

October 13, 2023

954.001.04.002

City of Sebastopol
Public Works Department
Attention: Dante Del Prete, Superintendent
714 Johnson Street
Sebastopol, California 95472

**Re: Groundwater Level Data Transmittal
Third Quarter 2023
City of Sebastopol
Sebastopol, California**

Dear Mr. Del Prete:

This data transmittal has been prepared by PES Environmental, Inc. dba NV5 (NV5), on behalf of the City of Sebastopol (City) to summarize the results of the groundwater level monitoring program performed during the Third Quarter 2023 (July through September 2023). The following sections of this transmittal summarize the activities performed and data collected for the subject monitoring period.

GROUNDWATER LEVEL MONITORING PROGRAM

The activities performed for the monitoring period (July through September 2023) included: (1) recording groundwater levels in four City production wells; (2) summarizing regional precipitation data; and (3) preparing groundwater level hydrographs.

Groundwater Level Measurements

Groundwater level data collected during the Third Quarter 2023 included groundwater elevations from four City production wells: inactive municipal Well #5, and active municipal Wells #4, #7, and #8. These wells were equipped with In-Situ Inc., electronic submersible “LevelTroll®” vented water level pressure transducers and “VuLink®” cellular telemetry devices. The vented pressure transducers automatically compensate for barometric pressure changes, and depth-to-water data are transmitted to an online server for subsequent download and processing. On October 25, 2022, the City removed the telemetry equipment at Well #6 to perform pump and motor maintenance activities. Following completion of this maintenance work, it is anticipated that the telemetry equipment will be reinstalled at Well #6.

Precipitation Data

Daily precipitation records maintained by the National Oceanic and Atmospheric Administration are summarized in Table 1. The precipitation data (reported in total inches per day) were measured at the Sonoma County Airport, Santa Rosa, California (Station ID: USW00023213). As indicated in Table 1, a total of 0.17 inches of rain was recorded during the Third Quarter of 2023.

Groundwater Level Hydrographs

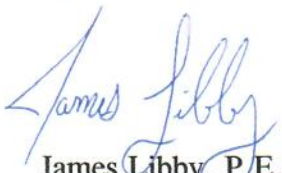
Following conversion of the pressure-head measurements to depth-to-groundwater levels, groundwater level hydrographs were prepared for each of the five City wells (Plates 1 through 5). To facilitate groundwater level trend analysis, groundwater level data from the previous quarter (April through June 2023) are included on Plates 1 through 5. During the subject monitoring period (July through September 2023), observed groundwater levels were generally stable with seasonal variations related to precipitation and associated groundwater recharge.


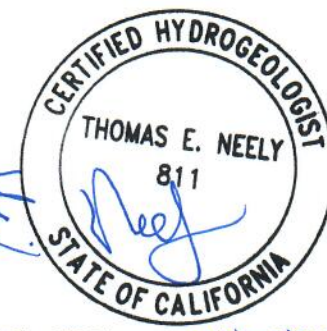
CLOSURE

NV5 appreciates the opportunity to be of service to the City and to provide assistance with the Groundwater Level Monitoring Program. Should you have any questions regarding this information, please call James Libby at (415) 798-3027 or Thomas Neely at (925) 375-8620.

Respectfully yours,

NV5


James Libby, P.E.
Project Engineer

 
Thomas E. Neely, PG, CHG
Principal Hydrogeologist

October 13, 2023

cc: Reyna Ramirez – City of Sebastopol

Attachments: Table 1 – Summary of Precipitation Totals
Plate 1 – Groundwater Level Hydrograph, Municipal Well #4
Plate 2 – Groundwater Level Hydrograph, Municipal Well #5
Plate 3 – Groundwater Level Hydrograph, Municipal Well #6
Plate 4 – Groundwater Level Hydrograph, Municipal Well #7
Plate 5 – Groundwater Level Hydrograph, Municipal Well #8

TABLE

Table 1
Summary of Precipitation Totals
Sonoma County Airport
Santa Rosa, California

Day	Daily Precipitation Totals (inches)		
	Jul-2023	Aug-2023	Sep-2023
1	--	--	--
2	--	--	T
3	--	--	--
4	--	--	--
5	--	--	--
6	--	--	--
7	--	--	--
8	--	--	--
9	--	--	--
10	--	--	--
11	--	--	--
12	--	--	--
13	--	--	--
14	--	T	--
15	--	--	--
16	T	--	--
17	--	--	--
18	--	--	--
19	--	T	--
20	--	T	--
21	--	T	--
22	--	--	--
23	--	--	--
24	--	--	--
25	--	--	0.09
26	--	--	0.07
27	--	--	--
28	--	--	--
29	--	--	T
30	--	--	0.01
31	--	na	--
Total (inches)	0.00	0.00	0.17
Total Precipitation in inches for July through September: 0.17			

Notes:

⁽¹⁾ Source of Data: National Oceanic and Atmospheric Administration (NOAA)
Preliminary Record of Climatological Observations for Sonoma County
Airport - Cooperative Station Network (Station ID: USW00023213)
-- = No measurable/reported precipitation
T = Trace precipitation event
na = Not Applicable

PLATES

Plate 1
Groundwater Level Hydrograph - Well #4
City of Sebastopol Municipal Wellfield
Sebastopol, California

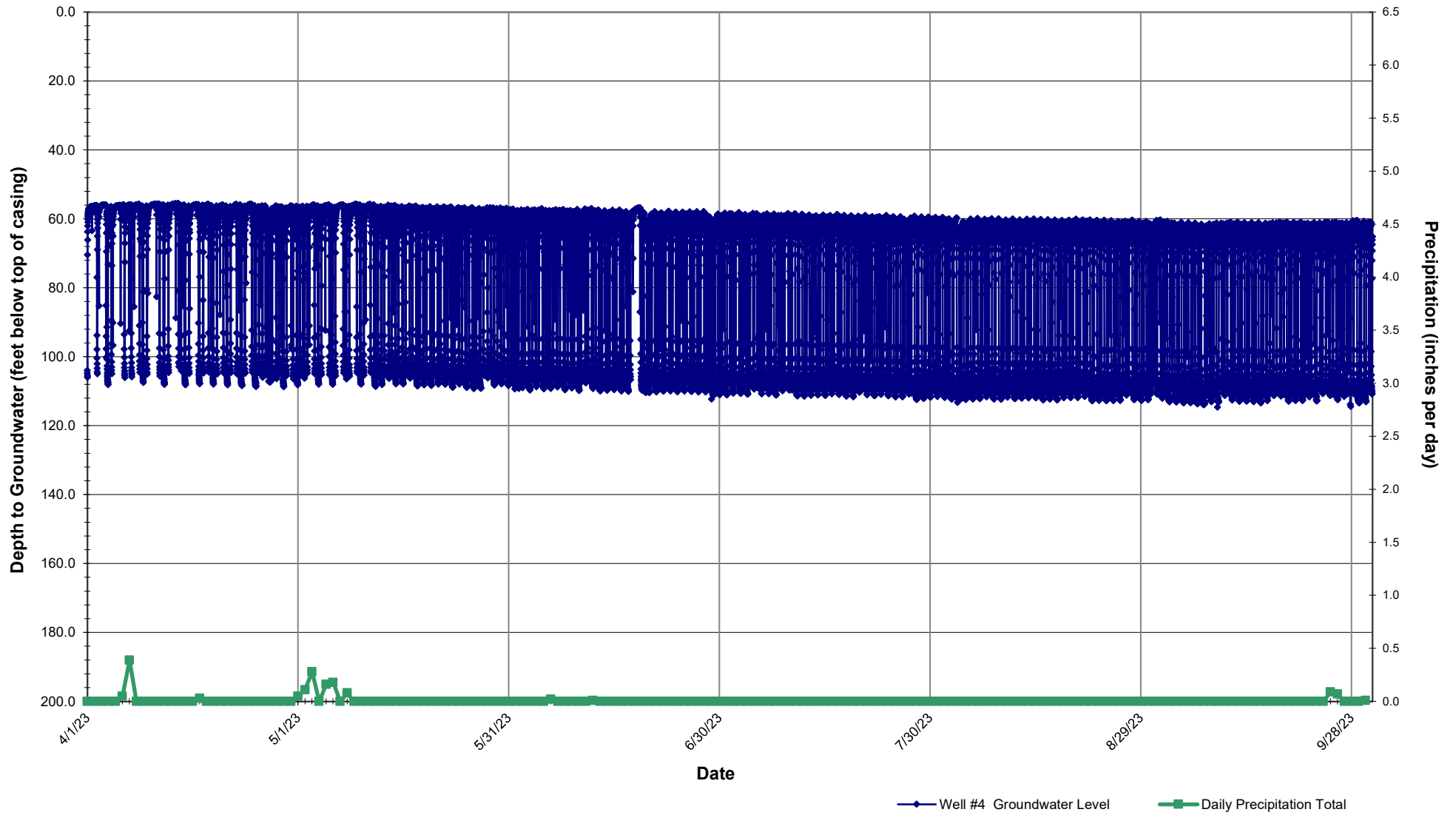


Plate 2
Groundwater Level Hydrograph - Well #5
City of Sebastopol Municipal Wellfield
Sebastopol, California

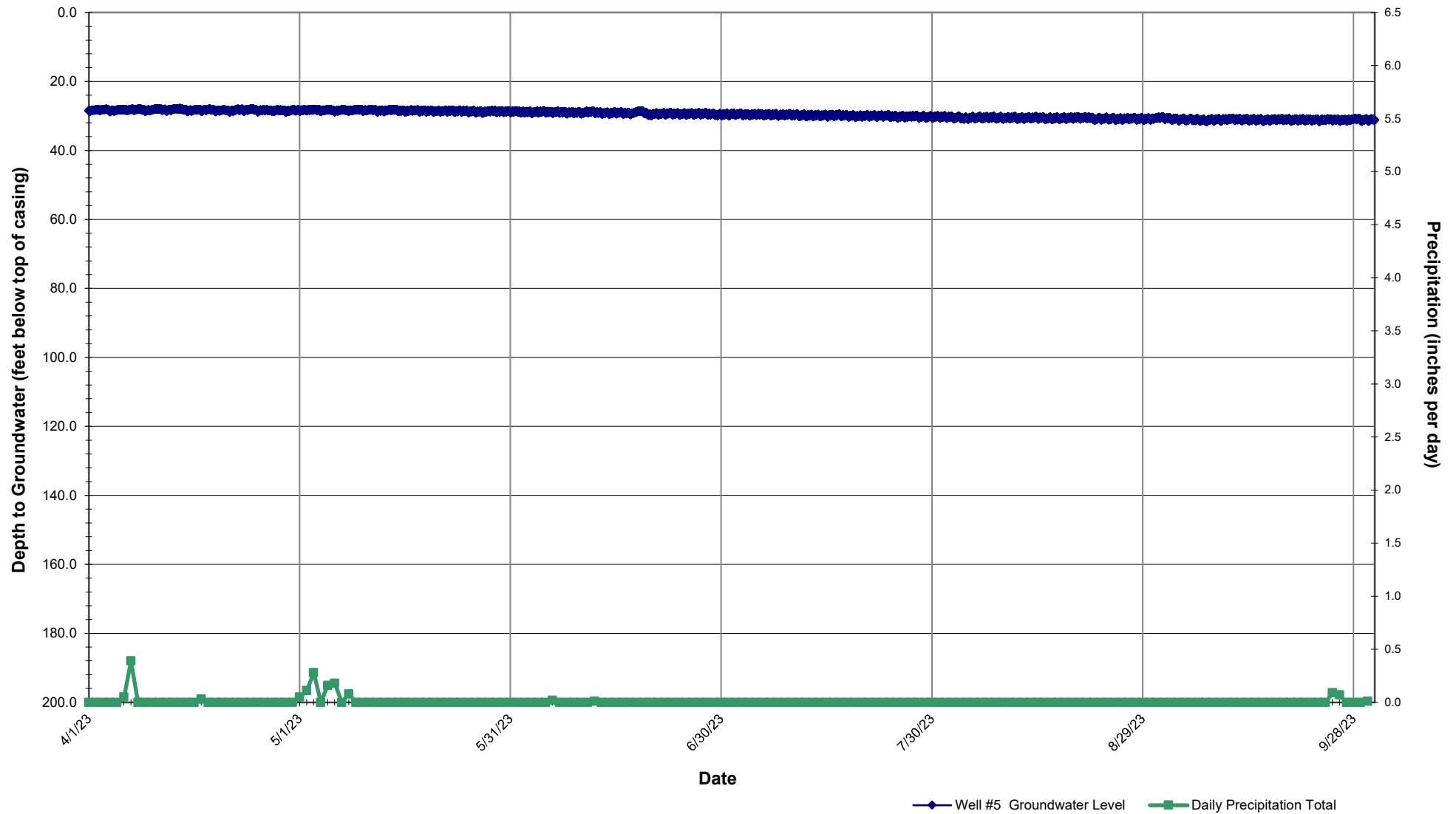


Plate 3
Groundwater Level Hydrograph - Well #6
City of Sebastopol Municipal Wellfield
Sebastopol, California

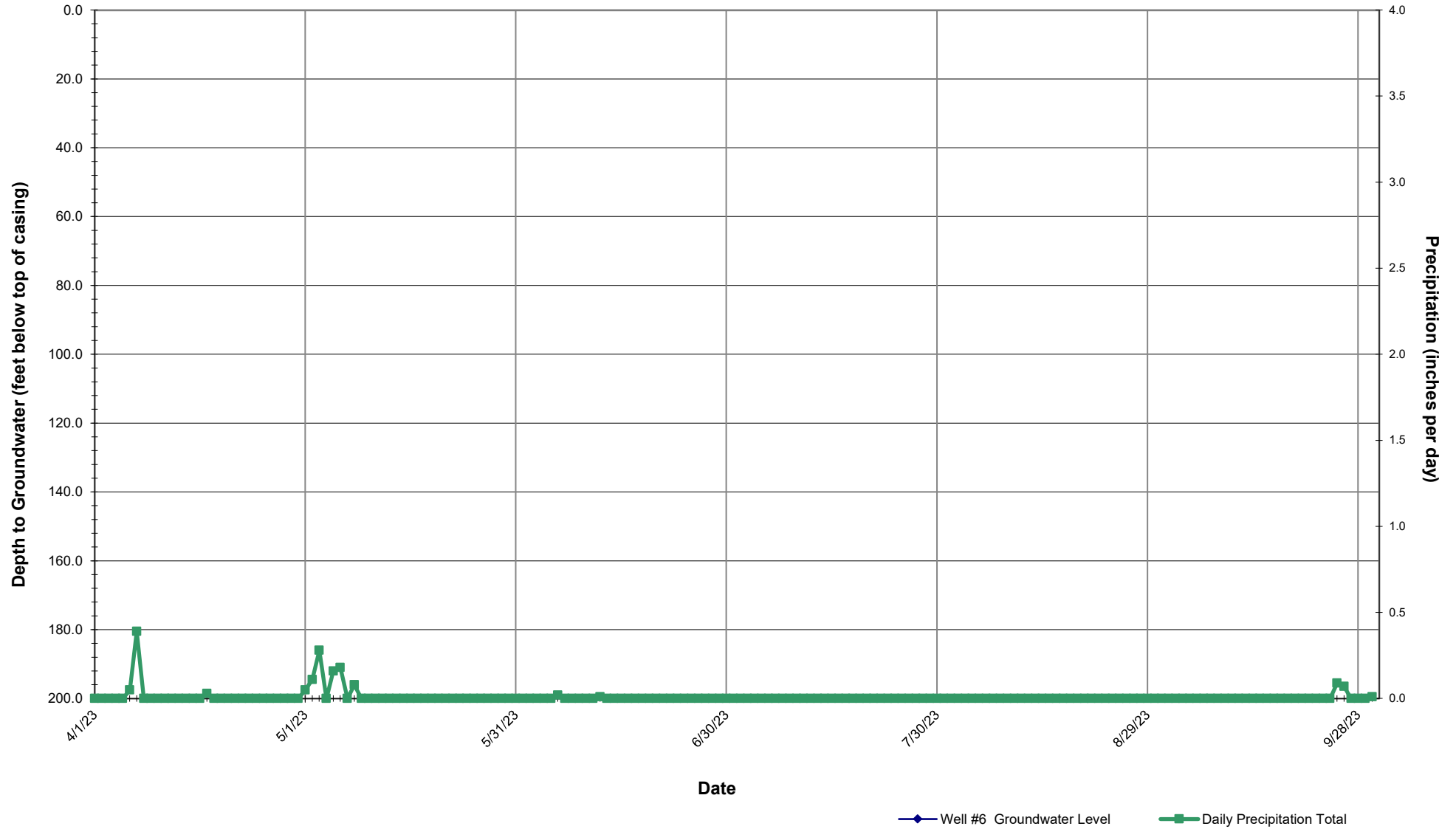


Plate 4
Groundwater Level Hydrograph - Well #7
City of Sebastopol Municipal Wellfield
Sebastopol, California

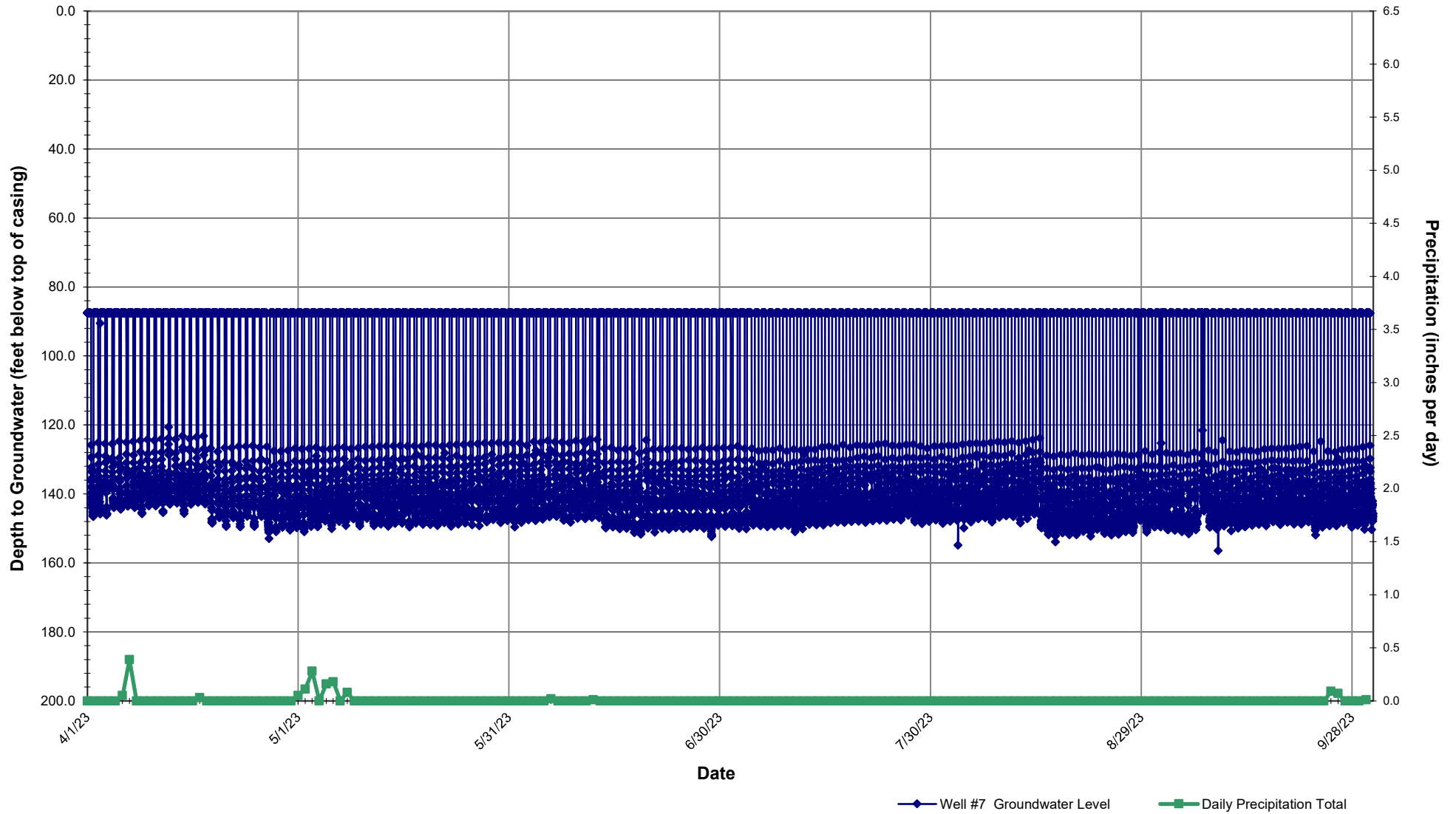


Plate 5
Groundwater Level Hydrograph - Well #8
City of Sebastopol Municipal Wellfield
Sebastopol, California

