019

Orlando L. Archuleta
Utility Operations Supervisor
Pueblo of Sandia
Public Works Department
481 Sandia Loop
Bernalillo, NM 87004

**RE: Lead and Copper Results from Semiannual Sampling June through December
2018 for Sandia Resort and Casino PWSID # 063506114**

Dear Mr. Archuleta:

Enclosed is a copy of EPA Region 6's Houston Laboratory Report dated February 6, 2019, showing the analytical results of lead and copper samples that were collected on December 12, 2018, at the water system listed below.

The 90th percentile concentrations in milligrams per liter (mg/L) are also listed. The EPA action levels for lead and copper are 0.015 mg/L and 1.3 mg/L, respectively. In this round of sampling there were no exceedances of the action levels. For 20 samples, the 90th percentile concentration is determined by taking the 18th highest result.

<u>System</u>	<u>PWS ID</u>	<u>90th Lead</u>	<u>90th Copper</u>
Sandia Resort and Casino	063506114	Non- detect	0.166 mg/L

Nineteen (19) of the twenty (20) samples taken tested below the detection limit of our Houston Laboratory testing limits. While there is no lead action level exceedance, one sample (LCR030) had elevated concentration of lead at 4.8 µg/L. As a result, the system may want to evaluate this site to determine the cause of this lead concentration and investigate options to reduce it.

The Lead and Copper Rule requires you notify the consumers of the lead results regardless of whether there was a lead action level exceedance. Attached is a notification template which you may use for this notification. The notice must be posted above the sample site location for any sites that had a detectable concentration of lead for at least two weeks from date of posting. For sites where the results for lead were non-detects, the notice can be posted within the facility. In addition, the Lead Consumer Notice Certification Form (attached) must be completed and returned to our office, at the address below, within 30 days from the date of this letter.



Environmental Protection Agency
Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099
Phone:(281)983-2100 Fax:(281)983-2248

Metals by EPA Drinking Water Method 200.8 - ICP/MS

Sample Type: Liquid

Lab Number	Station ID	Analyzed	COPPER			LEAD			TURBIDITY Result (NTU)	Analyzed
			Result (µg/L)	Reporting Limit	Qual	Result (µg/L)	Reporting Limit	Qual		
1812010-01	LCR004	12/27/18	8.2	4.0		U	2.0		U	12/20/18
1812010-02	LCR008	12/27/18	14.4	4.0		U	2.0		U	12/20/18
1812010-03	LCR010	12/27/18	6.3	4.0		U	2.0		U	12/20/18
1812010-04	LCR012	12/27/18	13.1	4.0		U	2.0		U	12/20/18
1812010-05	LCR013	12/27/18	16.4	4.0		U	2.0		U	12/20/18
1812010-06	LCR014	12/27/18	U	4.0		U	2.0		U	12/20/18
1812010-07	LCR015	12/27/18	U	4.0		U	2.0		U	12/20/18
1812010-08	LCR016	12/27/18	6.3	4.0		U	2.0		U	12/20/18
1812010-09	LCR017	12/27/18	10.1	4.0		U	2.0		U	12/20/18
1812010-10	LCR022	12/27/18	5.7	4.0		U	2.0		U	12/20/18
1812010-11	LCR023	12/27/18	15.7	4.0		U	2.0		U	12/20/18
1812010-12	LCR026	12/27/18	11.6	4.0		U	2.0		U	12/20/18
1812010-13	LCR027	12/27/18	U	4.0		U	2.0		U	12/20/18
1812010-14	LCR028	12/27/18	16.6	4.0		U	2.0		U	12/20/18
1812010-15	LCR029	12/27/18	15.6	4.0		U	2.0		U	12/20/18
1812010-16	LCR030	12/27/18	11.6	4.0		4.8	2.0		0.5	12/20/18
1812010-17	LCR031	12/27/18	20.7	4.0		U	2.0		U	12/20/18
1812010-18	LCR033	12/27/18	14.7	4.0		U	2.0		U	12/20/18
1812010-19	LCR034	12/27/18	13.2	4.0		U	2.0		U	12/20/18
1812010-20	LCR035	12/27/18	17.9	4.0		U	2.0		U	12/20/18

spc

RG

Turbidity measurements are for the sole purpose of determining if an acid digestion is required for each sample.
Samples with an NTU>1 are digested.

Appendix 10

Old Casino Well Plugging Record

J.O.
2/7/2023



Plugging Record

(Revised 11/2012)

I. WELL PLUGGING INFORMATION:

POS Well No.: **GW-26**

- 1) Name of well drilling company that plugged well: Rodgers & Co. Inc.
- 2) New Mexico Well Driller License No.: NMWB 225 Expiration Date: Jan 31, 2015
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Ken Tarbot
- 4) Date well plugging began: March 7, 2013 Date well plugging concluded: March 7, 2013
- 5) Depth of well confirmed at initiation of plugging as: 365 ft below ground level
by the following manner: freeze pipe and pumped bent/cement grout
- 6) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences
between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 7) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft below ground level)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments (“casing perforated first”, “open annular space also plugged”, etc.)
0					
100					
200					
224.5					
300					
365' TD					
400					

6" steel well casing

723 gal portland w/ 5% bent.

536 gal.

213' tremie

grout was pumped to surface. casing excavated 2' and cutoff. 6" concrete cap poured on top and covered

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, Jeff Watson, say that I am familiar with the rules of the Pueblo of Sandia pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Well Driller Signature: _____

Date: 3/8/13

J.O.
2/7/2023

To be completed by Pueblo of Sandia Staff:

The above plugging record has been reviewed, and work by well driller is found to be satisfactory and in compliance with plugging plan unless otherwise noted. ☒ Yes ☐ No (please describe any variances): _____

Is there a well log for this well? If yes, attach to this document. If no, check box ☒

A map of the location of the plugged well has been attached. ☒ Yes ☐ No (if no, obtain map and attach to this document)

Other notes, if applicable: _____

NORTHING: 3897326.958

EASTING: 356440.411

Print/Signed Jessica Tracy J Tracy Title/Dept Water Resources Mng. Date: 3/8/13
Env. Dept

March 2013

Abandoned
Police Station
Well

AKA: old
casino well

$35^{\circ} 12' 31.35'' N$
 $106^{\circ} 34' 37.79'' W$

Former
Site of
Old Casino

Current
Police Station



Spring 2012 Imagery

0 75 150 300 Feet

I-25

Appendix 11

PRV Installation/Rebuild Outline

Curb Services Company

4101 Corrales Road, Unit #178
Corrales, NM 87048

2/8/23
105
P

To: Ken Garcia
Pueblo of Sandia

CC: Gabe C De Baca
James Leija
Orlando Archuleta

From: Bill Curb
Curb Services Company
505.977.6455

Re: Golden Anderson Pressure Relief Control Valve Repair Service Report
Pueblo of Sandia – Well #1

Date: May 19, 2021

Ken,

Well #1 Pumping Facility

Site visit: 05/18/2021

Attending:

Ken Garcia
Gabe C De Baca
Jesus Camacho

Installed valve:

Golden Anderson Model = 6" 6" 8566-D Pressure Relief Valve
S/N 002926

This valve supplied with:

bronze piston, bronze piston liner, and SS piston skirt.
Ultra high molecular weight plastic Seat ring
brass position indicator
bronze/ Aluminum pressure relief pilot with SS upper and lower stem

Reported Issues:

The position indicator has been long term leaking (past the packing) and causing corrosion of the outer cover.

On arrival, it was also noted that the main valve was not closed drip tight – allowing fair amount of water to waste to grade.

Summary of Repairs Performed, 6" Model 8566-D:

Main line Inlet isolation valves closed. Ken had previously drained the pressure from the well pump discharge line.

Bled piloting to confirm no pressure on inlet/ outlet of pressure relief valve.

Disassembled the pilot system.

The wye strainer media had a little bit of buildup. Acid washed the wye strainer. This item cleaned to fine condition.

Disassembled the main valve.

Decent amount of water deposits/ buildup on valve interior parts.

Had to use acid and emery cloth to remove buildup on the bronze liner, to allow us to pull the piston free.

After the piston was removed, the liner received more emery cloth, and was cleaned up in fine condition.

Note – the liner can be removed and replaced using special tool and jack bolt – since the liner cleaned up fine, the liner was not removed.

Very minor buildup on the seat. Used emery cloth to polish the seat. Seating surface cleaned up to like new condition

Acid washed the brass position indicator stem and adapter fittings.

Used wire wheel and acid wash on the bronze piston and the SS piston skirt to remove deposits.

Replaced the following piston parts:

- UMHW seat ring
- o-ring located between the piston and the new seat ring
- Piston quad ring
- thread seals for the seat follower screws

Emery cloth used to smooth the brass position indicator stem.

After cleaning, the piston, piston skirt, position indicator stem all inspected in fine condition.

Note - Very minor pitting identified on the lip of the bronze piston (since piston is located horizontal in the main valve, this material was missing from the "bottom". This was no cause for concern. We did re-install the piston with this area located to the "top".

Used wire wheel and acid to remove internal cover deposits and external rust scaling. Noted a substantial amount of material missing from the inside of the cover where the cover o-ring seals the cover to the body (ref attached pictures – more on this later).

Also replaced the crusty rusty cover port plug with new SS plug.

Tear down/ inspect of the pressure relief pilot revealed no issues.
Pilot was cleaned, acid washed internals. SS upper and lower shafts were emery cloth polished. New rubber o-rings from repair kit were installed on the upper and lower stems.
New diaphragm installed.

Note: the pressure relief valve exploded diagram/ parts listing labels the seat as "Rubber Seat". The original seat in the pilot appeared to me to be of much harder material, more like plastic. This old installed seat displayed a fair amount of deformity from years of being set in the same position.

There were 2 different new seats included in the repair kit. One was orange "plastic", quite rigid like the original installed seat.

The 2nd seat was more flexible black rubber.

The install instructions included with the pressure relief pilot repair kit clearly stated use the black rubber seat on re-install. We followed this directive and used the black rubber seat.
Reassembled the pressure relief pilot.

At the main valve, installed the new cover o-ring, and installed the cover.

Note we ruined the threads on one cover to body bolt during disassemble. Sandia personnel located a new replacement. To prevent this in the future, all threads were cleaned to remove the paint and corrosion, and they received Ant-Seize on reassembly.

Re-assembled the piloting

Installed approx. 8" of new packing around the valve position indicator's stem.

Opened the inlet isolation valve, and even with very low pressures, the damaged cover prevented seal, allowed leakage past the cover o-ring. We removed, and tried again a couple more times, but could never get the cover to seal.

Ken located a thin paper gasket that resided just inside the bolt circle, and the cover was re-installed again.

With this gasket in place, the body to cover seal integrity was confirmed.

I was initially somewhat worried about this new clearance between cover and piston possibly allowing too much piston travel. I contacted Golden Anderson today – they say there is NO issue.

In fact, they offer a cork gasket for this very situation when the cover corrodes at the o-ring. They described the cork gasket as the interim solution until the cover is replaced.

With well pump running, system pressure approximately 158 – 160 psig. The pressure relief pilot was adjusted to "match" this pressure, and the valve was observed to open and maintain inlet pressure of 158 – 160 psig. Closing speed control was adjusted.

After marking the relief pilot's adjustment handle wheel, I adjusted the pressure relief pilot approximately +0.75 turn clockwise – per the supplied spring chart, this should raise the pressure relief set point to approx. 172 – 174 psig.

Visually confirmed the main valve closed drip tight on shut-off.

Tightened the packing nut at the position indicator until dripping stopped.

NOTE: This valve equipped with pressure relief pilot with 0 – 250 psig spring ("short round wire spring", Yellow).

Adjustment = +18.6 psig every adjustment screw full turn CW.

-18.6 psig every adjustment screw full turn CCW.

Please call or email with any questions.

Thank you

Bill Curb

Curb Services Company

Appendix 12

Example Work Orders

Work Order

Work Order	413747	Scheduled Start Date	02/05/2023
	Comm ATF - Replace 12" butterfly valve (CFWE)	Scheduled End Date	02/05/2023
Status	6 - Completed	Date Started	02/06/2023 00:00
Created By	UTILITIES	Date Completed	02/07/2023
Created	02/05/2023	Time Completed	07:23
WO Type	BRKD	Parent WO	
	Repair	Class	
Department	UTILITIES	Priority	
	Utilities Division	Warranty	
PM Schedule		Safety	
		Equipment Criticality	
Cost Code	842	Assigned To	
	UTILITIES	Reported By	
Problem Code		Assigned By	
		Campaign	
Project		Campaign Event	
Standard WO			

Equipment

Equipment	1100-100	Location	
	COMML ATF - MAIN ROOM	Reliability Ranking	
Manufacturer		Reliability Ranking Index	
Model		Reliability Ranking Score	
Serial Number			

Activity List

Activity	Task Plan Description	Trade	Start Date	End Date	Supplier
10		WWOPII	02/05/2023	02/05/2023	



Print Work Order

Work Orders Starting Between 02/01/2023 and 02/08/2023

Version	11.4
Date	02/08/2023 12:10
User	KGARCIA
Work Order	413747 [CommI ATF - Replace 12" butterfly valve (CFWE)]
Barcode	No
Task Plan Instructions	No
Work Order Custom Fields	No
Work Order User Defined Fields	No
Equipment Custom Fields	No
Equipment User Defined Fields	No
Booked Hours	No
Print Attachments	No
Print Images	No
Reprint	No
Include Comments	No
Include Task Plan Checklist	No
Include Nonconformities	No

7/11/23
2/1/23

Work Order

Work Order 413977
Comm1 ATF - Replace actuator on 12" CFWE valve
Status 1 - Released
Created By KGARCIA
Created 02/07/2023

Scheduled Start Date 02/07/2023
Scheduled End Date 02/07/2023
Reprint

Date Started
Date Completed
Time Completed

WO Type BRKD
Department UTILITIES
PM Schedule Utilities Division

Cost Code 842
Problem Code UTILITIES

Project
Standard WO

Parent WO
Class
Priority
Warranty
Safety
Equipment Criticality
Assigned To
Reported By KGARCIA-PS
Assigned By
Campaign
Campaign Event

Equipment

Equipment 1100-100
COMML ATF - MAIN ROOM
Manufacturer
Model
Serial Number

Location
Reliability Ranking
Reliability Ranking Index
Reliability Ranking Score

Activity List

Activity	Task Plan Description	Trade	Start Date	End Date	Supplier
10		WWOPII	02/05/2023	02/05/2023	

Test Name
Filter #1
inside bldg
1100 - Filter #1
100 - Inside Bldg



Print Work Order

Work Orders Starting Between 02/01/2023 and 02/08/2023

Version	11.4
Date	02/08/2023 12:09
User	KGARCIA
Work Order	413977 [Comm1 ATF - Replace actuator on 12" CFWE valve]
Barcode	No
Task Plan Instructions	No
Work Order Custom Fields	No
Work Order User Defined Fields	No
Equipment Custom Fields	No
Equipment User Defined Fields	No
Booked Hours	No
Print Attachments	No
Print Images	No
Reprint	No
Include Comments	No
Include Task Plan Checklist	No
Include Nonconformities	No