

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	04/11/2024	
Media Program:	Water	
Regulatory Program(s)	SDWA	
Company Name:	Plott Acres	
Facility Name:	Plott Acres	
Facility Physical Location:	8601 County Road 6430	
(city, state, zip code)	Lubbock, TX 79416	
Mailing address:	4406 9 th Street	
(city, state, zip code)	Lubbock, TX 79416-4716	
County/Parish:	Lubbock County	
Facility Phone Number	806-775-3416	
Facility Contact:	Keith B. Smith	Operator
	smitherstx@gmail.com	
FRS Number:	None	
Identification/Permit Number:	TX1520062	
Media Identifier Number:	None	
NAICS:	None	
SIC:	None	
Personnel participating in inspection:		
Keith B. Smith	Plott Acres	Operator
Jason Adams	Texas Commission on Environmental Quality (TCEQ) Region 2	Environmental Investigator
Samantha Rodriguez	TCEQ Region 2	Environmental Investigator
David Parker	EPA National Enforcement Investigation Center (NEIC)	Inspector
Jacob Lunn	EPA Office of Enforcement and Compliance Assurance (OECA)	Inspector
Daniel Kim	EPA Region 6	Lead Inspector
Craig Young	EPA Region 6	Inspector
Sami Doupnik	EPA Region 6	Inspector
Mariela Reyna	EPA Region 6	Inspector
EPA Lead Inspector Signature/Date	DANIEL KIM  Digitally signed by DANIEL KIM Date: 2024.05.17 08:21:33 -05'00'	05/17/2024
	Daniel Kim	Date
Supervisor Signature/Date	SAMANTHA DOUPNIK  Digitally signed by SAMANTHA DOUPNIK Date: 2024.05.17 10:31:02 -05'00'	05/17/2024
	Sami Doupnik (Acting)	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Daniel Kim, Craig Young, Sami Doupnik, and Mariela Reyna accompanied by David Parker (EPA NEIC inspector), Jacob Lunn (EPA OECA inspector), Jason Adams (TCEQ Environmental Investigator), and Samantha Rodriguez (TCEQ Environmental Investigator) arrived at Plott Acres public water system (PWS) at 10:26 am on April 11, 2024, for an announced inspection of the water system. The same day at 8:30 am, we met with Keith B. Smith, Operator for the Stormlight Mobile Home Park (MHP) and Plott Acres water systems. We had the opening conference for both Stormlight MHP and Plott Acres water systems at Stormlight MHP at 8:39 am. Sami Doupnik presented her credentials to Mr. Smith and informed him that this was an EPA inspection to determine the water system facility's compliance under the Safe Drinking Water Act and was being conducted as part of a drinking water inspector training for federal drinking water inspectors. The inspection was planned at Plott Acres because the system is considered a Top Violator, as defined by EPA's National Enforcement and Compliance Initiatives (NECIs). The scope of the inspection was to inspect the physical assets, treatment, and operations and management of the water system. The inspection was not a full Sanitary Survey, nor did it take the place of the Texas Commission on Environmental Quality (TCEQ) Comprehensive Compliance Investigations, performed triennially.

FACILITY DESCRIPTION

Plot Acres (TX1520062) is a MHP located on the northeast area of the intersection of North Farm to Market (FM) Road 179 and County Road 6440 on the northwest side of Lubbock, TX. Plot Acres is a community water system that serves 68 connections and a population of 204 individuals, according to Texas Drinking Water Watch (DWW) data. The water system consists of two wells (Well #1 and #2), one 0.017-million-gallon (MG) fiberglass ground storage tank, two 200 gallon per minute (GPM) service pumps, and three 0.001 MG hydro-pneumatic (HD) pressure tanks. At the time of inspection, Well #1 was inactive, and the two 0.001 MG HD pressure tanks connected to Well #1 were not in operation. Well #2 is operated with two 200 GPM service pumps, one 0.001 MG HD pressure tank and one 0.017-million-gallon (MG) fiberglass ground storage tank. Water from Well #2 flows into the 0.017 MG fiberglass ground storage tank. Two 200 GPM service pumps transfer water from the storage tank to the 0.001 MG HD pressure tank, which maintains even pressure throughout the distribution system. Water from Well #2 is disinfected by hypo-chlorination before entering the ground storage tank. An Arsenic and Fluoride Removal System (AFRS) is located near the wellhouse but has not been used and is not connected to the system. Well #2, two service pumps, and disinfection system are located in the well house. All parts of the system, including the AFRS, are surrounded and protected by a locked security fence. A full diagram of Plott Acres water system was provided by Samantha Rodriguez, TCEQ Environmental Investigator, and can be found in Appendix 3.

Section II – OBSERVATIONS

During the inspection, we inspected the wellhouse (Well #2), hydro-pneumatic tank (Well #2), and ground storage tank (Well #2). In addition, we observed the inactive status of the AFRS (Well #2) and Well #1 and discussed current SDWA violations and the system's future improvement plans.

Wellhouse (Well #2)

- The well didn't appear to have a sanitary seal under the well cover (Appendix 1, Photo 1; AOC 1).
- The mixing barrel for sodium-hypochlorite was missing a label (Appendix 1, Photo 2; AOC 2).
- The sodium-hypochlorite mixing barrel had an opening on top of the container, which could serve as a path for contamination or accelerated degradation of the solution (Appendix 1, Photo 2; AOC 3).
- We were informed that deionization (DI) water is used for disinfection process and is mixed with sodium-hypochlorite at a ratio of 1:1. We were informed that the target level of free chlorine was between 0.5 to 2.0 mg/l at the entry point.
- The two service pumps were observed to be in good condition. The pipes were covered with the insulation materials at the time of inspection (Appendix 1, Photo 3).
- The insulated cover of the pipe located outside of the wellhouse was not properly secured (Appendix 1, Photo 4; AOC 4).

Hydro-pneumatic tank (Well #2)

- The capacity of the tank is 0.001 MG, and the tank is equipped with a drain valve, a pressure relief valve, and a pressure gauge (Appendix 1, Photo 5 and 6).
- We observed that the drain valve of the tank lacked a backflow prevention device (Appendix, Photo 6; AOC 5).
- We observed that a damaged plastic storage tank located near the hydro-pneumatic tank was disconnected from the system and not in use (Appendix 1, Photo 7; AOC 6).

Ground storage tank (Well #2)

- According to the Operator's manual for this facility, the well is controlled by the float switch in the ground storage tank. Depending on the water level in the tank, the well is automatically operated to transfer water to the ground storage tank.
- The storage tank was built in 1992, and the capacity and empty weight are 0.017 MG and 3000 lbs. The ground storage tank appeared to be in good condition (Appendix 1, Photo 8).

Arsenic and fluoride removal system (Well #2)

- We were informed that the AFRS had been disconnected and not in use (Appendix 1, Photo 9).
- The AFRS contained Aluminum Chloro-hydrate (ACH) and was being stored near the ground storage tank (Appendix 1, Photo 10; AOC 7).
- The mixing barrel for the AFRS was not in use and was placed near the wellhouse (Well #2) (Appendix 1, Photo 11; AOC 8).

Wellhouse and hydro-pneumatic tanks (Well #1)

- We observed that Well #1 was completely disconnected from the two hydro-pneumatic tanks and not operated (Appendix 1, Photo 12).
- No chemical feed system for disinfection was equipped with Well #1 (Appendix 1, Photo 12).
- The two hydro-pneumatic tanks for Well #1 were observed to be not in use at the time of inspection. They were air-gapped from Well #1, but still connected to the distribution system (Appendix 1, Photo 13).
- We observed a leak coming from a pipe downstream of the standing hydro-pneumatic tank for Well #1 (Appendix 1, Photo 14; AOC 9). We notified Mr. Smith of the leak, and he placed a work order to the operating company, Patterson Water Supply, which handles all maintenance and repairs for the system. The leak was repaired and photos documenting the repair were provided to EPA by Mr. Smith on April 19, 2024 (Appendix 2).

The system's future improvement plan discussion

- We were informed that this community water system recently transferred ownership to a public utility commission (PUC), which is a water board elected by the community residents. The PUC recently changed the system's operation company from Central States Water Resources (CSWR) - Texas to Patterson Water Supply. The new operation company has a plan to renovate the water system. Mr. Smith briefly explained that the entire part of Well #2 would be housed in a new structure, and Well #1 also would be activated for future community water supply.

Fluoride Maximum Contaminant Level (MCL) violation discussion

- According to Texas Drinking Water Watch (DWW), Plott Acres has been in violation of the SDWA for exceeding the maximum contaminant level (MCL) of fluoride since 2021 (AOC 10). Many other small water systems in the Lubbock, TX region have experienced elevated fluoride and arsenic levels in the groundwater for a long time due to the subsurface geological characteristics of the area. We invited other nearby small systems, including Plott Acres, to a joint-closing conference at the City of Lubbock PWS to discuss possible solutions for both fluoride and arsenic issues. One of the suggested solutions was to consider connecting small systems to the City of Lubbock PWS. In addition, the concept and benefit of PUC for other small water systems were discussed, as well as potential funding sources for adequate fluoride and arsenic treatments.

Section III – AREAS OF CONCERN

1. Well #2 lacked a sanitary seal. We recommend properly sealing the well.
2. The mixing barrel for sodium-hypochlorite was missing a label. We recommend replacing the missing label.
3. The sodium-hypochlorite mixing barrel had an opening on top of the container, which could serve as a path for contamination or accelerated degradation of the solution. We recommend properly sealing the barrel.
4. The insulated cover of the pipe located outside of the wellhouse was not properly secured. We recommend properly securing the cover.
5. The drain valve of hydro-pneumatic tank (Well #2) did not have a backflow prevention device.

6. A damaged plastic storage tank was not in use and placed near the hydro-pneumatic tank. We recommend disposing of the tank.
7. The AFRS was disconnected from the system but still contained ACH and was stored near the ground storage tank. We recommend properly disposing of the AFRS if the system does not intend to rehabilitate it for future use.
8. The mixing barrel for arsenic and fluoride removal was not in use and placed near wellhouse (Well #2). We recommend disposing of the mixing barrel.
9. We observed a leak coming from a pipe downstream of the standing hydro-pneumatic tank for Well #1. The leak was repaired by April 19, 2024 (Appendix 2)
10. According to Texas DWW, the public water system has exceeded Fluoride MCL since 2021.

EPA Region 6 inspectors Daniel Kim conducted a closing conference at Plott Acres at 12:03 PM on April 11, 2024 for the inspection. During the closing conference, Daniel Kim reviewed the nine (9) Areas of Concern noted during the inspection and our recommendations.

Section IV – FOLLOW UP

The following information was received by EPA on April 11, 2024, after exiting the Facility on April 11, 2024: The photo of the work order for leaking issue in Plott Acres was given from Mr. Smith (Appendix 2, Photo 1).

The following information was received by EPA on April 19, 2024, after exiting the Facility on April 11, 2024: The photo of the repaired leaked pipe at Plott Acres was provided by Mr. Smith (Appendix 2, Photo 2).

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 14 photos taken 4/11/13

Appendix 2 – Follow up – 2 photos given 4/11/2024 and 4/19/2024

Appendix 3 – Water System Diagram

Appendix 4 – Opening and closing conference sign-in sheet

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5301.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:26 AM

Photographer: Daniel Kim

Description: The seal status of Well #2 inside of the wellhouse.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5177.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:40 AM

Photographer: Daniel Kim

Description: Opening in the top of the mixing barrel for Sodium hypochlorite (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5175.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:39 AM

Photographer: Daniel Kim

Description: Two service pumps in good condition (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5180.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:40 AM

Photographer: Daniel Kim

Description: The detached box shape structure covering the pipe located outside of the wellhouse (Well #2)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5172.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:38 AM

Photographer: Daniel Kim

Description: Hydروpneumatic tank equipped with a pressure relief valve and a pressure gauge located in a secured fence (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5304.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:28 AM

Photographer: Daniel Kim

Description: The drain valve of the hydropneumatic tank in Well #2.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5308.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:29 AM

Photographer: Daniel Kim

Description: The unutilized plastic storage tank near the hydropneumatic tank (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5289.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:18 AM

Photographer: Daniel Kim

Description: Ground storage tank in good condition (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5154.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:28 AM

Photographer: Daniel Kim

Description: Unutilized arsenic and fluoride removal system in a secured fence (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5160.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:32 AM

Photographer: Daniel Kim

Description: ACH stored in the unutilized arsenic and flouride removal system (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5157.JPG

Date of Photo: 04/11/2024

Time of Photo: 10:30 AM

Photographer: Daniel Kim

Description: Unutilized mixing barrel for arsenic and flouride removal near the wellhouse (Well #2).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5321.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:39 AM

Photographer: Daniel Kim

Description: The interior of the wellhouse for the inactive Well #1. No chemical feed system for disinfection.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5315.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:38 AM

Photographer: Daniel Kim

Description: Two disconnected hydro-pneumatic tanks from Well #1.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: DSCN5331.JPG

Date of Photo: 04/11/2024

Time of Photo: 11:47 AM

Photographer: Daniel Kim

Description: Leaking issue from a pipe near the standing hydropneumatic tank (Well #1).

Appendix 2

Follow Up



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Follow Up

Photo No. 1

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas

Thursday, April 11, 2024 12:16:20PM

Page 1 of 1

Work order #3126
Pending

Patterson Water Supply

Start Time: _____ End Time: _____ Mileage: _____ Reading: _____

Requested By: Operator Date Issued: 4/11/24 To be Completed by: 0:00AM

Assigned By: Randi Date Completed: _____ By: _____

Assigned To: _____ Meter Reading: _____

Workorder Type water leak

Workorder Notes: Operator found leak with EPA during inspection.

Account #: 84929-0
Meter #: 6203000
Route #: 0 Seq #: 100
Last Reading 503139
Prev Reading 503139 Last Usage: 0
Date Last Read 2/22/24

Latitude 33.61578629
Longitude -102.00497779

2/22/24 0

PART #	USED	DESCRIPTION	ADDITIONAL PART	USED
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Field Notes:

Patterson Water Supply

Photo File Name: IMG_20240411_145439.jpg

Date of Photo received: 04/11/2024

Time of Photo received: 2:57 PM

Provider: Keith B. Smith

Description: The work order for leaking issue in Plott Acres (Well #1).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Follow Up

Photo No. 2

Location: Plott Acres		
City: Lubbock	County/Parish: Lubbock County	State: Texas



Photo File Name: IMG_20240411_145439.jpg

Date of Photo received: 04/19/2024

Time of Photo received: 2:46 PM

Provider: Keith B. Smith

Description: The completion of the work for leaking issue (Well #1).

Appendix 3

Water System Diagram

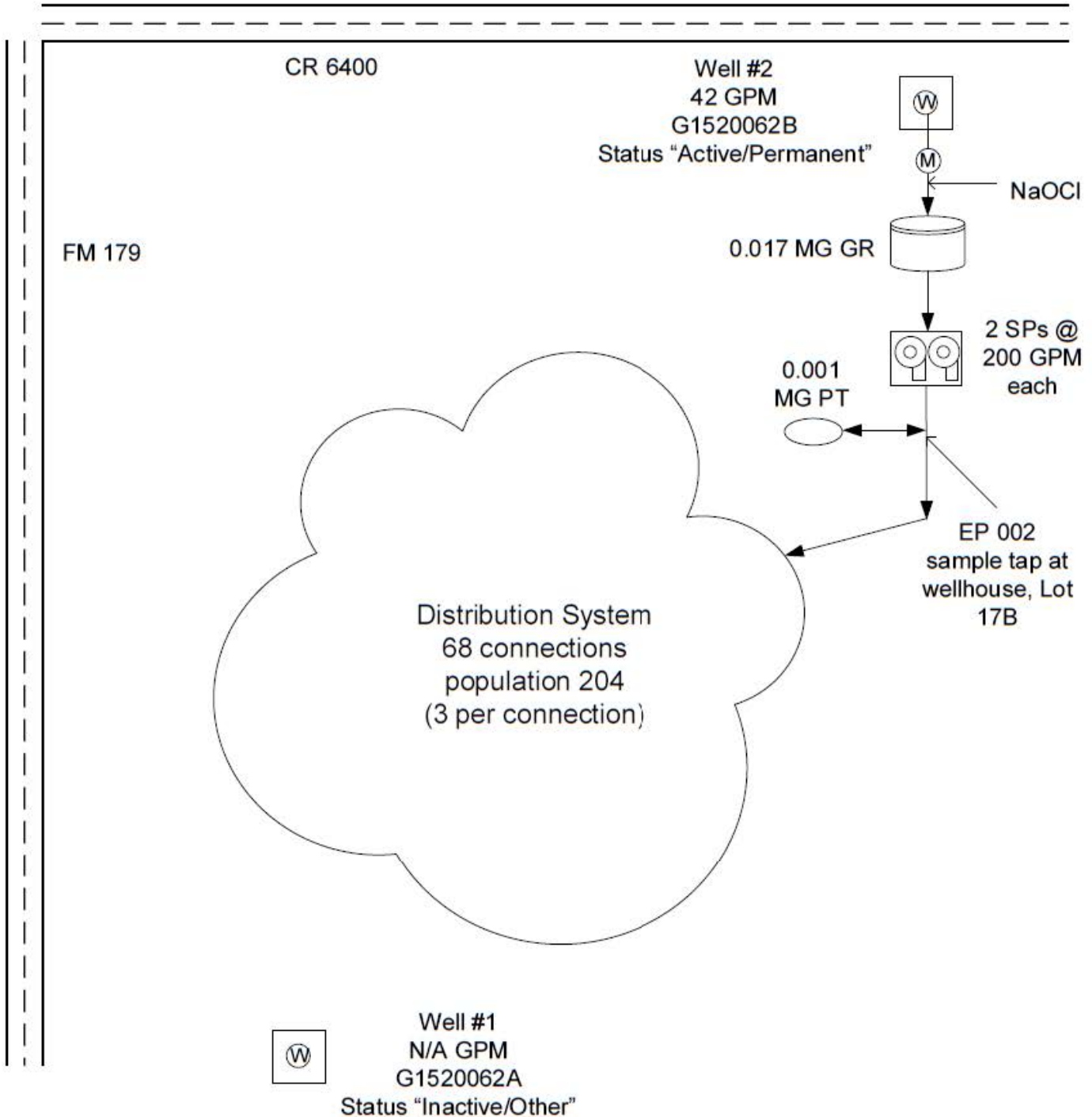


System Sketch Plott Acres

PWS ID #1520062

April 19, 2023

By: Samantha Rodriguez



Appendix 4

Opening and closing conference sign-in sheet

Date: April 11, 2024

Date: April 11, 2024

[illegible]