



Annual Surveillance Report January 2024 to December 2024 for Syphon Canyon Dam DSOD Dam No. 1029-004

Unincorporated Orange County, California

Submitted to:
Irvine Ranch Water District
Dams & Storage
15600 Sand Canyon Avenue
Irvine, CA 92618



Prepared by:
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May 5, 2025
GEI Project No. 2305575



Consulting May 5, 2025
Engineers and GEI Project No. 2305575
Scientists Mr. Jacob Moeder,
Engineering Manager – Dams & Storage
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

**Re: Syphon Canyon Dam, DSOD Dam No. 1029-004,
Annual Surveillance Report from January 2024 to December 2024**

Dear Mr. Moeder:

GEI Consultants, Inc. (GEI) is pleased to submit this Annual Surveillance Report for Syphon Canyon Dam covering January 2024 to December 2024. This report is part of the scope of work described under our Professional Service Agreement between Irvine Ranch Water District (District) and GEI Consultants Inc. (GEI) dated October 25, 2023.

We appreciate this opportunity to provide the District with our services. Please contact Emerson Revolorio at erevolorio@geiconsultants.com or Rich Sanchez at rsanchez@geiconsultants.com with any questions.

Sincerely,

GEI CONSULTANTS, INC.



Richard Sanchez, P.E.
Principal Engineer



Emerson Revolorio, P.E.
Project Engineer

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Inspection Photograph Log of Syphon Canyon Dam March 25, 2024

IRWD Dam Outlet Valve Exercising Log

Acronyms and Abbreviations

AC	asphalt concrete
AF	acre-feet
CML&C	cement-mortar-lined and coated
District	Irvine Ranch Water District
DSOD	State of California, Department of Water Resources, Division of Safety of Dams
El, EL, Elev	elevation
ft	feet
GEI	GEI Consultants, Inc.
gpm	gallons per minute
gal/min	gallons per minute
H:V	Horizontal to Vertical
ID	identification
in.	inches
liter/min	liters per min
MW	monitoring well
NAVD 88	North American Vertical Datum of 1988
NGVD 29	National Geodetic Vertical Datum of 1929
No.	number
NOAA	National Oceanic and Atmospheric Administration
P.E.	Professional Engineer
P or Piez	Piezometer
RCP	reinforced concrete pipe
Res.	Reservoir
VW, VWP, VBW	Vibrating Wire Piezometer
W.S.	water surface
YR	year

1.0 Introduction and Background

1.1 General

This report presents the results of the dam safety monitoring and surveillance for Syphon Canyon Dam conducted by the Irvine Ranch Water District (District) and GEI Consultants, Inc. (GEI) between January 2024 through December 2024. It includes a review of previous surveillance reports, a compilation of the field measurements, maintenance reports, observations, and conclusions related to the general condition and safety of the dam. In addition, recommendations are provided for continued operation, surveillance, and monitoring of the dam. This report is submitted as part of the jurisdictional requirements of the State of California, Department of Water Resources, Division of Safety of Dams (DSOD).

This report includes graphical summaries of the field measurements of water levels in the piezometers and seepage flow rates. It includes two-year graphical summaries (short term) of water levels in the piezometers, flow from the subdrain, and reservoir water levels, as well as historical (long term) graphical and tabular summaries of this data. The historical data is used to evaluate the long-term performance of the dam and reservoir and to identify any adverse trends. Water levels in the piezometers and seepage flow rates are presented with corresponding reservoir water surface elevations.

Figure 1 is a plan view of the dam and reservoir and instrumentation locations. Figure 1A is a section of the dam along the maximum section showing piezometers along this plane. As used in this report, the left and right designations are as viewed looking downstream.

The report also contains tabulated data and graphs of the field measurements of water levels in the piezometers and seepage flow rates. Table 3 provides historical readings of each piezometer and seepage flow measuring point.

The vertical datum indicated on the as-built plans and project documents for Syphon Canyon Dam is National Geodetic Vertical Datum of 1929 (NGVD 29). The reservoir water surface elevation and instrumentation data are currently being read based on NGVD 29.

In July 2023, IRWD developed a Dam Safety Program (IRWD, 2023) that includes principles and guidelines for Risk Informed Decision Making (RIDM) for its portfolio of dams. This report has been updated to follow the guidelines in the Dam Safety Program.

1.2 Dam and Reservoir

Syphon Canyon Dam and Reservoir are located in Orange County, California, and were constructed in 1949 by the Irvine Company. Irvine Ranch Water District (District) took over operation and ownership of the dam and reservoir in January of 2010.

Syphon Canyon Dam is a 59-foot-high homogeneous embankment dam. As Built plans show the dam crest is at Elevation of 385 ft, with a crest length of 843 ft and a crest width of 10 ft. The upstream face of the dam has a slope of 1.2H:1V from the crest to Elevation 378 ft, 1.4H:1V between Elevations 378 and 370 ft, and then a slope of 6H:1V to the upstream toe of the embankment. The downstream face has a uniform slope of 2.25H:1V with a bench at Elevation 340 ft. The upstream face is covered by low height grass cover and riprap, the downstream face is covered by well-maintained low height grass cover and the crest is surfaced with soil and gravel.

The watershed contributing to the reservoir has a drainage area of only 0.3 square miles. The reservoir area is 27 acres, and the reservoir storage capacity is 578 acre-feet at the spillway crest elevation.

The reservoir has been drained in preparation of the upcoming dam replacement project. The dam will be rebuilt to current dam safety standards and the reservoir will not be filled again until after the construction of the new dam.

1.3 Spillway

The spillway is located within the left abutment of the dam and consists of an approach apron and a broad-crested weir leading to a 12.5-foot-wide open trapezoidal channel and chute. The weir control section and sides of the spillway channel and chute are lined with shotcrete/gunite. Concrete was also placed to form the control section. The spillway crest is at Elevation 378.0 ft, providing 7 ft of total freeboard.

1.4 Outlet Works

The outlet conduit consists of a 15-inch-diameter reinforced concrete pipe (RCP) with upstream and downstream control valves. The outlet is located at the right end of the dam and the manual operating equipment for the upstream control valve is located near the top of dam. In 2015, the 15-inch slide gate at the inlet was replaced with a 12-inch-diameter valve. The invert of the inlet is at approximately Elevation 336.0 ft.

At the downstream side of the dam, the 15-inch-diameter RCP transitions to a 16-inch-diameter metal pipe with a 16-inch butterfly valve controlling the flow in the pipe. The 16-inch metal pipe then joins a 16-inch-diameter, cement-mortar-lined and-coated (CML&C) steel pipe that

connects to the Interim Facility, which includes the reservoir drain line. The Interim Facility consists of a strainer facility which is used prior to serving recycled water to customers. An emergency blowoff pipe branches off the 16-inch steel pipe and discharges into the underground storm drain water system.

The District provided a Dam Outlet Valve Exercising Log which states that the valves were not exercised during the review period. The table is provided in the Appendix of this report.

1.5 Subdrains

The dam embankment is homogeneous and there was no internal drainage system installed during the original construction of the dam. However, seepage through the dam and/or foundation is collected at the toe area and directed to the seepage collection vault located beyond the downstream toe of the dam (Figure 1). The seepage collection vault has just one seepage subdrain outlet.

2.0 Field Measurements

2.1 General

Based on data provided by the District, field measurements at Syphon Canyon Dam have been taken on a regular basis since March 25, 2008. These measurements include the water levels in 12 piezometers and seepage readings starting in 2009. District personnel measure the water levels in the reservoir, piezometers, and the seepage flow monthly. Precipitation is measured by an onsite rain gage. There are no monitored survey monuments at this dam.

Figure 1 is a Site and Instrumentation Plan showing the layout of the dam and appurtenances, as well as the locations of the piezometers and the seepage collection subdrain. Figure 1A shows the piezometer locations along the maximum section of the dam. The left and right designations are as viewed looking downstream.

Throughout this report, instrumentation measurements and readings that remained within historical limits and followed historical trends will be classified as normal. Historical limit is classified as the range between maximum and minimum water levels within the past ten years.

Threshold and action levels were not developed for Syphon Canyon dam. IRWD excluded Syphon Canyon Dam from threshold and action level analysis since the reservoir is drained and is planned to be drained until the new dam is built.

Based on the ten-year historical data from January 2014 through December 2024, the reservoir water surface elevation varied from dry to a maximum Elevation of 375.9 ft. During the 2024 review period, the reservoir was mostly drained, and the maximum water surface elevation was 344 on February 22, 2024. The District started draining the reservoir in April 2022 in preparation for the Syphon Canyon Dam Improvements Project. Rainfall data is included in Table 3 and Figures 2 through 11.

2.2 Piezometers

Originally, the dam had 12 open-well piezometers. An open-well piezometer is a small-diameter well used mainly to measure the water pressure or depth to water. It is typically installed in a casing inside a vertical borehole and has a discrete perforated zone near its bottom to enable monitoring of changes in water levels within that zone. More than one piezometer can be installed within a single, larger-diameter outer well casing. These groups of piezometers are often referred to as multi-stage or nested piezometers.

In December 2015, the District converted Piezometers VBW/2-A, VBW/2-B, VBW/4, VBW/5, VBW/6, VBW/7, VBW/8, and VBW/9 to vibrating wire piezometers. Vibrating wire piezometers contain high tensile steel wire attached at one end to a diaphragm. The frequency of vibration in the wire induces an alternating electrical current in a coil. The magnitude of the current is detected, and the reading is then converted to a pressure. The pressure fluctuates with changes in water levels in the immediate vicinity of the piezometer tip. Between May 2020 and November 2020, the District was having problems with the vibrating wire piezometer data logger and did not provide readings, as can be seen in the Table 3 data. The District was able to fix the data logger unit with the help of the manufacturer (Geokon) and started providing readings again in 2021. The readings appear to be given as depths and in units of feet and seem to follow the historical trends seen before the data logger malfunction. The exception includes vibrating wire piezometers VBW/2A and 2B, which appear to be providing erroneous readings, which is attributed to incorrect data logger conversion settings.

The location of each piezometer is shown in Figure 1. Table 3 lists piezometer water levels from March 2008 through December 2024. Figures 2 through 5 are graphical plots of piezometer water levels and reservoir water surface elevations during the two-year period from January 2023 through December 2024. Figures 6 through 9 are graphical plots of the historical piezometer water levels and reservoir water surface elevations from 2014.

The following is a discussion of each piezometer including the water level measurements during the 12-month review period as well as comparisons with historical trends.

Table 1 provides the maximum and minimum water levels recorded during the current review period, as well as the historical range for each piezometer. Readings with isolated spikes or drops were not considered reliable (erroneous reading) and were not included in the maximum and minimum water level range.

Table 1. Piezometers – Maximum and Minimum Water Level Ranges

Piezometer	Tip Elevation (ft)	2014-2024 10-Year Range (ft)	2024 Range (ft)	Comment
P-1A	365.7	364.5 - 366	365.3 - 365.6	Dry
P-1B	345.7	345.3 - 357.5	345.3 - 345.6	Dry
VBW/2-A	342.2	342.9 - 382.4	342.9 - 354.08	
VBW/2-B	309.4	321.4 - 384.03	356.78 - 382.53	
P-3A	362.3	357.9 - 362.3	361.8 - 362.2	Dry
P-3B	340.3	339.6 - 357.4	339.88 - 340.1	Dry
VBW/4	314.7	317.04 - 331.9	317.04 - 322.93	
VBW/5	314.0	311.51 - 332.6	314 - 318.59	Dry for most of review period.
VBW/6	360.6	359.3 - 361.43	359.3 - 359.3	Dry
VBW/7	338.1	337.2 - 340.3	337.2 - 337.2	Dry
VBW/8	336.8	335.8 - 346.4	335.8 - 335.8	Dry
VBW/9	335.4	333.9 - 336.26	333.9 - 333.9	Dry

Piezometers P-1, VBW/2 and P-3 are located on the crest of the dam. Piezometer VBW/2 is located near the maximum section of the dam, P-1 is located on the right side of the crest, and P-3 is located on the left side of the crest. Piezometer P-1A is nested in the same well as Piezometer P-1B at the right end of the crest of the dam. The tip of P-1A is located within the dam embankment at Elevation 365.7 ft, while the tip of P-1B is within the dam foundation at Elevation 345.7 ft. Piezometer P-1A and P-1B remained dry during the report period (Figures 2 and 6).

Piezometer VBW/2-A is nested in the same well as Piezometer VBW/2-B on the crest of the dam, near the maximum section of the dam. The tip of VBW/2-A is located within the dam embankment at Elevation 342.2 ft, while the tip of VBW/2-B is within the dam foundation at Elevation 304 ft.

The water level readings in Piezometer VBW/2-B have been periodically unreliable (erroneous) since the vibrating wire instrument was installed in December 2015 (Figure 7). In 2016, the District determined that the vibrating wire instrument was providing faulty data, which resulted in readings higher than the historic trend. The instrument was repaired, and on February 16, 2017, the District cleaned piezometer VBW/2-B standpipe which resulted in the new reported bottom Elevation of 304.0 ft, which is five ft deeper than prior to the cleaning. From January 2018 through November 2019, January 2020 through March 2020, and on December 2020, the water levels in Piezometer VBW/2-B appeared to respond normally to the fluctuations in the reservoir levels (Table 3 and Figure 7). VBW/2-B data included in Table 3 for December 2019 and April 2020 is not considered reliable and attributed to the data logger problems. No data was available from May 2020 to November 2020 for VBW/2-A and VBW/2-B due to problems with the data logger.

According to the instrumentation data provided by IRWD, the vibrating wires for VBW/2-A and 2-B were pulled and placed in buckets during a large portion of the review period (Figure 3). GEI did not use the readings from VBW/2-A and 2-B for the evaluation of the dam since they are not reliable. The vibrating wire piezometers' data logger instrument is still providing erratic readings at times based on discussions with the District.

Open well piezometer P-3A is nested in the same well as piezometer P-3B and are located on the far-left portion of the crest of the dam. The tips of both P-3A and P-3B are located within the dam embankment at Elevations 362.3 and 340.3 ft, respectively. P-3A and P-3B remained dry throughout the review period (Figures 4 and 8).

Piezometer VBW/4 is located on the downstream face, near the maximum section of the dam. VBW/5 is located at the downstream toe, also near the maximum section of the dam. The tips of both VBW/4 and VBW/5 are located within the dam foundation at Elevations 314.7 and 314.0 ft, respectively. According to the instrumentation data provided by IRWD, the vibrating wires for

VBW/4 were pulled and placed in buckets (Figure 4). VBW/5 became dry in August 2024 in response to the dry reservoir.

Piezometers VBW/6, VBW/7 and VBW/8 are located on the downstream face of the dam, near the maximum section. The tips of all three piezometers are located within the dam embankment at Elevations 360.6, 338.1 and 336.8 ft, respectively. On June 23, 2015, the tops of casings for all three piezometers were raised from 1.1 ft to as high as 1.6 ft (Table 2). In July 2015, the District cleaned Piezometer VBW/7. Since VBW/6, VBW/7 and VBW/8 were installed in 2015, water level readings have not responded to the reservoir water level and the piezometer water levels have been near the bottom of piezometer tip elevations (Figure 9). During the review period VBW/6, VBW/7, and VBW/8 were dry (Figures 3 and 5).

Piezometer VBW/9 is located on the downstream face of the dam near the right side. The tip of VBW/9 is located within the dam foundation at Elevation 335.4 ft. On June 23, 2015, the top of the casing for VBW/9 was raised 1.5 ft (Table 2). VBW/9 was dry during the 2024 review period (Figure 2). Since the vibrating wire instrument was installed in December 2015 for VBW/9, the level readings have not fluctuated and is considered dry (Figure 6). Based on GEI's review of the available piezometer data, most of the piezometers were dry or showing piezometer water levels trending downwards due to the recent lowering of the reservoir level.

2.3 Seepage Flows

Seepage through the dam and/or foundation is collected in the seepage collection vault, which is located beyond the downstream toe of the dam (Figure 1). The seepage collection vault has one seepage subdrain outlet. Seepage flow is measured monthly by District personnel at that one point.

Historical seepage flow rates measured at the sole seepage flow point are presented in Table 3 and shown in Figure 11. Figure 10 displays the seepage flow rates versus the reservoir water levels from January 2023 through December 2024. From January 2020 to March 2020 seepage flow was zero. The range of minimum and maximum flow rate for seepage based on trends from the ten-year historical data from January 2014 through December 2024 was between 0 and 9.5 gallons per minute (gpm). No seepage has been observed since June 29, 2022 because the reservoir has been fully drained.

3.0 Field Evaluations

3.1 Field Evaluation of March 25, 2024

A field evaluation and inspection were performed by Emerson Revolorio and Rich Sanchez of GEI, Danielle Drake, and Casey King of the District, and Cameron Lancaster and Brandon Cruz of DSOD on March 25, 2024. The reservoir level was reported at Elevation 343 ft. Weather conditions were partly cloudy with temperature in the mid-60s. Photos taken by GEI are included in the Appendix of this report.

3.1.1 Dam

The crest of the dam, downstream slope and groin areas, abutment areas and sections of the upstream slope face were visually inspected, and no adverse signs of movement, significant cracking, or instability were seen, see Photos 1 through 6. The reservoir has been drained in preparation of the upcoming dam replacement project. The dam will be rebuilt to current dam safety standards and the reservoir will not be filled again until after the construction of the new dam. However, there are sporadic times throughout the year when ponded water exists within the reservoir due to precipitation and runoff. The ponded water tends to dry out quickly. The exposed upstream riprap with a grass cover slope face had no unusual conditions. No other unusual items were observed. The gravel/dirt crest surface was walked for its entire length and no signs of movement/settlement, cracking, or instability were seen. The downstream embankment slope looked well maintained. No rodent activity was seen during this inspection. During the inspection, GEI discovered that most of the rodent control feeder boxes on the dam were removed. According to IRWD, the rodent control feeder boxes were removed because the poison pellets (Wilco) that were historically used were recently banned in California. Currently, IRWD is utilizing carbon monoxide as an effective treatment for ground squirrel control. IRWD still has black feeder control stations for rats and mice near the dam caretaker houses and other IRWD facilities. No signs of seepage or unusual wet spots were seen on the downstream slope face or toe area of the dam. Besides the reservoir level increasing from the recent rain, the condition of the dam remains largely unchanged from the conditions observed during the July 2023 inspection. Overall, the dam was well maintained with no signs of instability, or distress.

3.1.2 Spillway

The spillway is ungated and consists of a trapezoidal shaped open channel on the left abutment. The spillway was clear of any obstructions. The channel sides and bottom are covered with shotcrete/gunite and concrete. The gunite and concrete are deteriorating in some areas and has significant cracking, see Photos 7 and 8. The District is moving forward with design work for the construction of a new spillway. Therefore, repairing the existing spillway has not been initiated

considering a major replacement would occur in a few years and the watershed drainage area is relatively small.

3.1.3 Outlet Works

The outlet works includes an upstream 12-inch control valve manually operated (hand wheel) from near the top of the dam. The outlet works are located at the right end of the dam, see Photo 9. The upstream outlet valve is at Elevation 336 ft. The upstream valve was not exercised during this inspection. The downstream 16-inch control outlet valves are just beyond the right downstream toe area of the dam. Any emergency evacuation flows from this outlet system would go into local storm drain system below the dam.

3.1.4 Seepage

No seepage or wet spots were observed on the dam. Monitored seepage flow continues to be measured monthly by District staff. The seepage toe drain vault was examined and found dry, see Photo 10.

4.0 Conclusions and Recommendations

4.1 Conclusions

- 1) The dam is being rebuilt and enlarged to increase water storage. The reservoir water has been drained but a small amount of ponded water exists from rain and runoff in early 2024.
- 2) Based on the review of available instrumentation data and the field inspection observations, the dam did not have signs of structural deficiencies or signs of seepage.
- 3) Most of the piezometers were dry or showing piezometer water levels trending downward due to the recent draining of the reservoir.
- 4) Seepage flow has not been observed since June 2022 because the reservoir has been drained.
- 5) No rodent activity was observed on the downstream face of the dam during this inspection. IRWD is continuing with rodent control measures. IRWD is currently utilizing carbon monoxide as an effective treatment for ground squirrel control. IRWD still has black feeder control stations for rats and mice near the dam caretaker houses and other IRWD facilities.
- 6) The spillway gunite lining cracks and spall areas appeared to be unchanged from the last inspection. Needed spillway repairs are not planned due to major dam modifications and spillway replacement which are currently underway and scheduled to start at the end of 2025.
- 7) Based on District records, the outlet valves were not exercised during the 2024 review period.

4.2 Recommendations

- 1) The District should continue collaborating with pest management companies to determine most effective treatment options in controlling rodent activity. In addition, the District should continue collapsing, backfilling, and compacting rodent holes with surrounding material as an ongoing maintenance item throughout the dam.
- 2) Operational staff to observe the condition of the dam and appurtenant structures and look for signs of distress or movement, increased seepage, or other unusual conditions during their regular inspections. Any unusual observations should be reported immediately to Dam Safety Engineer for evaluation.
- 3) GEI recommends continuing following IRWD's Dam Safety Program Guidelines after a 4.0 earthquake.

Syphon Canyon Dam Action Item Summary

Item	Location	Maintenance	Measures
Rodent control feeder boxes	Throughout dam	Lack of poison in rodent control feeder boxes	The District should continue collaborating with pest management companies to determine most effective treatment options in controlling rodent activity. In addition, the District should continue collapsing, backfilling, and compacting rodent holes with surrounding material as an ongoing maintenance item throughout the dam.

5.0 Limitations

This report presents observations made, conclusions drawn, and opinions formed from (1) a visual inspection of the Syphon Canyon Dam and its appurtenant structures, and (2) a review of instrumentation data, including piezometer levels and seepage, collected by the District. The purpose of the inspection and review is to assess the safety of the structure for continuing operation. Reuse of this report for any other purposes, in part or in whole, is at the sole risk of the user.

In the context intended above, the term "safety" is interpreted to be restricted specifically to major structural and control features of the project in regard to their adequacy against possible catastrophic failure due to natural or operational events. No consideration is given herein to those public safety aspects related to voluntary occupancy or use of project features in such manner as to result in personal mishaps.

The undersigned who performed the inspection and reviewed the instrumentation data and prepared this report, desire that it be clearly understood that the conclusions regarding the condition and safety of the dam and related facilities are not guaranteed but do represent our best judgment. Inevitably, such judgment must be recognized to be affected to an uncertain degree by the practical limitations that affect all dam evaluations, relative principally to approximate knowledge of the existing properties of the structures and their foundations, the potential for storm or seismic damage, and the uncertainties that are known to exist in estimating margins of safety.

The conclusions and professional opinions presented herein were developed by GEI Consultants, Inc. for the Irvine Ranch Water District in accordance with generally accepted engineering principles and practices. We make no other warranty, either expressed or implied.

6.0 References

DSOD (California Department of Water Resources, Division of Safety of Dams), Syphon Canyon Dam (No. 1029-004) Inspection of Dam and Reservoir in Certified Status report, October 20, 2020.

Genterra, 2018, Annual Surveillance Report January 2017 through December 2017 Syphon Canyon Dam DSOD Dam No. 1029-004, Irvine, CA, by Genterra Consultants Inc., December 19, 2018.

IRWD, 2023, Dam Safety Program Guidelines & Governance, July 2023.

Tables

TABLE 2
SYPHON CANYON DAM
PIEZOMETER DETAILS

Piezometer ID	Location and Approximate Station	Original			Modified Unknown Date			2015 - Current			Material at Tip (if known)	Installation or First Reading
		Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)	Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)	Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)		
P-1A	Dam Crest, Station 6+90	385.1	365.7	19.4	385.1	365.7	19.4	385.1	365.7	19.4	Dam Embankment	Before 2003
P-1B	Dam Crest, Station 6+90	385.1	345.7	39.4	385.1	345.7	39.4	385.1	345.7	39.4	Dam Foundation	Before 2003
VBW/2-A	Dam Crest, Station 4+90	385.9	342.2	43.7	385.9	342.2	43.7	385.9	342.2	43.7	Dam Embankment	Before 2003
VBW/2-B	Dam Crest, Station 4+90	385.0	309.4	75.6	385.0	309.4	75.6	385.0	304.0	81.0	Dam Foundation	Before 2003
P-3A	Dam Crest, Station 3+00	385.6	362.3	23.3	385.6	362.3	23.3	385.6	362.3	23.3	Dam Embankment	Before 2003
P-3B	Dam Crest, Station 3+00	385.6	340.3	45.3	385.6	340.3	45.3	385.6	340.3	45.3	Dam Foundation	Before 2003
VBW/4	Downstream Slope, Station 5+00	340.0	314.7	25.3	340.0	314.7	25.3	342.8	314.7	28.1	Dam Embankment	Before 2003
VBW/5	Downstream Slope, Station 4+60	330.7	314.0	16.7	330.7	314.0	16.7	333.7	314.0	19.7	Dam Foundation	Before 2003
VBW/6	Downstream Slope, Station 4+90	370.2	360.6	9.6	370.2	360.6	9.6	371.4	360.6	10.8	Dam Embankment	1/19/2011
VBW/7	Downstream Slope, Station 4+90	349.7	338.1	11.6	349.7	338.1	11.6	351.3	338.1	13.2	Dam Foundation	1/19/2011
VBW/8	Downstream Slope, Station 4+90	343.4	336.8	6.6	345.3	336.8	8.5	346.4	336.8	9.6	Dam Embankment	1/19/2011
VBW/9	Downstream Slope, Station 6+70	342.9	335.4	7.5	344.9	335.4	9.5	346.4	335.4	11.0	Dam Foundation	1/19/2011

1. Piezometer data based on NGVD 29 datum.

TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008								
2/1/2008								
3/25/2008	365.10		19.40	365.7	Dry	32.40	352.7	
4/25/2008	366.40		19.40	365.7	Dry	32.40	352.7	
5/28/2008	365.30		19.40	365.7	Dry	32.40	352.7	
6/25/2008	365.00		19.40	365.7	Dry	32.40	352.7	
7/18/2008	364.50		19.40	365.7	Dry	32.40	352.7	
8/25/2008	363.50		19.40	365.7	Dry	32.80	352.3	
9/25/2008	363.00		19.40	365.7	Dry	32.80	352.3	
10/21/2008	362.00		19.40	365.7	Dry	33.40	351.7	
11/25/2008	365.00		19.40	365.7	Dry	33.90	351.2	
12/23/2008	365.00		19.40	365.7	Dry	33.90	351.2	
1/26/2009	364.50		19.40	365.7		33.40	351.7	
2/24/2009	364.50		19.40	365.7		33.40	351.7	
3/23/2009	368.50		19.40	365.7		30.80	354.3	
4/27/2009	367.50		19.40	365.7		30.80	354.3	
5/22/2009	367.00		19.40	365.7		31.40	353.7	
6/29/2009	372.00		19.40	365.7		26.80	358.3	
7/31/2009	371.00		19.40	365.7		28.80	356.3	
8/26/2009	370.00		19.40	365.7		29.40	355.7	
9/29/2009	369.50		19.40	365.7		29.80	355.3	
10/30/2009	369.00		19.40	365.7		29.40	355.7	
11/30/2009	368.00		19.40	365.7		29.40	355.7	
12/30/2009	368.00		19.40	365.7		29.40	355.7	
3/1/2010	368.00		19.90	365.2	Dry	28.20	356.9	
3/30/2010	368.00		19.90	365.2	Dry	28.50	356.6	
4/4/2010	368.70		19.80	365.3	Dry	28.50	356.6	
4/27/2010	368.40		19.70	365.4		28.80	356.6	
5/26/2010	367.84		19.90	365.2	Dry	29.10	356.3	
6/29/2010	367.00		19.60	365.5	Dry	29.50	355.6	
7/27/2010	367.00		19.80	365.3	Dry	29.90	355.2	
8/27/2010	366.80		19.60	365.3	Dry	30.30	354.8	
9/28/2010	366.80		19.70	365.5	Dry	30.70	354.4	

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
10/26/2010	368.50		19.70	365.4	Dry	31.00	354.1	
11/30/2010	371.40		19.60	365.4		29.50	355.6	
12/28/2010	374.70		19.70	365.5	Dry	27.20	357.9	
1/4/2011	374.80		19.70	365.4	Dry	27.00	358.1	
1/6/2011	374.80		19.50	365.4	Dry	27.00	358.1	
1/7/2011	374.80		19.70	365.6	Dry	26.90	358.2	
1/8/2011	374.80		19.70	365.4	Dry	27.20	357.9	
1/9/2011	374.80		19.70	365.4	Dry	27.20	358.1	
1/10/2011	374.80		19.50	365.6	Dry	27.00	358.1	
1/11/2011	374.80		19.70	365.4	Dry	27.10	358.0	
1/17/2011	374.80		19.60	365.5	Dry	27.10	357.9	
1/19/2011	374.70		19.70	365.4	Dry	27.20	357.9	
1/21/2011	374.80		19.50	365.6	Dry	27.20	357.9	
1/27/2011	374.60		19.70	365.4	Dry	27.20	357.6	
2/3/2011	374.60		19.50	365.6	Dry	27.50	357.6	
2/8/2011	374.70		19.50	365.6	Dry	27.50	357.6	
2/28/2011	374.70		19.70	365.4	Dry	28.00	357.1	
3/28/2011	372.50	2.35	19.60	365.5		28.90	356.2	
4/28/2011	372.10	0.27	19.80	365.3	Dry	28.80	356.3	
5/18/2011	371.80	0.03	19.70	365.4	Dry	29.40	355.7	
5/25/2011	371.70	0.30	19.70	365.4	Dry	29.40	355.7	
6/28/2011	370.90	0.03	19.70	365.4	Dry	29.70	355.4	
7/26/2011	370.30	0.03	19.70	365.4	Dry	30.20	354.9	
8/24/2011	369.60	0.03	19.60	365.5	Dry	30.60	354.5	
8/30/2011	369.40		19.90	365.2		30.90	354.2	
9/13/2011	364.30	0.00	19.80	365.3	Dry	33.60	351.5	
9/27/2011	361.90		19.70	365.4	Dry	36.50	348.6	
10/11/2011	358.50	1.03	19.60	365.5	Dry	39.60	345.5	
10/25/2011	356.00	1.03	19.70	365.4	Dry	39.60	345.5	
11/29/2011	355.00	1.51	19.70	365.4	Dry	39.60	345.5	
12/28/2011	355.00	0.28	19.80	365.3	Dry	39.70	345.5	
1/26/2012	355.00	1.05	19.70	365.4	Dry	39.50	345.6	
2/28/2012	355.00	0.73	19.70	365.4	Dry	39.50	345.6	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2012	352.40	0.73	19.90	365.2		39.80	345.3	
4/23/2012	352.10	1.35	19.70	365.4		39.60	345.5	
5/30/2012	352.20	0.07	19.70	365.4		39.70	345.4	
6/13/2012	352.20		19.60	365.4		39.60	345.5	
6/26/2012	352.20	0.00	19.70	365.4		39.50	345.6	
7/24/2012	352.20	0.23	19.60	365.5		39.60	345.5	
8/8/2012	352.20	0.23	19.80	365.3		39.80	345.3	
8/28/2012	351.80	0.00	19.60	365.5		39.50	345.6	
8/29/2012	351.80	0.00	19.80	365.3		39.70	345.4	
9/25/2012	351.30	0.00	19.60	365.5		39.50	345.6	
10/31/2012	351.00	0.09	19.60	365.5		39.50	345.6	
11/27/2012	351.00	0.87	19.60	365.5		39.50	345.6	
12/12/2012	351.00	1.13	19.70	365.4		39.60	345.5	
1/29/2013	366.10	1.30	19.80	365.3		39.90	345.2	
2/21/2013	372.10	0.42	19.80	365.3		35.80	349.3	
3/28/2013	371.90	0.79	19.70	365.4		32.90	352.2	
4/25/2013	371.40	0.00	19.60	365.5		33.00	352.1	
5/22/2013	370.90	0.00	19.80	365.3		32.90	352.2	
6/25/2013	370.20	0.00	19.70	365.4		33.20	351.9	
7/23/2013	369.40	0.00	19.70	365.4	Dry	33.60	351.5	
8/21/2013	368.60	0.00	19.70	365.4	Dry	34.10	351.0	
9/25/2013	367.70	0.00	19.70	365.4	Dry	34.60	350.5	
10/30/2013	366.90	0.00	19.70	365.4	Dry	35.30	349.8	
11/26/2013	366.50	0.59	19.70	365.4	Dry	35.60	349.5	
12/17/2013	366.20	0.70	19.70	365.4	Dry	35.80	349.3	
1/28/2014	365.50	0.00	19.70	365.4	Dry	36.10	349.0	
2/25/2014	365.40	0.76	19.80	365.3	Dry	36.60	348.6	
3/25/2014	365.30		19.80	365.3	Dry	36.40	348.7	
3/28/2014	365.30	2.02	19.70	365.4		36.50	348.6	
4/25/2014	364.50	0.52	19.70	365.4		36.60	348.5	
5/28/2014	363.80	0.00	19.80	365.3	Dry	37.10	348.0	
6/25/2014	363.00	0.00	19.70	365.2	Dry	37.70	351.5	
7/30/2014	361.90	0.00	19.70	365.2	Dry	38.00	348.6	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
8/27/2014	361.10	0.04	19.70	365.4	Dry	38.60	346.5	
9/23/2014	360.50	0.00	19.50	365.6	Dry	39.10	346.0	
10/29/2014	359.50	0.00	19.80	365.3	Dry	39.70	345.4	
11/24/2014	359.40	0.32	19.70	365.4	Dry	39.60	345.5	
12/30/2014	359.40	3.98	19.70	365.4	Dry	39.70	345.4	
1/27/2015	359.00	1.42	19.70	365.4	Dry	39.80	345.3	
2/26/2015	358.60	0.46	19.70	365.4	Dry	39.60	345.5	
3/27/2015	358.00	0.63	19.70	365.4	Dry	39.50	345.6	
4/26/2015	331.00	0.22	19.80	365.3	Dry	39.60	345.5	Dry
5/27/2015	332.00	1.79	19.80	365.3	Dry	39.60	345.5	Dry
6/23/2015	331.00	0.00	19.70	365.4	Dry	39.80	345.3	Dry
7/30/2015	331.00	0.00	19.70	365.4	Dry	39.60	345.5	Dry
8/25/2015	331.00	0.00	19.60	365.5	Dry	39.60	345.5	Dry
9/30/2015	331.00	1.97	19.10	366.0	Dry	39.80	345.3	Dry
10/29/2015	331.00	0.18	19.70	365.4	Dry	39.70	345.4	Dry
11/25/2015	331.00	0.17	19.70	365.4	Dry	39.70	345.4	Dry
12/30/2015	331.00	1.42	19.70	365.4	Dry	39.70	345.4	Dry
1/26/2016	343.70	2.97	19.60	365.5	Dry	39.60	345.5	Dry
2/24/2016	363.80	0.26	20.60	364.5	Dry	39.60	345.5	Dry
3/29/2016	374.90	1.50	19.60	365.5	Dry	38.40	346.7	
4/28/2016	375.50	0.09	19.70	365.4	Dry	32.40	352.7	
5/24/2016	374.40	0.13	19.50	365.6	Dry	30.80	354.3	
6/29/2016	373.70	0.00	19.50	365.6	Dry	30.80	354.3	
7/28/2016	372.20	0.00	19.70	365.4	Dry	30.70	354.4	
8/25/2016	367.10	0.00	19.70	365.4	Dry	32.20	352.9	
9/27/2016	363.30	0.00	19.60	365.5		34.60	350.5	
10/25/2016	362.10	0.82	19.60	365.5	Dry	35.90	349.2	
11/22/2016	361.80	1.69	19.70	365.4	Dry	36.90	348.2	
12/28/2016	368.55	3.61	19.70	365.4	Dry	36.90	348.2	
1/25/2017	375.80	6.48	19.80	365.3	Dry	32.50	352.6	
2/28/2017	375.90	3.95	19.60	365.5	Dry	28.20	356.9	
3/15/2017	375.80	3.61	19.80	365.3	Dry	28.40	356.7	
3/28/2017	375.50	0.09	19.70	365.4		27.90	357.2	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/26/2017	375.00	0.04	19.80	365.3	Dry	27.60	357.5	
5/23/2017	374.60	0.00	19.70	365.4	Dry	28.00	357.1	
6/22/2017	373.80	0.00	19.70	365.4	Dry	28.20	356.9	
7/26/2017	371.40	0.00	19.70	365.4	Dry	29.70	355.4	
8/30/2017	368.60	0.00	19.70	365.4	Dry	31.10	354.0	
9/28/2017	364.80	0.00	19.60	365.5	Dry	33.20	351.9	
10/26/2017	359.00	0.00	19.70	365.4	Dry	34.40	350.7	
11/29/2017	357.80	0.15	19.50	365.6	Dry	39.50	345.6	
12/27/2017	357.30	0.00	19.70	365.4	Dry	39.00	346.1	
1/24/2018	357.30	1.84	19.70	365.40	Dry	39.30	345.80	
2/21/2018	361.00	0.18	19.40	365.70	Dry	38.00	347.10	
3/28/2018	366.90	2.19	19.60	365.50	Dry	33.90	351.20	
4/25/2018	367.00	0.05	19.60	365.50	Dry	33.30	351.80	
5/30/2018	366.40	0.36	19.40	365.70	Dry	33.10	352.00	
6/28/2018	365.60	0.00	19.40	365.70	Dry	33.10	352.00	
7/25/2018	363.20	0.00	19.60	365.50	Dry	34.50	350.60	
8/28/2018	357.30	0.00	19.60	365.50	Dry	38.00	347.10	
9/27/2018	354.60	0.00	19.50	365.60	Dry	39.60	345.50	
10/24/2018	351.90	1.49	19.80	365.30	Dry	39.60	345.50	
11/28/2018	348.60	0.56	19.60	365.50	Dry	39.60	345.50	
12/21/2018	348.80	2.04	19.70	365.40	Dry	39.80	345.30	
1/30/2019	348.90	4.41	19.60	365.50	Dry	39.60	345.50	
2/27/2019	351.70	8.05	19.50	365.60	Dry	39.50	345.60	Dry
3/28/2019	351.60	2.00	19.70	365.40	Dry	39.40	345.70	Dry
4/25/2019	348.70	0.10	19.7	365.40		39.7	345.40	
5/30/2019	348.30	0.99	19.6	365.50		39.6	345.50	
6/26/2019	344.50	0.11	19.7	365.40		39.6	345.50	
7/5/2019	343.30	0.00	19.5	365.60		39.5	345.60	
7/30/2019	341.00	0.00	19.6	365.50		39.6	345.50	
8/27/2019	341.00	0.00	19.8	365.30		39.8	345.30	
9/26/2019	341.00	0.00	19.4	365.70		39.8	345.30	
10/24/2019	341.00	0.00	19.6	365.50		39.5	345.60	
11/26/2019	341.00	2.60	19.6	365.50		39.6	345.50	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/16/2019	341.00	4.93	19.7	365.40	Dry	39.7	345.40	Dry
1/28/2020	341.00	0.21	19.6	365.50	Dry	39.6	345.50	Dry
2/26/2020	360.60	0.39	19.6	365.50	Dry	39.5	345.60	Dry
3/24/2020	370.30	3.75	19.6	365.50	Dry	39.7	345.40	Dry
4/23/2020	375.30	4.63	19.8	365.30		33.1	352.00	
5/28/2020	374.80	0.04	19.6	365.50		30.8	354.30	
6/23/2020	373.60	0.00	19.6	365.50		30.5	354.60	
7/29/2020	370.70	0.00	19.7	365.40		31.4	353.70	
8/27/2020	367.80	0.00	19.6	365.50		32.8	352.30	
9/29/2020	364.90	0.00	19.6	365.50		34.6	350.50	
10/29/2020	354.80	0.00	19.7	365.40		37.9	347.20	
11/24/2020	343.00	0.32	19.5	365.60		39.8	345.30	
12/29/2020	343.50	1.14	19.5	365.60		39.6	345.50	
1/27/2021	355.70	2.45	19.70	365.40		39.60	345.50	
2/25/2021	365.90	0.03	19.80	365.30		39.40	345.70	
3/23/2021	370.80	1.27	19.70	365.40		34.40	350.70	
4/28/2021	371.70	0.03	19.60	365.50		31.80	353.30	
5/26/2021	370.00	0.05	19.60	365.50		32.00	353.10	
6/30/2021	366.30	0.00	19.60	365.50		33.50	351.60	
7/27/2021	361.50	0.03	19.40	365.70		35.90	349.20	
8/25/2021	356.30	0.00	19.60	365.50		28.80	356.30	Omitted
9/28/2021	350.60	0.03	19.40	365.70		39.40	345.70	
10/27/2021	343.50	0.79	19.40	365.70		39.40	345.70	
11/25/2021	343.40	0.00	19.40	365.70		39.40	345.70	Dry
12/21/2021	348.90	6.14	19.70	365.40		39.60	345.50	Dry
1/25/2022	372.70	0.01	19.40	365.70	Dry	35.70	349.40	
2/23/2022	374.60	0.32	19.70	365.40	Dry	29.80	355.30	
3/29/2022	370.90	1.21	19.60	365.50	Dry	30.30	354.80	
4/26/2022	367.80	0.04	19.60	365.50	Dry	32.10	353.00	
5/25/2022	360.70	0.03	19.60	365.50	Dry	35.40	349.70	
6/29/2022	343.70	0.00	19.70	365.40	Dry	39.60	345.50	Dry
7/26/2022	343.10	0.00	19.40	365.70	Dry	39.40	345.70	Dry
8/30/2022	342.00	0.03	19.70	365.40	Dry	39.70	345.40	Dry

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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-1A			P-1B		
Top of Well Elevation -->			385.10			385.10		
Bottom of Well Elevation -->			365.70			345.70		
Depth of Well			19.40			39.40		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
9/29/2022	342.00	0.32	19.70	365.40	Dry	39.60	345.50	Dry
10/26/2022	342.00	0.32	19.60	365.50	Dry	39.60	345.50	Dry
11/23/2022	342.00	2.04	19.70	365.40	Dry	39.60	345.50	Dry
12/28/2022	341.60	2.11	19.70	365.40	Dry	39.50	345.60	Dry
1/26/2023	342.70	7.19	19.70	365.40	Dry	39.60	345.50	Dry
2/28/2023	343.50	3.28	19.70	365.40	Dry	39.60	345.50	Dry
3/29/2023	346.30	6.30	19.40	365.70	Dry	39.50	345.60	Dry
4/25/2023	346.30	0.14	19.60	365.50	Dry	39.60	345.50	Dry
5/24/2023	346.00	1.15	19.40	365.70	Dry	39.40	345.70	Dry
6/28/2023	345.80	0.11	19.68	365.42	Dry	39.62	345.48	Dry
7/27/2023	343.90	0.00	19.60	365.50	Dry	39.50	345.60	Dry
8/29/2023	343.00	2.25	19.50	365.60	Dry	39.50	345.60	Dry
9/27/2023	342.70	0.00	19.50	365.60	Dry	39.50	345.60	Dry
10/26/2023	342.00	0.18	19.70	365.40	Dry	39.60	345.50	Dry
11/29/2023	346.30	0.70	19.70	365.40	Dry	35.50	349.60	
12/21/2023	341.40	1.08	19.80	365.30	Dry	39.74	345.36	Dry
1/30/2024	341.50	2.03	19.60	365.50		39.60	345.50	
2/22/2024	344.00	9.11	19.70	365.40		39.50	345.60	
3/26/2024	343.00	3.07	19.80	365.30		39.74	345.36	
4/25/2024	343.00	1.62	19.80	365.30		39.75	345.35	
5/1/2024	343.30	0	19.70	365.40		39.70	345.40	
5/23/2024	343.00	0.2	19.70	365.40		39.80	345.30	
6/27/2024	342.00	0	19.80	365.30		39.70	345.40	
7/25/2024	343.00	0	19.70	365.40		39.80	345.30	
8/28/2024	343.00	0	19.70	365.40		39.70	345.40	
9/25/2024	343.00	0	19.70	365.40		39.60	345.50	
10/29/2024	343.00	0	19.50	365.60		39.50	345.60	
11/26/2024	343.00	0.11	19.70	365.40		39.60	345.50	
12/18/2024	343.00	0.01	19.70	365.40		39.60	345.50	

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008								
2/1/2008								
3/25/2008	365.10		27.70	358.2		45.60	339.4	
4/25/2008	366.40		27.70	358.2		45.60	339.4	
5/28/2008	365.30		27.70	358.2		46.60	338.4	
6/25/2008	365.00		28.20	357.7		46.60	338.4	
7/18/2008	364.50		28.80	357.1		46.60	338.4	
8/25/2008	363.50		28.80	357.1		46.60	338.4	
9/25/2008	363.00		28.80	357.1		46.60	338.4	
10/21/2008	362.00		28.20	357.7		47.00	338.0	
11/25/2008	365.00		28.20	357.7		46.10	338.9	
12/23/2008	365.00		28.20	357.7		46.10	338.9	
1/26/2009	364.50		28.70	357.2		46.60	338.4	
2/24/2009	364.50		28.70	357.2		46.60	338.4	
3/23/2009	368.50		28.70	357.2		44.60	340.4	
4/27/2009	367.50		28.70	357.2		45.00	340.0	
5/22/2009	367.00		28.70	357.2		45.00	340.0	
6/29/2009	372.00		27.70	358.2		43.00	342.0	
7/31/2009	371.00		28.70	357.2		45.00	340.0	
8/26/2009	370.00		28.70	357.2		45.60	339.4	
9/29/2009	369.50		28.70	357.2		46.00	339.0	
10/30/2009	369.00		27.70	358.2		45.00	340.0	
11/30/2009	368.00		27.10	358.8		45.00	340.0	
12/30/2009	368.00		27.10	358.8		45.00	340.0	
3/1/2010	368.00		26.30	359.6		44.00	341.0	
3/30/2010	368.00		26.20	359.7		44.20	340.8	
4/4/2010	368.70		26.10	359.8		44.30	340.7	
4/27/2010	368.40		26.00	359.9		44.20	340.8	
5/26/2010	367.84		26.10	359.8		44.60	340.4	
6/29/2010	367.00		26.20	359.7		44.80	340.2	
7/27/2010	367.00		26.40	359.5		45.10	339.9	
8/27/2010	366.80		26.60	359.3		45.40	339.6	
9/28/2010	366.80		26.60	359.3		45.60	339.4	

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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
10/26/2010	368.50		27.00	358.9		45.80	339.2	
11/30/2010	371.40		27.20	358.7		44.70	340.3	
12/28/2010	374.70		27.20	358.7		43.10	341.9	
1/4/2011	374.80		27.40	358.5		43.10	341.9	
1/6/2011	374.80		27.10	358.8		43.10	342.0	
1/7/2011	374.80		27.10	358.8		43.00	342.0	
1/8/2011	374.80		27.30	358.6		43.40	341.6	
1/9/2011	374.80		27.30	358.6		43.50	341.5	
1/10/2011	374.80		27.10	358.8		43.30	341.7	
1/11/2011	374.80		27.10	358.8		43.20	341.8	
1/17/2011	374.80		27.00	358.9		43.30	341.7	
1/19/2011	374.70		27.00	358.9		43.40	341.6	
1/21/2011	374.80		26.90	359.0		43.30	341.7	
1/27/2011	374.60		26.80	359.1		43.40	341.6	
2/3/2011	374.60		26.70	359.2		43.60	341.4	
2/8/2011	374.70		26.70	359.2		43.60	341.4	
2/28/2011	374.70		26.20	359.7		43.80	341.2	
3/28/2011	372.50	2.35	26.20	359.7		44.20	340.8	
4/28/2011	372.10	0.27	24.20	361.7		44.60	340.4	
5/18/2011	371.80	0.03	26.40	359.5		44.40	340.6	
5/25/2011	371.70	0.30	26.40	359.5		44.30	340.7	
6/28/2011	370.90	0.03	26.50	359.4		44.50	340.5	
7/26/2011	370.30	0.03						
8/24/2011	369.60	0.03	26.80	359.1		44.80	340.2	
8/30/2011	369.40		27.10	358.8		45.00	340.0	
9/13/2011	364.30	0.00	27.20	358.7		47.10	337.9	
9/27/2011	361.90		27.20	358.7		49.60	335.4	
10/11/2011	358.50	1.03	27.30	358.6		51.90	333.1	
10/25/2011	356.00	1.03	27.70	358.2		53.20	331.8	
11/29/2011	355.00	1.51	26.30	359.6		54.20	330.8	
12/28/2011	355.00	0.28	28.80	357.1		54.80	330.3	
1/26/2012	355.00	1.05	29.00	356.9		54.90	330.1	
2/28/2012	355.00	0.73	29.30	356.6		55.20	329.8	

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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2012	352.40	0.73	29.80	356.1		55.30	329.7	
4/23/2012	352.10	1.35	29.80	356.1		55.20	329.8	
5/30/2012	352.20	0.07	30.00	355.9		55.60	329.4	
6/13/2012	352.20		30.20	355.7		55.40	329.3	
6/26/2012	352.20	0.00	30.30	355.6		56.00	329.0	
7/24/2012	352.20	0.23	30.50	355.4		53.40	331.6	
8/8/2012	352.20	0.23	30.50	355.4		53.60	331.4	
8/28/2012	351.80	0.00	30.60	355.3		54.50	330.5	
8/29/2012	351.80	0.00	30.80	355.1		54.80	330.2	
9/25/2012	351.30	0.00	30.90	355.0		55.10	329.9	
10/31/2012	351.00	0.09	30.90	355.0		55.90	329.1	
11/27/2012	351.00	0.87	31.20	354.7		56.30	328.7	
12/12/2012	351.00	1.13	31.20	354.7		56.30	328.7	
1/29/2013	366.10	1.30	31.20	354.7		46.30	338.7	
2/21/2013	372.10	0.42	32.70	353.2		43.90	341.1	
3/28/2013	371.90	0.79	31.50	354.4		42.20	342.8	
4/25/2013	371.40	0.00	31.40	354.5		42.20	342.8	
5/22/2013	370.90	0.00	31.40	354.5		42.70	342.3	
6/25/2013	370.20	0.00	30.70	355.2		42.80	342.2	
7/23/2013	369.40	0.00	30.50	355.4		43.20	341.8	
8/21/2013	368.60	0.00	30.40	355.5		43.80	341.3	
9/25/2013	367.70	0.00	30.20	355.7		44.10	340.9	
10/30/2013	366.90	0.00	30.30	355.6		44.80	340.2	
11/26/2013	366.50	0.59	30.30	355.6		45.10	339.9	
12/17/2013	366.20	0.70	30.40	355.5		45.50	339.5	
1/28/2014	365.50	0.00	30.60	355.3		45.90	339.1	
2/25/2014	365.40	0.76	30.80	355.1		46.20	338.9	
3/25/2014	365.30		30.80	355.1		45.90	339.1	
3/28/2014	365.30	2.02	30.70			45.90		
4/25/2014	364.50	0.52	30.80	355.1		46.10	338.9	
5/28/2014	363.80	0.00	30.90	355.0		46.50	338.5	
6/25/2014	363.00	0.00	31.20	358.7		47.00	337.9	
7/30/2014	361.90	0.00	31.10	358.7		47.20	335.4	

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JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
8/27/2014	361.10	0.04	31.30	354.6		47.90	337.1	
9/23/2014	360.50	0.00	31.30	354.6		48.30	336.7	
10/29/2014	359.50	0.00	31.80	354.1		49.00	336.0	
11/24/2014	359.40	0.32	31.60	354.3		49.40	335.6	
12/30/2014	359.40	3.98	31.80	354.1		49.90	335.1	
1/27/2015	359.00	1.42	32.10	353.8		49.80	335.2	
2/26/2015	358.60	0.46	31.80	354.1		50.10	334.9	
3/27/2015	358.00	0.63	32.30	353.6		51.30	333.8	
4/26/2015	331.00	0.22	32.10	353.8		56.50	328.5	
5/27/2015	332.00	1.79	32.20	353.7		56.30	328.7	
6/23/2015	331.00	0.00	32.30	353.6		60.40	324.6	
7/30/2015	331.00	0.00	31.10	354.8	In July maint. Cleaned	61.40	323.6	
8/25/2015	331.00	0.00	32.80	353.1	Dry	62.10	322.9	
9/30/2015	331.00	1.97	32.10	353.8		62.40	322.6	
10/29/2015	331.00	0.18	33.20	352.7		62.40	322.6	
11/25/2015	331.00	0.17	33.30	352.6		63.10	321.9	
12/30/2015	331.00	1.42	33.40	352.5	VW installed	63.60	321.4	VW installed
1/26/2016	343.70	2.97	32.30	353.6		46.10	338.9	
2/24/2016	363.80	0.26	32.50	353.5		31.40		Erroneous
3/29/2016	374.90	1.50	32.70	353.2		23.30		Erroneous
4/28/2016	375.50	0.09	32.60	353.3		23.90		Erroneous
5/24/2016	374.40	0.13	31.70	354.2		21.70		Erroneous
6/29/2016	373.70	0.00	30.60	355.3		21.60		Erroneous
7/28/2016	372.20	0.00	30.00	355.9		23.90		Erroneous
8/25/2016	367.10	0.00	29.50	356.4		26.10		Erroneous
9/27/2016	363.30	0.00	29.70	356.2		28.20		Erroneous
10/25/2016	362.10	0.82	29.50	356.4		28.50		Erroneous
11/22/2016	361.80	1.69			VW was not logging			VW was not logging
12/28/2016	368.55	3.61	30.00	355.9		25.00		Erroneous
1/25/2017	375.80	6.48	29.90	356.0		34.20	350.8	Measured w/sounder
2/28/2017	375.90	3.95	29.90	356.0		34.00	351.0	Measured w/sounder
3/15/2017	375.80	3.61	28.40	357.5		34.20	350.8	Measured w/sounder
3/28/2017	375.50	0.09	28.20	357.7		13.20		Erroneous

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Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/26/2017	375.00	0.04	27.60	358.3		34.00	351.0	Measured w/sounder
5/23/2017	374.60	0.00	27.20	358.7		8.30		Erroneous
6/22/2017	373.80	0.00	27.00	358.9		2.00		Erroneous
7/26/2017	371.40	0.00	26.90	359.0		4.10		Erroneous
8/30/2017	368.60	0.00	27.20	358.7		6.00		Erroneous
9/28/2017	364.80	0.00	27.20	358.7		8.10		Erroneous
10/26/2017	359.00	0.00	27.30	358.6		11.60		Erroneous
11/29/2017	357.80	0.15	28.20	357.7		12.90		Erroneous
12/27/2017	357.30	0.00	28.50	357.4		13.30		Erroneous
1/24/2018	357.30	1.84	28.90	357.00		13.50	371.50	
2/21/2018	361.00	0.18	29.20	356.70		11.60	373.40	
3/28/2018	366.90	2.19	29.48	356.42		9.20	375.80	
4/25/2018	367.00	0.05	29.60	356.30		4.00	381.00	
5/30/2018	366.40	0.36	29.70	356.20		1.00	384.00	
6/28/2018	365.60	0.00	29.50	356.40		1.40	383.60	
7/25/2018	363.20	0.00	29.40	356.50		2.70	382.30	
8/28/2018	357.30	0.00	29.44	356.46		5.90	379.10	
9/27/2018	354.60	0.00	29.30	356.60		7.40	377.60	
10/24/2018	351.90	1.49	29.80	356.10		10.40	374.60	
11/28/2018	348.60	0.56	30.10	355.80		11.40	373.60	
12/21/2018	348.80	2.04	29.90	356.00		11.10	373.90	
1/30/2019	348.90	4.41	30.50	355.40		11.60	373.40	
2/27/2019	351.70	8.05	30.40	355.50		9.56	375.44	
3/28/2019	351.60	2.00	30.60	355.30		10.20	374.80	
4/25/2019	348.70	0.10	30.70	355.20		11.70	373.30	
5/30/2019	348.30	0.99	31.00	354.90		12.00	373.00	
6/26/2019	344.50	0.11	31.00	354.90		14.00	371.00	
7/5/2019	343.30	0.00	31.00	354.90		15.20	369.80	
7/30/2019	341.00	0.00	31.20	354.70		17.00	368.00	
8/27/2019	341.00	0.00	31.40	354.50		19.50	365.50	
9/26/2019	341.00	0.00	31.40	354.50		21.10	363.90	
10/24/2019	341.00	0.00	31.40	354.50		21.80	363.20	
11/26/2019	341.00	2.60	31.50	354.40		22.40	362.60	

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Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/16/2019	341.00	4.93	40.71			64.50		
1/28/2020	341.00	0.21	30.40	355.50		11.52	373.48	
2/26/2020	360.60	0.39	31.43	354.47		6.88	378.12	
3/24/2020	370.30	3.75	32.10	353.80		21.80	363.20	
4/23/2020	375.30	4.63	31.20	354.70		75.60		
5/28/2020	374.80	0.04			No data received			No data received
6/23/2020	373.60	0.00			No data received			No data received
7/29/2020	370.70	0.00			No data received			No data received
8/27/2020	367.80	0.00			No data received			No data received
9/29/2020	364.90	0.00			No data received			No data received
10/29/2020	354.80	0.00			No data received			No data received
11/24/2020	343.00	0.32			No data received			No data received
12/29/2020	343.50	1.14	30.10	355.80		14.30	370.70	
1/27/2021	355.70	2.45	30.00	355.90		6.30		
2/25/2021	365.90	0.03	30.40	355.50		0.30		
3/23/2021	370.80	1.27	30.70	355.20		-3.50		
4/28/2021	371.70	0.03	30.10	355.80		-4.20		
5/26/2021	370.00	0.05	9.20			1.31		
6/30/2021	366.30	0.00	9.01			3.40		
7/27/2021	361.50	0.03	8.90			6.00		
8/25/2021	356.30	0.00	9.10			9.10		
9/28/2021	350.60	0.03	9.50			13.00		
10/27/2021	343.50	0.79	9.60			17.90		
11/25/2021	343.40	0.00	9.90			18.90		
12/21/2021	348.90	6.14	10.00			15.50		
1/25/2022	372.70	0.01	30.60	355.30		-3.80		
2/23/2022	374.60	0.32	30.20	355.70		-4.50		
3/29/2022	370.90	1.21	29.30	356.60		-13.80		
4/26/2022	367.80	0.04	28.70	357.20		12.30		
5/25/2022	360.70	0.03	29.00		No Response to drainage	-8.50		
6/29/2022	343.70	0.00	29.20			1.90		
7/26/2022	343.10	0.00	29.60			28.40		
8/30/2022	342.00	0.03	29.90			3.90		

Notes:

1. Readings in red are classified as erroneous

TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.90			385.00		
Bottom of Well Elevation -->			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
9/29/2022	342.00	0.32	30.20			5.20		
10/26/2022	342.00	0.32	30.20			7.30		
11/23/2022	342.00	2.04	30.40			8.00		
12/28/2022	341.60	2.11	30.40			7.80		
1/26/2023	342.70	7.19	30.60			4.80		
2/28/2023	343.50	3.28	31.10			4.30		
3/29/2023	346.30	6.30	31.30			1.10		
4/25/2023	346.30	0.14	3.50		Omitted	1.70		
5/24/2023	346.00	1.15	31.40			2.00		
6/28/2023	345.80	0.11	31.40			2.50		
7/27/2023	343.90	0.00	31.50			3.00		
8/29/2023	343.00	2.25	31.75			3.89		
9/27/2023	342.70	0.00	31.70			4.20		
10/26/2023	342.00	0.18	31.70			4.50		
11/29/2023	346.30	0.70	31.80			5.10		
12/21/2023	341.40	1.08	31.70			5.30		
1/30/2024	341.50	2.03	31.94	353.96		5.45	379.55	
2/22/2024	344.00	9.11	31.87	354.03		2.47	382.53	
3/26/2024	343.00	3.07	31.82	354.08		3.31	381.69	
4/25/2024	343.00	1.62	32.00	353.90		3.40	381.60	
5/1/2024	343.30	0	42.84	343.06		27.96	357.04	
5/23/2024	343.00	0.2	42.73	343.17		27.90	357.10	
6/27/2024	342.00	0	42.78	343.12		28.05	356.95	
7/25/2024	343.00	0	42.84	343.06		27.96	357.04	
8/28/2024	343.00	0	42.83	343.07		28.15	356.85	
9/25/2024	343.00	0	43.00	342.90		28.22	356.78	
10/29/2024	343.00	0	42.79	343.11		27.96	357.04	
11/26/2024	343.00	0.11	42.79	343.11		27.92	357.08	
12/18/2024	343.00	0.01	42.84	343.06		28.04	356.96	

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008								
2/1/2008								
3/25/2008	365.10		22.70	362.9		38.70	346.9	
4/25/2008	366.40		22.70	362.9		38.70	346.9	
5/28/2008	365.30		23.30	362.3		39.30	346.3	
6/25/2008	365.00		23.30	362.3		39.80	345.8	
7/18/2008	364.50		23.30	362.3		39.80	345.8	
8/25/2008	363.50		23.30	362.3		40.30	345.3	
9/25/2008	363.00		23.30	362.3		40.30	345.3	
10/21/2008	362.00		23.30	362.3		40.30	345.3	
11/25/2008	365.00		23.30	362.3		39.80	345.8	
12/23/2008	365.00		23.30	362.3		39.80	345.8	
1/26/2009	364.50		23.30	362.3		40.30	345.3	
2/24/2009	364.50		23.30	362.3		40.30	345.3	
3/23/2009	368.50		23.30	362.3		38.70	345.9	
4/27/2009	367.50		23.30	362.3		39.30	346.3	
5/22/2009	367.00		23.30	362.3		39.30	346.3	
6/29/2009	372.00		23.30	362.3		36.70	348.9	
7/31/2009	371.00		23.30	362.3		38.30	347.3	
8/26/2009	370.00		23.30	362.3		38.30	347.3	
9/29/2009	369.50		23.30	362.3		39.30	346.3	
10/30/2009	369.00		23.30	362.3		38.30	347.3	
11/30/2009	368.00		23.30	362.3		38.30	347.3	
12/30/2009	368.00		23.30	362.3		38.30	348.2	
3/1/2010	368.00		23.00	362.6		37.40	347.9	
3/30/2010	368.00		23.10	362.5		37.70	347.9	
4/4/2010	368.70		22.80	362.7		37.70	347.9	
4/27/2010	368.40		22.80	362.8		37.80	347.8	
5/26/2010	367.84		22.90	362.7		37.90	347.7	
6/29/2010	367.00		23.00	362.6		38.10	347.5	
7/27/2010	367.00		23.60	362.0		38.30	347.3	
8/27/2010	366.80		23.40	362.2		38.10	347.5	
9/28/2010	366.80		23.00	362.6		38.60	347.0	

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
10/26/2010	368.50		23.10	362.5		38.70	346.9	
11/30/2010	371.40		23.00	362.6		37.80	347.8	
12/28/2010	374.70		23.20	362.4		36.60	349.0	
1/4/2011	374.80		23.40	362.2		36.50	349.1	
1/6/2011	374.80		23.40	362.2		36.50	349.2	
1/7/2011	374.80		23.40	362.2		36.50	349.1	
1/8/2011	374.80		23.60	362.0		36.80	348.8	
1/9/2011	374.80		23.40	362.2		36.80	348.8	
1/10/2011	374.80		23.40	362.2		36.60	349.0	
1/11/2011	374.80		23.20	362.4		36.80	348.8	
1/17/2011	374.80		23.40	362.2		36.70	348.9	
1/19/2011	374.70		23.40	362.2		36.80	348.8	
1/21/2011	374.80		23.40	362.2		36.90	348.7	
1/27/2011	374.60		23.00	362.6		37.00	348.6	
2/3/2011	374.60		23.40	362.2		37.20	348.4	
2/8/2011	374.70		23.40	362.2		37.20	348.4	
2/28/2011	374.70		22.90	362.7		37.40	348.2	
3/28/2011	372.50	2.35	23.00	362.6		37.50	348.1	
4/28/2011	372.10	0.27	23.20	362.4		37.90	347.7	
5/18/2011	371.80	0.03	23.10	362.5		37.90	347.7	
5/25/2011	371.70	0.30	23.00	362.6		37.90	347.7	
6/28/2011	370.90	0.03	22.90	362.7		38.00	347.6	
7/26/2011	370.30	0.03	23.00	362.7		38.20	347.4	
8/24/2011	369.60	0.03	23.70	361.9		38.30	347.3	
8/30/2011	369.40		23.10	362.5		38.60	347.0	
9/13/2011	364.30	0.00	23.00	362.6		40.40	345.2	
9/27/2011	361.90		23.00	362.6		43.10	342.5	
10/11/2011	358.50	1.03	23.00	362.6		44.10	341.5	
10/25/2011	356.00	1.03	22.90	362.7		45.30	340.3	
11/29/2011	355.00	1.51	23.70	361.9		45.50	340.1	
12/28/2011	355.00	0.28	23.70	361.9		45.60	340.0	
1/26/2012	355.00	1.05	23.60	362.0		45.60	340.0	
2/28/2012	355.00	0.73	23.60	362.0		45.60	340.0	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2012	352.40	0.73	23.60	362.0		45.70	339.9	
4/23/2012	352.10	1.35	23.60	362.0		45.70	339.9	
5/30/2012	352.20	0.07	23.70	361.9		45.60	340.0	
6/13/2012	352.20		23.70	361.9		45.60	340.0	
6/26/2012	352.20	0.00	23.60	362.0		45.50	340.1	
7/24/2012	352.20	0.23	23.60	362.0		45.60	340.0	
8/8/2012	352.20	0.23	23.70	362.9		45.70	339.9	
8/28/2012	351.80	0.00	23.60	362.0		45.50	340.1	
8/29/2012	351.80	0.00	23.80	361.8		45.70	339.9	
9/25/2012	351.30	0.00	23.70	361.9		45.60	340.0	
10/31/2012	351.00	0.09	23.60	362.0		45.60	340.0	
11/27/2012	351.00	0.87	23.60	362.0		45.50	340.1	
12/12/2012	351.00	1.13	23.60	362.0		45.60	340.0	
1/29/2013	366.10	1.30	23.80	361.8		46.00	339.6	
2/21/2013	372.10	0.42	23.40	362.2		42.90	342.7	
3/28/2013	371.90	0.79	23.70	361.9		41.10	344.5	
4/25/2013	371.40	0.00	23.60	362.0		41.00	344.6	
5/22/2013	370.90	0.00	23.80	361.8		41.10	344.5	
6/25/2013	370.20	0.00	23.60	362.0		41.00	344.6	
7/23/2013	369.40	0.00	23.60	362.0		41.30	344.3	
8/21/2013	368.60	0.00	23.70	361.9	Dry	41.70	343.9	
9/25/2013	367.70	0.00	23.70	361.9	Dry	42.00	343.6	
10/30/2013	366.90	0.00	23.70	361.9	Dry	42.70	342.9	
11/26/2013	366.50	0.59	23.60	362.0	Dry	42.60	343.0	
12/17/2013	366.20	0.70	23.70	361.9	Dry	43.00	342.6	
1/28/2014	365.50	0.00	23.80	361.8	Dry	43.70	341.9	
2/25/2014	365.40	0.76	23.80	361.8	Dry	44.00	341.6	
3/25/2014	365.30		23.80	361.8	Dry	43.90	341.7	
3/28/2014	365.30	2.02	23.60	362.0		43.90	341.7	
4/25/2014	364.50	0.52	23.60	362.0		44.10	341.5	
5/28/2014	363.80	0.00	23.70	361.9	Dry	44.40	341.2	
6/25/2014	363.00	0.00	23.70	361.9		45.00	345.2	
7/30/2014	361.90	0.00	23.70	361.9	Wet	45.10	342.5	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
8/27/2014	361.10	0.04	23.60	362.0	Dry	45.60	340.0	Wet
9/23/2014	360.50	0.00	23.60	362.0	Wet	45.50	340.1	Wet
10/29/2014	359.50	0.00	23.60	362.0	Dry	45.80	339.8	Dry
11/24/2014	359.40	0.32	23.70	361.9	Dry	45.60	340.0	Dry
12/30/2014	359.40	3.98	23.70	361.9	Dry	45.80	339.8	Dry
1/27/2015	359.00	1.42	23.60	362.0	Wet	45.60	340.0	Dry
2/26/2015	358.60	0.46	23.60	362.0	Wet	45.50	340.1	Wet
3/27/2015	358.00	0.63	23.70	361.9		45.90	339.7	Dry
4/26/2015	331.00	0.22	23.60	362.0		45.60	340.0	Dry
5/27/2015	332.00	1.79	23.60	362.0	Dry	45.60	340.0	Dry
6/23/2015	331.00	0.00	23.60	362.0	Wet	45.70	339.9	Wet
7/30/2015	331.00	0.00	23.70	361.9	Dry	45.60	340.0	Dry
8/25/2015	331.00	0.00	23.50	362.1	Dry	45.50	340.1	Dry
9/30/2015	331.00	1.97	23.70	361.9	Dry	45.70	339.9	Dry
10/29/2015	331.00	0.18	23.70	361.9	Dry	45.70	339.9	Dry
11/25/2015	331.00	0.17	23.70	361.9	Dry	45.50	340.1	Dry
12/30/2015	331.00	1.42	23.70	361.9	Dry	45.50	340.1	Dry
1/26/2016	343.70	2.97	23.60	362.0	Dry	45.60	340.0	Dry
2/24/2016	363.80	0.26	23.70	361.9	Dry	45.70	339.9	Dry
3/29/2016	374.90	1.50	23.60	362.0		41.90	343.7	
4/28/2016	375.50	0.09	23.60	362.1		37.70	347.9	
5/24/2016	374.40	0.13	23.30	362.3		38.00	347.6	
6/29/2016	373.70	0.00	23.30	362.3		38.10	347.5	
7/28/2016	372.20	0.00	23.60	362.0	Dry	38.50	347.1	
8/25/2016	367.10	0.00	23.70	361.9	Dry	40.90	344.7	
9/27/2016	363.30	0.00	23.80	361.8		41.80	343.8	
10/25/2016	362.10	0.82	23.60	362.0		42.80	342.8	
11/22/2016	361.80	1.69	23.70	361.9	Dry	43.00	342.6	
12/28/2016	368.55	3.61	23.70	361.9		40.70	344.9	
1/25/2017	375.80	6.48	23.60	362.0	Dry	36.40	349.2	
2/28/2017	375.90	3.95	23.60	362.0	Dry	35.30	350.4	
3/15/2017	375.80	3.61	23.70	361.9	Dry	35.70	349.9	
3/28/2017	375.50	0.09	23.90	361.7	Dry	35.00	350.6	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/26/2017	375.00	0.04	23.70	361.9	Dry	35.20	350.4	
5/23/2017	374.60	0.00	23.60	362.0		35.60	350.0	
6/22/2017	373.80	0.00	23.70	361.9		28.20	357.4	Erroneous
7/26/2017	371.40	0.00	23.50	362.1	Dry	36.70	348.9	
8/30/2017	368.60	0.00	23.70	361.9	Dry	38.10	347.5	
9/28/2017	364.80	0.00	23.50	362.1	Dry	40.10	345.5	
10/26/2017	359.00	0.00	23.60	362.0	Dry	42.10	343.5	
11/29/2017	357.80	0.15	23.60	362.0	Dry	45.60	340.0	Dry
12/27/2017	357.30	0.00	23.60	362.0	Dry	44.60	341.0	
1/24/2018	357.30	1.84	23.60	362.00	Dry	44.80	340.80	
2/21/2018	361.00	0.18	23.30	362.30	Wet	43.70	341.90	
3/28/2018	366.90	2.19	23.60	362.00		40.70	344.90	
4/25/2018	367.00	0.05	23.60	362.00	Dry	40.20	345.40	
5/30/2018	366.40	0.36	23.30	362.30	Wet	40.40	345.20	
6/28/2018	365.60	0.00	23.50	362.10		40.70	344.90	
7/25/2018	363.20	0.00	23.70	361.90	Dry	41.50	344.10	
8/28/2018	357.30	0.00	23.60	362.00	Dry	44.25	341.35	
9/27/2018	354.60	0.00	23.50	362.10		45.40	340.20	
10/24/2018	351.90	1.49	23.60	362.00	Dry	45.60	340.00	
11/28/2018	348.60	0.56	23.50	362.10	Dry	45.50	340.10	
12/21/2018	348.80	2.04	23.60	362.00	Dry	45.70	339.90	Dry
1/30/2019	348.90	4.41	23.50	362.10	Dry	45.50	340.10	Dry
2/27/2019	351.70	8.05	23.50	362.10	Dry	45.50	340.10	Dry
3/28/2019	351.60	2.00	23.60	362.00	Dry	45.70	339.90	Dry
4/25/2019	348.70	0.10	23.7	361.90		45.5	340.10	Dry
5/30/2019	348.30	0.99	23.6	362.00		45.6	340.00	
6/26/2019	344.50	0.11	26.3	359.30	Omitted	45.5	340.10	Dry
7/5/2019	343.30	0.00	23.6	362.00		45.5	340.10	Dry
7/30/2019	341.00	0.00	23.6	362.00		45.6	340.00	Dry
8/27/2019	341.00	0.00	23.7	361.90		45.6	340.00	Dry
9/26/2019	341.00	0.00	23.6	362.00		45.5	340.10	Dry
10/24/2019	341.00	0.00	23.5	362.10		45.5	340.10	Dry
11/26/2019	341.00	2.60	23.6	362.00		45.7	339.90	Dry

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/16/2019	341.00	4.93	23.5	362.10	Dry	45.6	340.00	Dry
1/28/2020	341.00	0.21	23.5	362.10	Dry	45.5	340.10	Dry
2/26/2020	360.60	0.39	23.4	362.20		45.5	340.10	
3/24/2020	370.30	3.75	23.5	362.10		45.6	340.00	
4/23/2020	375.30	4.63	23.7	361.90		38.5	347.10	
5/28/2020	374.80	0.04	23.6	362.00		37.8	347.80	
6/23/2020	373.60	0.00	23.5	362.10		37.8	347.80	
7/29/2020	370.70	0.00	23.6	362.00		39	346.60	
8/27/2020	367.80	0.00	23.6	362.00		40.3	345.30	
9/29/2020	364.90	0.00	23.6	362.00		41.4	344.20	
10/29/2020	354.80	0.00	23.6	362.00		43.8	341.80	
11/24/2020	343.00	0.32	23.6	362.00		45.6	340.00	
12/29/2020	343.50	1.14	23.5	362.10		45.5	340.10	
1/27/2021	355.70	2.45	23.60	362.00		45.60	340.00	
2/25/2021	365.90	0.03	23.50	362.10		42.50	343.10	
3/23/2021	370.80	1.27	23.60	362.00		39.00	346.60	
4/28/2021	371.70	0.03	23.50	362.10		37.50	348.10	
5/26/2021	370.00	0.05	23.60	362.00		38.10	347.50	
6/30/2021	366.30	0.00	23.60	362.00		39.70	345.90	
7/27/2021	361.50	0.03	23.30	362.30		41.70	343.90	
8/25/2021	356.30	0.00	23.60	362.00		44.10	341.50	
9/28/2021	350.60	0.03	23.40	362.20		45.40	340.20	
10/27/2021	343.50	0.79	23.30	362.30		45.30	340.30	
11/25/2021	343.40	0.00	23.30	362.30		45.30	340.30	
12/21/2021	348.90	6.14	23.60	362.00		45.60	340.00	
1/25/2022	372.70	0.01	23.60	362.00	Dry	39.20	346.40	
2/23/2022	374.60	0.32	23.60	362.00	Dry	35.90	349.70	
3/29/2022	370.90	1.21	23.60	362.00	Dry	37.40	348.20	
4/26/2022	367.80	0.04	23.60	362.00	Dry	39.30	346.30	
5/25/2022	360.70	0.03	23.60	362.00	Dry	41.90	343.70	
6/29/2022	343.70	0.00	23.60	362.00	Dry	46.00	339.60	Dry
7/26/2022	343.10	0.00	23.30	362.30	Dry	45.30	340.30	Dry
8/30/2022	342.00	0.03	23.60	362.00	Dry	45.60	340.00	Dry

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			P-3A			P-3B		
Top of Well Elevation -->			385.60			385.60		
Bottom of Well Elevation -->			362.30			340.30		
Depth of Well			23.30			45.30		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
9/29/2022	342.00	0.32	23.70	361.90	Dry	45.50	340.10	Dry
10/26/2022	342.00	0.32	23.70	361.90	Dry	45.50	340.10	Dry
11/23/2022	342.00	2.04	23.60	362.00	Dry	45.60	340.00	Dry
12/28/2022	341.60	2.11	23.40	362.20	Dry	45.70	339.90	Dry
1/26/2023	342.70	7.19	23.50	362.10	Dry	45.70	339.90	Dry
2/28/2023	343.50	3.28	23.60	362.00	Dry	45.60	340.00	Dry
3/29/2023	346.30	6.30	23.50	362.10	Dry	45.50	340.10	Dry
4/25/2023	346.30	0.14	23.50	362.10	Dry	45.60	340.00	Dry
5/24/2023	346.00	1.15	23.50	362.10	Dry	45.60	340.00	Dry
6/28/2023	345.80	0.11	23.62	361.98	Dry	45.60	340.00	Dry
7/27/2023	343.90	0.00	23.50	362.10	Dry	45.60	340.00	Dry
8/29/2023	343.00	2.25	23.50	362.10	Dry	45.50	340.10	Dry
9/27/2023	342.70	0.00	23.40	362.20	Dry	45.30	340.30	Dry
10/26/2023	342.00	0.18	27.70	357.90	Dry	45.60	340.00	Dry
11/29/2023	346.30	0.70	23.60	362.00	Dry	45.50	340.10	Dry
12/21/2023	341.40	1.08	23.75	361.85	Dry	45.70	339.90	Dry
1/30/2024	341.50	2.03	23.70	361.90		45.50	340.10	
2/22/2024	344.00	9.11	23.40	362.20		45.50	340.10	
3/26/2024	343.00	3.07	23.75	361.85		45.72	339.88	
4/25/2024	343.00	1.62	23.77	361.83		45.70	339.90	
5/1/2024	343.30	0	23.60	362.00		45.60	340.00	
5/23/2024	343.00	0.2	23.60	362.00		45.70	339.90	
6/27/2024	342.00	0	23.80	361.80		45.70	339.90	
7/25/2024	343.00	0	23.60	362.00		45.70	339.90	
8/28/2024	343.00	0	23.60	362.00		45.60	340.00	
9/25/2024	343.00	0	23.60	362.00		45.60	340.00	
10/29/2024	343.00	0	23.60	362.00		45.60	340.00	
11/26/2024	343.00	0.11	23.60	362.00		45.60	340.00	
12/18/2024	343.00	0.01	23.60	362.00		45.60	340.00	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008								
2/1/2008								
3/25/2008	365.10		13.70	326.3		5.10	325.6	
4/25/2008	366.40		13.70	326.3		5.10	325.6	
5/28/2008	365.30		13.70	326.3		5.10	325.6	
6/25/2008	365.00		14.30	325.7		5.10	325.6	
7/18/2008	364.50		14.30	325.7		5.10	325.6	
8/25/2008	363.50		14.30	325.7		5.70	325.0	
9/25/2008	363.00		14.30	325.7		5.70	325.0	
10/21/2008	362.00		14.30	325.7		5.70	325.0	
11/25/2008	365.00		14.30	325.7		5.70	325.0	
12/23/2008	365.00		14.30	325.7		5.70	325.0	
1/26/2009	364.50		14.30	325.7		5.70	325.0	
2/24/2009	364.50		14.30	325.7		5.70	325.0	
3/23/2009	368.50		14.30	325.7		5.70	325.0	
4/27/2009	367.50		14.30	325.7		5.20	325.5	
5/22/2009	367.00		14.30	325.7		5.20	325.5	
6/29/2009	372.00		14.30	325.7		4.10	326.6	
7/31/2009	371.00		15.30	324.7		5.10	325.6	
8/26/2009	370.00		15.30	324.7		5.10	325.6	
9/29/2009	369.50		15.30	324.7		5.70	325.0	
10/30/2009	369.00		14.30	325.7		4.70	326.0	
11/30/2009	368.00		14.30	325.7		4.10	326.6	
12/30/2009	368.00		14.30	325.7		4.10	326.6	
3/1/2010	368.00		13.50	326.5		3.00	327.7	
3/30/2010	368.00		13.50	326.5		3.20	327.5	
4/4/2010	368.70		13.50	326.5		3.30	327.4	
4/27/2010	368.40		13.40	326.6		3.20	327.5	
5/26/2010	367.84		13.60	326.4		3.40	327.3	
6/29/2010	367.00		13.60	326.4		3.50	327.2	
7/27/2010	367.00		13.60	326.4		3.60	327.1	
8/27/2010	366.80		13.80	326.2		3.60	327.1	
9/28/2010	366.80		13.60	326.4		3.70	327.0	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
10/26/2010	368.50		13.60	326.4		2.50	328.2	
11/30/2010	371.40		13.70	326.3		3.30	327.4	
12/28/2010	374.70		13.50	326.5		2.60	328.1	
1/4/2011	374.80		13.40	326.6		2.30	328.4	
1/6/2011	374.80		13.40	326.6		2.50	328.2	
1/7/2011	374.80		13.50	326.5		2.70	328.0	
1/8/2011	374.80		13.60	326.3		3.10	327.6	
1/9/2011	374.80		13.70	326.3		3.10	327.6	
1/10/2011	374.80		13.60	326.4		3.00	327.8	
1/11/2011	374.80		13.40	326.6		2.70	328.0	
1/17/2011	374.80		13.50	326.6		3.00	327.8	
1/19/2011	374.70		13.50	326.5		2.80	327.9	
1/21/2011	374.80		13.50	326.5		2.80	327.9	
1/27/2011	374.60		13.50	326.5		2.90	327.8	
2/3/2011	374.60		13.50	326.5		3.20	327.5	
2/8/2011	374.70		13.50	326.5		3.30	327.4	
2/28/2011	374.70		13.50	326.5		2.90	327.8	
3/28/2011	372.50	2.35	13.50	326.5		3.00	327.7	
4/28/2011	372.10	0.27	13.70	326.3		3.80	326.9	
5/18/2011	371.80	0.03	13.50	326.5		3.40	327.3	
5/25/2011	371.70	0.30	13.70	326.3		3.50	327.2	
6/28/2011	370.90	0.03	13.60	326.4		3.50	327.2	
7/26/2011	370.30	0.03	13.70	326.3		3.90	326.8	
8/24/2011	369.60	0.03	16.00	324.0		3.50	327.2	
8/30/2011	369.40		16.00	324.0		3.60	327.1	
9/13/2011	364.30	0.00	15.90	324.1		4.00	326.7	
9/27/2011	361.90		16.10	323.9		5.00	325.7	
10/11/2011	358.50	1.03	16.10	323.9		5.60	325.1	
10/25/2011	356.00	1.03	16.30	323.7		6.50	324.2	
11/29/2011	355.00	1.51	16.80	323.2		7.20	323.5	
12/28/2011	355.00	0.28	17.40	322.7		7.60	323.1	
1/26/2012	355.00	1.05	17.50	322.5		7.80	322.9	
2/28/2012	355.00	0.73	17.90	322.1		7.90	322.9	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2012	352.40	0.73	18.40	321.6		8.30	322.4	
4/23/2012	352.10	1.35	18.30	321.7		8.10	322.6	
5/30/2012	352.20	0.07	18.60	321.4		8.40	322.3	
6/13/2012	352.20		18.70	321.3		8.60	322.1	
6/26/2012	352.20	0.00	2.80		Cap was off bad read	8.70	322.0	
7/24/2012	352.20	0.23	4.20		Cap was off bad read	7.75	323.0	
8/8/2012	352.20	0.23	4.70		Cap was off bad read	7.50	323.2	
8/28/2012	351.80	0.00	19.20	320.8		7.90	322.8	
8/29/2012	351.80	0.00	18.90	321.1		8.20	322.5	
9/25/2012	351.30	0.00	19.40	320.6		8.40	322.3	
10/31/2012	351.00	0.09	19.60	320.4		8.90	321.8	
11/27/2012	351.00	0.87	19.20	320.8		9.20	321.5	
12/12/2012	351.00	1.13	19.00	321.0		9.20	321.5	
1/29/2013	366.10	1.30	19.00	321.0		5.40	325.3	
2/21/2013	372.10	0.42	18.80	321.2		4.30	326.4	
3/28/2013	371.90	0.79	18.10	321.9		3.10	327.6	
4/25/2013	371.40	0.00	17.80	322.2		2.70	328.0	
5/22/2013	370.90	0.00	17.70	322.3		2.90	327.8	
6/25/2013	370.20	0.00	17.00	323.0		2.50	328.2	
7/23/2013	369.40	0.00	16.80	323.2		2.70	328.0	
8/21/2013	368.60	0.00	16.80	323.4		2.80	327.9	
9/25/2013	367.70	0.00	16.30	323.7		2.80	327.9	
10/30/2013	366.90	0.00	16.10	323.9		3.00	327.7	
11/26/2013	366.50	0.59	15.90	324.1		3.00	327.7	
12/17/2013	366.20	0.70	15.90	324.1		3.20	327.5	
1/28/2014	365.50	0.00	15.70	324.3		3.40	327.3	
2/25/2014	365.40	0.76	15.90	324.2		3.65	327.1	
3/25/2014	365.30		16.00	324.0		3.40	327.3	
3/28/2014	365.30	2.02	15.60	324.5		3.40	327.3	
4/25/2014	364.50	0.52	15.50	324.5		3.50	327.2	
5/28/2014	363.80	0.00	15.50	324.5		3.70	327.0	
6/25/2014	363.00	0.00	15.70	324.3		3.90	326.8	
7/30/2014	361.90	0.00	15.40	324.6		3.90	326.8	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
8/27/2014	361.10	0.04	15.50	324.5		4.30	326.4	
9/23/2014	360.50	0.00	13.50	326.5		4.20	326.5	
10/29/2014	359.50	0.00	15.60	324.4		4.50	326.2	
11/24/2014	359.40	0.32	15.70	324.3		4.60	326.1	
12/30/2014	359.40	3.98	15.80	324.2		4.70	326.0	
1/27/2015	359.00	1.42	15.90	324.1		4.70	326.0	
2/26/2015	358.60	0.46	15.90	324.1		4.80	325.9	
3/27/2015	358.00	0.63	16.00	324.0		5.30	325.4	
4/26/2015	331.00	0.22	16.20	323.8		8.00	322.7	
5/27/2015	332.00	1.79	16.10	323.9		7.90	322.8	
6/23/2015	331.00	0.00	20.50	322.3	Extended casing	12.30	318.4	
7/30/2015	331.00	0.00	20.60	322.2		13.70	317.0	
8/25/2015	331.00	0.00	21.50	321.3	Wet	17.60	316.1	Extended Casing
9/30/2015	331.00	1.97	22.50	320.3		18.30	315.4	
10/29/2015	331.00	0.18	22.90	319.9		18.40	315.3	
11/25/2015	331.00	0.17	23.40	319.4		19.50	314.2	Dry
12/30/2015	331.00	1.42	23.80	319.0	VW installed	19.50	314.2	Dry; VW Installed
1/26/2016	343.70	2.97	17.90	325.0		16.07	317.6	
2/24/2016	363.80	0.26	18.10	324.7		9.93	323.8	
3/29/2016	374.90	1.50	17.10	325.7		5.40	328.3	
4/28/2016	375.50	0.09	15.60	327.2		4.30	329.4	
5/24/2016	374.40	0.13	14.20	328.6		4.00	329.7	
6/29/2016	373.70	0.00	14.30	328.5		4.10	329.6	
7/28/2016	372.20	0.00	14.40	328.4		4.11	329.6	
8/25/2016	367.10	0.00	14.50	328.3		4.70	329.0	
9/27/2016	363.30	0.00	14.60	328.2		5.30	328.4	
10/25/2016	362.10	0.82	14.10	328.7		5.00	328.7	
11/22/2016	361.80	1.69			VW was not logging			
12/28/2016	368.55	3.61	13.50	329.3		3.00	330.7	
1/25/2017	375.80	6.48	12.90	329.9		1.30	332.4	
2/28/2017	375.90	3.95	12.60	330.2		1.20	332.5	
3/15/2017	375.80	3.61	12.20	330.6		1.10	332.6	
3/28/2017	375.50	0.09	12.10	330.7		1.10	332.6	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/26/2017	375.00	0.04	11.90	330.9		1.10	332.6	
5/23/2017	374.60	0.00	11.50	331.3		1.10	332.6	
6/22/2017	373.80	0.00	11.30	331.5		1.40	332.3	
7/26/2017	371.40	0.00	11.10	331.7		2.00	331.7	
8/30/2017	368.60	0.00	11.10	331.7		2.90	330.8	
9/28/2017	364.80	0.00	10.90	331.9		3.50	330.2	
10/26/2017	359.00	0.00	11.00	331.8		4.80	328.9	
11/29/2017	357.80	0.15	11.00	331.8		5.80	327.9	
12/27/2017	357.30	0.00	11.00	331.8		5.90	327.8	
1/24/2018	357.30	1.84	11.00	331.80		6.10	327.60	
2/21/2018	361.00	0.18	11.00	331.80		5.60	328.10	
3/28/2018	366.90	2.19	11.60	331.20		5.00	328.70	
4/25/2018	367.00	0.05	11.40	331.40		4.90	328.80	
5/30/2018	366.40	0.36	11.60	331.20		5.10	328.60	
6/28/2018	365.60	0.00	11.50	331.30		5.20	328.50	
7/25/2018	363.20	0.00	11.60	331.20		5.50	328.20	
8/28/2018	357.30	0.00	11.70	331.10		6.40	327.30	
9/27/2018	354.60	0.00	11.80	331.00		6.90	326.80	
10/24/2018	351.90	1.49	12.00	330.80		7.60	326.10	
11/28/2018	348.60	0.56	12.30	330.50		8.60	325.10	
12/21/2018	348.80	2.04	12.20	330.60		8.32	325.38	
1/30/2019	348.90	4.41	12.80	330.00		9.00	324.70	
2/27/2019	351.70	8.05	12.70	330.10		7.90	325.80	
3/28/2019	351.60	2.00	12.60	330.20		8.20	325.50	
4/25/2019	348.70	0.10	12.30	330.50		9.20	324.50	
5/30/2019	348.30	0.99	12.30	330.50		9.50	324.20	
6/26/2019	344.50	0.11	12.50	330.30		16.70	317.00	
7/5/2019	343.30	0.00	12.70	330.10		10.60	323.10	
7/30/2019	341.00	0.00	13.80	329.00		11.50	322.20	
8/27/2019	341.00	0.00	15.17	327.63		14.37	319.33	
9/26/2019	341.00	0.00	15.90	326.90		16.40	317.30	
10/24/2019	341.00	0.00	16.50	326.30		16.70	317.00	
11/26/2019	341.00	2.60	12.60	330.20		16.70	317.00	

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/16/2019	341.00	4.93	13.10	329.70		8.70	325.00	
1/28/2020	341.00	0.21	12.80	330.00		9.00	324.70	
2/26/2020	360.60	0.39	18.84	323.96		11.62	322.08	
3/24/2020	370.30	3.75	14.30	328.50		4.10	329.60	
4/23/2020	375.30	4.63	17.20	325.60		5.30	328.40	
5/28/2020	374.80	0.04			No data received			No data received
6/23/2020	373.60	0.00			No data received			No data received
7/29/2020	370.70	0.00			No data received			No data received
8/27/2020	367.80	0.00			No data received			No data received
9/29/2020	364.90	0.00			No data received			No data received
10/29/2020	354.80	0.00			No data received			No data received
11/24/2020	343.00	0.32			No data received			No data received
12/29/2020	343.50	1.14	15.20	327.60		11.60	322.10	
1/27/2021	355.70	2.45	15.20	327.60		8.40	325.30	
2/25/2021	365.90	0.03	15.20	327.60		6.20	327.50	
3/23/2021	370.80	1.27	15.00	327.80		5.10	328.60	
4/28/2021	371.70	0.03	14.40	328.40		4.50	329.20	
5/26/2021	370.00	0.05	14.10	328.70		4.50	329.20	
6/30/2021	366.30	0.00	14.00	328.80		4.85	328.85	
7/27/2021	361.50	0.03	13.70	329.10		5.20	328.50	
8/25/2021	356.30	0.00	13.50	329.30		5.70	328.00	
9/28/2021	350.60	0.03	13.90	328.90		6.90	326.80	
10/27/2021	343.50	0.79	13.40	329.40		9.30	324.40	
11/25/2021	343.40	0.00	13.80	329.00		9.80	323.90	
12/21/2021	348.90	6.14	13.90	328.90		9.60	324.10	
1/25/2022	372.70	0.01	14.10	328.70		4.00	329.70	
2/23/2022	374.60	0.32	13.40	329.40		3.80	329.90	
3/29/2022	370.90	1.21	13.30	329.50		4.50	329.20	
4/26/2022	367.80	0.04	13.10	329.70		4.60	329.10	
5/25/2022	360.70	0.03	13.10	329.70		5.70	328.00	
6/29/2022	343.70	0.00	13.00	329.80		9.50	324.20	
7/26/2022	343.10	0.00	13.40	329.40		10.80	322.90	
8/30/2022	342.00	0.03	14.00	328.80		11.60	322.10	

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TABLE 3
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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/4			VBW/5		
Top of Well Elevation -->			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			314.70	314.7		314.00	314.0	
Depth of Well			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
9/29/2022	342.00	0.32	14.60	328.20		12.80	320.90	
10/26/2022	342.00	0.32	15.10	327.70		14.60	319.10	
11/23/2022	342.00	2.04	16.00	326.80		15.90	317.80	
12/28/2022	341.60	2.11	16.70	326.10		16.40	317.30	
1/26/2023	342.70	7.19	17.70	325.10		14.60	319.10	
2/28/2023	343.50	3.28	18.50	324.30		14.00	319.70	
3/29/2023	346.30	6.30	18.70	324.10		11.00	322.70	
4/25/2023	346.30	0.14	18.50	324.30		11.60	322.10	
5/24/2023	346.00	1.15	18.60	324.20		21.10	312.60	Dry?
6/28/2023	345.80	0.11	18.60	324.20		12.50	321.20	
7/27/2023	343.90	0.00	18.60	324.20		12.90	320.80	
8/29/2023	343.00	2.25	18.87	323.93		22.19	311.51	Dry?
9/27/2023	342.70	0.00	18.90	323.90		13.70	320.00	
10/26/2023	342.00	0.18	18.90	323.90		13.90	319.80	
11/29/2023	346.30	0.70	19.10	323.70		14.10	319.60	
12/21/2023	341.40	1.08	19.00	323.80		14.30	319.40	
1/30/2024	341.50	2.03	19.29	320.71		14.50	316.20	
2/22/2024	344.00	9.11	19.14	320.86		12.11	318.59	
3/26/2024	343.00	3.07	19.14	320.86		12.48	318.22	
4/25/2024	343.00	1.62	19.22	320.78		12.54	318.16	
5/1/2024	343.30	0	22.60	317.40		12.84	317.86	
5/23/2024	343.00	0.2	22.40	317.60		13.20	317.50	
6/27/2024	342.00	0	22.63	317.37		13.81	316.89	
7/25/2024	343.00	0	22.60	317.40		12.84	317.86	
8/28/2024	343.00	0	22.88	317.12		16.55	314.15	
9/25/2024	343.00	0	22.96	317.04		16.70	314.00	
10/29/2024	343.00	0	22.73	317.27		16.70	314.00	
11/26/2024	343.00	0.11	17.07	322.93		16.70	314.00	
12/18/2024	343.00	0.01	17.14	322.86		16.70	314.00	

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TABLE 3
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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008								
2/1/2008								
3/25/2008	365.10							
4/25/2008	366.40							
5/28/2008	365.30							
6/25/2008	365.00							
7/18/2008	364.50							
8/25/2008	363.50							
9/25/2008	363.00							
10/21/2008	362.00							
11/25/2008	365.00							
12/23/2008	365.00							
1/26/2009	364.50							
2/24/2009	364.50							
3/23/2009	368.50							
4/27/2009	367.50							
5/22/2009	367.00							
6/29/2009	372.00							
7/31/2009	371.00							
8/26/2009	370.00							
9/29/2009	369.50							
10/30/2009	369.00							
11/30/2009	368.00							
12/30/2009	368.00							
3/1/2010	368.00							
3/30/2010	368.00							
4/4/2010	368.70							
4/27/2010	368.40							
5/26/2010	367.84							
6/29/2010	367.00							
7/27/2010	367.00							
8/27/2010	366.80							
9/28/2010	366.80							

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SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
10/26/2010	368.50							
11/30/2010	371.40							
12/28/2010	374.70							
1/4/2011	374.80							
1/6/2011	374.80							
1/7/2011	374.80							
1/8/2011	374.80							
1/9/2011	374.80							
1/10/2011	374.80							
1/11/2011	374.80							
1/17/2011	374.80							
1/19/2011	374.70		9.40	360.7	Dry	6.90	342.8	
1/21/2011	374.80		9.60	360.6	Dry	7.00	342.6	
1/27/2011	374.60		9.50	360.7	Dry	7.20	342.4	
2/3/2011	374.60		9.50	360.7	Dry	7.70	342.0	
2/8/2011	374.70		9.50	360.7	Dry	7.70	342.0	
2/28/2011	374.70		9.70	361.5	Dry	8.40	341.3	
3/28/2011	372.50	2.35	9.60	360.6	Dry	5.00		Omitted
4/28/2011	372.10	0.27	9.60	360.6	Dry	8.60	341.1	
5/18/2011	371.80	0.03	9.60	360.6	Dry	8.80	340.9	
5/25/2011	371.70	0.30	9.60	360.6	Dry	9.10	340.6	
6/28/2011	370.90	0.03	9.50	360.7	Dry	10.00	339.7	
7/26/2011	370.30	0.03	9.50	360.7	Dry	9.30	340.4	
8/24/2011	369.60	0.03	9.50	360.7	Dry	9.20	340.5	
8/30/2011	369.40		9.80	360.4	Dry	10.20	339.5	
9/13/2011	364.30	0.00	9.60	360.6	Dry	10.10	339.6	
9/27/2011	361.90		9.50	360.7	Dry	10.00	339.7	
10/11/2011	358.50	1.03	9.50	360.7	Dry	9.50	340.2	
10/25/2011	356.00	1.03	9.50	360.7	Dry	9.90	339.8	
11/29/2011	355.00	1.51	9.50	360.7	Dry	9.80	339.9	
12/28/2011	355.00	0.28	9.65	360.5	Dry	9.40	340.3	
1/26/2012	355.00	1.05	9.45	360.7	Dry	10.10	339.6	
2/28/2012	355.00	0.73	9.60	360.6	Dry	10.60	339.1	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2012	352.40	0.73	9.80	360.4	Dry	10.30	339.4	
4/23/2012	352.10	1.35	9.65	360.5	Dry	10.50	339.2	
5/30/2012	352.20	0.07	9.60	360.6	Dry	9.90	339.8	
6/13/2012	352.20		9.70	360.5	Dry	10.40	339.3	
6/26/2012	352.20	0.00	9.70	360.5	Dry	10.50	339.2	
7/24/2012	352.20	0.23	9.60	360.6	Dry	10.50	339.2	
8/8/2012	352.20	0.23	9.80	360.4	Dry	10.70	339.0	
8/28/2012	351.80	0.00	9.60	360.6	Dry	10.10	339.6	
8/29/2012	351.80	0.00	9.80	360.4	Dry	10.30	339.4	
9/25/2012	351.30	0.00	9.50	360.7	Dry	9.90	339.8	
10/31/2012	351.00	0.09	9.60	360.6	Dry	10.30	339.4	
11/27/2012	351.00	0.87	9.60	360.6	Dry	10.20	339.5	
12/12/2012	351.00	1.13	9.50	360.7	Dry	10.50	339.2	
1/29/2013	366.10	1.30	9.70	360.5	Dry	11.00	338.7	
2/21/2013	372.10	0.42	9.70	360.5	Dry	11.20	338.5	
3/28/2013	371.90	0.79	9.60	360.6	Dry	10.80	338.9	
4/25/2013	371.40	0.00	9.40	360.8	Dry	10.30	339.4	
5/22/2013	370.90	0.00	9.80	360.4	Dry	11.20	338.5	
6/25/2013	370.20	0.00	9.70	360.5	Dry	10.90	338.8	
7/23/2013	369.40	0.00	9.60	360.6	Dry	11.10	338.6	
8/21/2013	368.60	0.00	9.70	360.5	Dry	11.00	338.7	
9/25/2013	367.70	0.00	9.60	360.6	Dry	11.10	338.6	
10/30/2013	366.90	0.00	9.70	360.5	Dry	11.10	338.6	
11/26/2013	366.50	0.59	9.70	360.5	Dry	11.10	338.6	Wet
12/17/2013	366.20	0.70	9.70	360.5	Dry	10.90	338.8	
1/28/2014	365.50	0.00	9.70	360.4	Dry	10.30	339.4	
2/25/2014	365.40	0.76	9.75	360.6	Dry	11.20	338.5	Wet
3/25/2014	365.30		9.60	360.6	Dry	10.80	338.9	
3/28/2014	365.30	2.02	9.60	360.6	Dry	11.10	338.6	
4/25/2014	364.50	0.52	9.60	360.5	Dry	10.70	339.0	
5/28/2014	363.80	0.00	9.70	360.4	Dry	10.80	338.9	
6/25/2014	363.00	0.00	9.80	360.4	Dry	10.30	339.4	
7/30/2014	361.90	0.00	9.80	360.4	Dry	10.50	339.2	

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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
8/27/2014	361.10	0.04	9.70	360.5	Dry	11.10	338.6	Wet
9/23/2014	360.50	0.00	9.60	360.6	Dry	11.10	338.6	Wet
10/29/2014	359.50	0.00	9.70	360.5	Dry	11.10	338.6	Wet
11/24/2014	359.40	0.32	9.70	360.5	Dry	10.90	338.8	Wet
12/30/2014	359.40	3.98	9.70	360.5	Dry	10.50	339.2	Wet
1/27/2015	359.00	1.42	9.70	360.5	Dry	10.90	338.8	
2/26/2015	358.60	0.46	9.70	360.5	Dry	11.10	338.6	Wet
3/27/2015	358.00	0.63	9.70	360.5	Dry	11.20	338.5	Wet
4/26/2015	331.00	0.22	9.60	360.6	Dry	11.10	338.6	Wet
5/27/2015	332.00	1.79	9.60	360.6	Dry	11.10	338.6	Wet
6/23/2015	331.00	0.00	9.80	360.6	Dry	12.30	339.0	
7/30/2015	331.00	0.00	10.40	361.0	Dry	11.00	340.3	Wet
8/25/2015	331.00	0.00	9.80	360.6	Dry	12.50	338.8	Wet
9/30/2015	331.00	1.97	10.90	360.5	Dry	12.60	338.7	Wet
10/29/2015	331.00	0.18	9.80	360.6	Dry	12.50	338.8	
11/25/2015	331.00	0.17	10.90	360.5	Dry	12.70	338.6	Dry
12/30/2015	331.00	1.42	10.90	360.5	Dry	12.70	338.6	Dry
1/26/2016	343.70	2.97	9.80	360.6	Dry	12.50	338.8	Dry
2/24/2016	363.80	0.26	10.90	360.5	Dry	12.50	338.8	Dry
3/29/2016	374.90	1.50	10.90	360.5	Dry	12.50	338.8	Dry
4/28/2016	375.50	0.09	10.90	360.5	Dry	12.50	338.8	Dry
5/24/2016	374.40	0.13	10.90	360.5	Dry	12.50	338.8	Dry
6/29/2016	373.70	0.00	10.90	360.5	Dry	12.50	338.8	Dry
7/28/2016	372.20	0.00	10.90	360.5	Dry	12.50	338.8	Dry
8/25/2016	367.10	0.00	10.90	360.5	Dry	12.50	338.8	Dry
9/27/2016	363.30	0.00	10.90	360.5	Dry	12.50	338.8	Dry
10/25/2016	362.10	0.82	10.90	360.5	Dry	12.50	338.8	Dry
11/22/2016	361.80	1.69						Dry
12/28/2016	368.55	3.61	10.90	360.5	Dry	12.50	338.8	Dry
1/25/2017	375.80	6.48	10.80	360.5	Dry	12.50	338.8	Dry
2/28/2017	375.90	3.95	10.90	360.5	Dry	12.50	338.8	Dry
3/15/2017	375.80	3.61	10.90	360.5	Dry	12.50	338.8	Dry
3/28/2017	375.50	0.09	10.90	360.5	Dry	12.50	338.8	Dry

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PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/26/2017	375.00	0.04	10.90	360.5	Dry	12.50	338.8	Dry
5/23/2017	374.60	0.00	10.90	360.5	Dry	12.50	338.8	Dry
6/22/2017	373.80	0.00	10.90	360.5	Dry	12.50	338.8	Dry
7/26/2017	371.40	0.00	10.90	360.5	Dry	12.50	338.8	Dry
8/30/2017	368.60	0.00	10.90	360.5	Dry	12.50	338.8	Dry
9/28/2017	364.80	0.00	10.90	360.5	Dry	12.50	338.8	Dry
10/26/2017	359.00	0.00	10.90	360.5	Dry	12.50	338.8	Dry
11/29/2017	357.80	0.15	10.90	360.5	Dry	12.50	338.8	Dry
12/27/2017	357.30	0.00	10.90	360.5	Dry	12.50	338.8	Dry
1/24/2018	357.30	1.84	10.90	360.50	Dry	12.50	338.80	Dry
2/21/2018	361.00	0.18	10.90	360.50	Dry	12.50	338.80	Dry
3/28/2018	366.90	2.19	10.90	360.50	Dry	12.50	338.80	Dry
4/25/2018	367.00	0.05	10.90	360.50	Dry	12.50	338.80	Dry
5/30/2018	366.40	0.36	10.90	360.50	Dry	12.50	338.80	Dry
6/28/2018	365.60	0.00	10.90	360.50	Dry	12.50	338.80	Dry
7/25/2018	363.20	0.00	10.90	360.50	Dry	12.50	338.80	Dry
8/28/2018	357.30	0.00	10.90	360.50	Dry	12.50	338.80	Dry
9/27/2018	354.60	0.00	10.90	360.50	Dry	12.50	338.80	Dry
10/24/2018	351.90	1.49	10.90	360.50	Dry	12.50	338.80	Dry
11/28/2018	348.60	0.56	10.90	360.50	Dry	12.50	338.80	Dry
12/21/2018	348.80	2.04	10.90	360.50	Dry	12.50	338.80	Dry
1/30/2019	348.90	4.41	10.90	360.50	Dry	12.50	338.80	Dry
2/27/2019	351.70	8.05	10.90	360.50	Dry	12.50	338.80	Dry
3/28/2019	351.60	2.00	10.90	360.50	Dry	12.50	338.80	Dry
4/25/2019	348.70	0.10	10.90	360.50	Dry	12.5	338.80	Dry
5/30/2019	348.30	0.99	10.90	360.50	Dry	12.5	338.80	Dry
6/26/2019	344.50	0.11	10.90	360.50	Dry	12.5	338.80	Dry
7/5/2019	343.30	0.00	10.90	360.50	Dry	12.5	338.80	Dry
7/30/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry
8/27/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry
9/26/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry
10/24/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry
11/26/2019	341.00	2.60	10.90	360.50	Dry	12.5	338.80	Dry

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/16/2019	341.00	4.93	10.90	360.50	Dry	12.5	338.80	Dry
1/28/2020	341.00	0.21	10.90	360.50	Dry	12.5	338.80	Dry
2/26/2020	360.60	0.39	10.90	360.50	Dry	12.5	338.80	Dry
3/24/2020	370.30	3.75	10.90	360.50	Dry	12.5	338.80	Dry
4/23/2020	375.30	4.63	10.90	360.50	Dry	12.5	338.80	Dry
5/28/2020	374.80	0.04			No data received			No data received
6/23/2020	373.60	0.00			No data received			No data received
7/29/2020	370.70	0.00			No data received			No data received
8/27/2020	367.80	0.00			No data received			No data received
9/29/2020	364.90	0.00			No data received			No data received
10/29/2020	354.80	0.00			No data received			No data received
11/24/2020	343.00	0.32			No data received			No data received
12/29/2020	343.50	1.14	10.90	360.50	Dry	12.5	338.80	Dry
1/27/2021	355.70	2.45	10.90	360.50	Dry	12.50	338.80	Dry
2/25/2021	365.90	0.03	10.90	360.50	Dry	12.50	338.80	Dry
3/23/2021	370.80	1.27	10.90	360.50	Dry	12.50	338.80	Dry
4/28/2021	371.70	0.03	10.90	360.50	Dry	12.50	338.80	Dry
5/26/2021	370.00	0.05	10.90	360.50	Dry	12.50	338.80	Dry
6/30/2021	366.30	0.00	10.90	360.50	Dry	12.50	338.80	Dry
7/27/2021	361.50	0.03	10.90	360.50	Dry	12.50	338.80	Dry
8/25/2021	356.30	0.00	10.90	360.50	Dry	12.50	338.80	Dry
9/28/2021	350.60	0.03	10.90	360.50	Dry	12.50	338.80	Dry
10/27/2021	343.50	0.79	10.90	360.50	Dry	12.50	338.80	Dry
11/25/2021	343.40	0.00	10.90	360.50	Dry	12.50	338.80	Dry
12/21/2021	348.90	6.14	10.90	360.50	Dry	12.50	338.80	Dry
1/25/2022	372.70	0.01	10.90	360.50	Dry	12.50	338.80	Dry
2/23/2022	374.60	0.32	10.90	360.50	Dry	12.50	338.80	Dry
3/29/2022	370.90	1.21	10.90	360.50	Dry	12.50	338.80	Dry
4/26/2022	367.80	0.04	10.90	360.50	Dry	12.50	338.80	Dry
5/25/2022	360.70	0.03	10.90	360.50	Dry	12.50	338.80	Dry
6/29/2022	343.70	0.00	10.90	360.50	Dry	12.50	338.80	Dry
7/26/2022	343.10	0.00	10.90	360.50	Dry	12.50	338.80	Dry
8/30/2022	342.00	0.03	10.90	360.50	Dry	12.30	339.00	Dry

Notes:

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/6			VBW/7		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1	
Depth of Well			9.50	10.8		11.50	13.2	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
9/29/2022	342.00	0.32	11.70	359.70	Dry	13.20	338.10	Dry
10/26/2022	342.00	0.32	11.60	359.80	Dry	13.20	338.10	Dry
11/23/2022	342.00	2.04	10.90	360.50	Dry	12.50	338.80	Dry
12/28/2022	341.60	2.11	11.50	359.90	Dry	13.30	338.00	Dry
1/26/2023	342.70	7.19	11.30	360.10	Dry	13.40	337.90	Dry
2/28/2023	343.50	3.28	10.30	361.10	Dry	11.70	339.60	Dry
3/29/2023	346.30	6.30	11.60	359.80	Dry	13.30	338.00	Dry
4/25/2023	346.30	0.14	10.90	360.50	Dry	12.50	338.80	Dry
5/24/2023	346.00	1.15	10.90	360.50	Dry	12.50	338.80	Dry
6/28/2023	345.80	0.11	10.90	360.50	Dry	12.50	338.80	Dry
7/27/2023	343.90	0.00	10.90	360.50	Dry	12.50	338.80	Dry
8/29/2023	343.00	2.25	9.97	361.43	Dry	11.69	339.61	Dry
9/27/2023	342.70	0.00	10.90	360.50	Dry	12.50	338.80	Dry
10/26/2023	342.00	0.18	10.90	360.50	Dry	12.50	338.80	Dry
11/29/2023	346.30	0.70	10.90	360.50	Dry	12.50	338.80	Dry
12/21/2023	341.40	1.08	10.90	360.50	Dry	12.50	338.80	Dry
1/30/2024	341.50	2.03	10.90	359.30		12.50	337.20	
2/22/2024	344.00	9.11	10.90	359.30		12.50	337.20	
3/26/2024	343.00	3.07	10.90	359.30		12.50	337.20	
4/25/2024	343.00	1.62	10.90	359.30		12.50	337.20	
5/1/2024	343.30	0	10.90	359.30		12.50	337.20	
5/23/2024	343.00	0.2	10.90	359.30		12.50	337.20	
6/27/2024	342.00	0	10.90	359.30		12.50	337.20	
7/25/2024	343.00	0	10.90	359.30		12.50	337.20	
8/28/2024	343.00	0	10.90	359.30		12.50	337.20	
9/25/2024	343.00	0	10.90	359.30		12.50	337.20	
10/29/2024	343.00	0	10.90	359.30		12.50	337.20	
11/26/2024	343.00	0.11	10.90	359.30		12.50	337.20	
12/18/2024	343.00	0.01	10.90	359.30		12.50	337.20	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008								
2/1/2008								
3/25/2008	365.10							
4/25/2008	366.40							
5/28/2008	365.30							
6/25/2008	365.00							
7/18/2008	364.50							
8/25/2008	363.50							
9/25/2008	363.00							
10/21/2008	362.00							
11/25/2008	365.00							
12/23/2008	365.00							
1/26/2009	364.50							
2/24/2009	364.50							
3/23/2009	368.50							
4/27/2009	367.50							
5/22/2009	367.00							
6/29/2009	372.00							
7/31/2009	371.00							
8/26/2009	370.00							
9/29/2009	369.50							
10/30/2009	369.00							
11/30/2009	368.00							
12/30/2009	368.00							
3/1/2010	368.00							
3/30/2010	368.00							
4/4/2010	368.70							
4/27/2010	368.40							
5/26/2010	367.84							
6/29/2010	367.00							
7/27/2010	367.00							
8/27/2010	366.80							
9/28/2010	366.80							

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
10/26/2010	368.50							
11/30/2010	371.40							
12/28/2010	374.70							
1/4/2011	374.80							
1/6/2011	374.80							
1/7/2011	374.80							
1/8/2011	374.80							
1/9/2011	374.80							
1/10/2011	374.80							
1/11/2011	374.80							
1/17/2011	374.80							
1/19/2011	374.70		3.90	341.4		4.50	340.4	
1/21/2011	374.80		4.20	341.4		4.80	340.1	
1/27/2011	374.60		4.20	341.2		4.90	340.0	
2/3/2011	374.60		4.40	341.1		5.30	339.6	
2/8/2011	374.70		4.50	340.9		5.30	339.6	
2/28/2011	374.70		4.80	340.9		5.60	339.3	
3/28/2011	372.50	2.35	4.00	340.5		4.90	340.0	
4/28/2011	372.10	0.27	4.50	341.3		5.90	339.0	
5/18/2011	371.80	0.03	4.20	340.8		6.50	338.4	
5/25/2011	371.70	0.30	4.55	340.8		6.90	338.0	
6/28/2011	370.90	0.03	6.10	339.2		7.40	337.5	
7/26/2011	370.30	0.03	6.30	339.0		7.40	337.5	
8/24/2011	369.60	0.03	8.40	336.9		9.50	335.4	
8/30/2011	369.40		8.40	336.9		9.50	335.4	
9/13/2011	364.30	0.00	7.70	337.6		9.50	335.4	
9/27/2011	361.90		7.70	337.6		9.50	335.4	
10/11/2011	358.50	1.03	7.00	338.3		9.30	335.6	
10/25/2011	356.00	1.03	7.10	338.2		9.50	335.4	
11/29/2011	355.00	1.51	7.50	337.8		9.60	335.3	
12/28/2011	355.00	0.28	6.90	338.4		9.60	335.3	
1/26/2012	355.00	1.05	7.40	337.9		9.40	335.5	
2/28/2012	355.00	0.73	7.80	337.5		9.40	335.5	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2012	352.40	0.73	7.90	337.4		9.60	335.3	
4/23/2012	352.10	1.35	7.90	337.4		9.40	335.5	
5/30/2012	352.20	0.07	7.80	337.5		9.40	335.5	
6/13/2012	352.20		7.70	337.6		9.40	335.5	
6/26/2012	352.20	0.00	7.60	337.7		9.50	335.4	
7/24/2012	352.20	0.23	8.10	337.2		9.40	335.5	
8/8/2012	352.20	0.23	8.30	337.0		9.60	335.3	
8/28/2012	351.80	0.00	7.60	337.7		9.40	335.5	
8/29/2012	351.80	0.00	8.00	337.3		9.70	335.2	
9/25/2012	351.30	0.00	7.40	337.9		9.40	335.5	
10/31/2012	351.00	0.09	7.60	337.7		9.40	335.5	
11/27/2012	351.00	0.87	7.50	337.8		9.50	335.4	
12/12/2012	351.00	1.13	8.00	337.3		9.50	335.4	
1/29/2013	366.10	1.30	8.30	337.0		9.50	335.4	
2/21/2013	372.10	0.42	8.10	337.2		9.50	335.4	
3/28/2013	371.90	0.79	8.30	337.0		9.40	335.5	
4/25/2013	371.40	0.00	7.90	337.4		9.40	335.5	
5/22/2013	370.90	0.00	8.50	336.8		9.60	335.3	
6/25/2013	370.20	0.00	8.30	337.0		9.40	335.5	
7/23/2013	369.40	0.00	8.30	337.0		9.40	335.5	
8/21/2013	368.60	0.00	8.30	337.0	Wet	9.50	335.4	
9/25/2013	367.70	0.00	8.30	337.0	Dry	9.45	335.5	
10/30/2013	366.90	0.00	8.40	336.9	Dry	9.10	335.8	
11/26/2013	366.50	0.59	8.30	337.0	Wet	10.90	334.0	Wet
12/17/2013	366.20	0.70	8.30	337.0	Wet	9.50	335.4	
1/28/2014	365.50	0.00	8.40	336.9		9.50	335.4	
2/25/2014	365.40	0.76	8.40	336.9	Wet	9.60	335.3	Dry
3/25/2014	365.30		8.30	337.0		9.50	335.4	
3/28/2014	365.30	2.02	8.30	337.0		9.40	335.5	
4/25/2014	364.50	0.52	8.30	337.0		9.50	335.4	
5/28/2014	363.80	0.00	8.10	337.2		9.40	335.5	
6/25/2014	363.00	0.00	8.40	336.9		9.60	335.3	
7/30/2014	361.90	0.00	8.40	336.9		9.60	335.3	

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SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
8/27/2014	361.10	0.04	8.30	337.0		9.50	335.4	
9/23/2014	360.50	0.00	8.20	337.1		9.50	335.4	Wet
10/29/2014	359.50	0.00	8.30	337.0		9.40	335.5	
11/24/2014	359.40	0.32	8.20	337.1		9.50	335.4	
12/30/2014	359.40	3.98	8.30	337.0		9.50	335.4	
1/27/2015	359.00	1.42	8.20	337.1		9.50	335.4	
2/26/2015	358.60	0.46	8.30	337.0		9.50	335.4	
3/27/2015	358.00	0.63	8.30	337.0		9.60	335.3	
4/26/2015	331.00	0.22	8.40	336.9	Wet	9.60	335.3	Wet
5/27/2015	332.00	1.79	8.40	336.9	Wet	9.60	335.3	Wet
6/23/2015	331.00	0.00	9.50	336.9	Wet	11.00	335.4	Dry
7/30/2015	331.00	0.00	8.30	338.1	Dry	10.90	335.5	Wet
8/25/2015	331.00	0.00	9.50	336.9	Wet	10.90	335.5	Wet
9/30/2015	331.00	1.97	9.50	336.9	Dry	11.00	335.4	Wet
10/29/2015	331.00	0.18	9.50	336.9	Dry	11.00	335.4	Dry
11/25/2015	331.00	0.17	9.50	336.9	Dry	11.00	335.4	Dry
12/30/2015	331.00	1.42	9.50	336.9	Dry	11.00	335.4	Dry
1/26/2016	343.70	2.97	9.30	337.1		10.75	335.6	
2/24/2016	363.80	0.26	9.50	336.9	Dry	10.90	335.5	
3/29/2016	374.90	1.50	9.50	336.9	Dry	11.00	335.4	
4/28/2016	375.50	0.09	9.50	336.9	Dry	11.00	335.4	
5/24/2016	374.40	0.13	9.50	336.9	Dry	11.00	335.4	
6/29/2016	373.70	0.00	9.50	336.9	Dry	11.00	335.4	
7/28/2016	372.20	0.00	9.50	336.9	Dry	11.00	335.4	
8/25/2016	367.10	0.00	9.50	336.9	Dry	10.97	335.4	
9/27/2016	363.30	0.00	9.50	336.9	Dry	11.00	335.4	
10/25/2016	362.10	0.82	9.50	336.9	Dry	10.90	335.5	
11/22/2016	361.80	1.69						
12/28/2016	368.55	3.61	9.50	336.9	Dry	10.95	335.4	
1/25/2017	375.80	6.48	9.50	336.9	Dry	10.80	335.6	
2/28/2017	375.90	3.95	9.50	336.9	Dry	11.00	335.4	
3/15/2017	375.80	3.61	9.50	336.9	Dry	11.00	335.4	
3/28/2017	375.50	0.09	9.50	336.9	Dry	11.00	335.4	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/26/2017	375.00	0.04	9.50	336.9	Dry	11.00	335.4	
5/23/2017	374.60	0.00	9.50	336.9	Dry	11.00	335.4	
6/22/2017	373.80	0.00	9.50	336.9	Dry	11.00	335.4	
7/26/2017	371.40	0.00	9.50	336.9	Dry	11.00	335.4	
8/30/2017	368.60	0.00	9.50	336.9	Dry	11.00	335.4	
9/28/2017	364.80	0.00	9.50	336.9	Dry	11.00	335.4	
10/26/2017	359.00	0.00	9.50	336.9	Dry	11.00	335.4	
11/29/2017	357.80	0.15	9.50	336.9	Dry	11.00	335.4	
12/27/2017	357.30	0.00	9.50	336.9	Dry	11.00	335.4	
1/24/2018	357.30	1.84	9.50	336.90	Dry	11.00	335.40	
2/21/2018	361.00	0.18	9.50	336.90	Dry	11.00	335.40	
3/28/2018	366.90	2.19	9.50	336.90	Dry	11.00	335.40	
4/25/2018	367.00	0.05	9.50	336.90	Dry	11.00	335.40	
5/30/2018	366.40	0.36	9.50	336.90	Dry	11.00	335.40	
6/28/2018	365.60	0.00	9.50	336.90	Dry	11.00	335.40	
7/25/2018	363.20	0.00	9.50	336.90	Dry	11.00	335.40	
8/28/2018	357.30	0.00	9.50	336.90	Dry	11.00	335.40	
9/27/2018	354.60	0.00	9.50	336.90	Dry	11.00	335.40	
10/24/2018	351.90	1.49	9.50	336.90	Dry	11.00	335.40	
11/28/2018	348.60	0.56	9.50	336.90	Dry	11.00	335.40	
12/21/2018	348.80	2.04	9.50	336.90	Dry	11.00	335.40	
1/30/2019	348.90	4.41	9.50	336.90	Dry	11.00	335.40	
2/27/2019	351.70	8.05	9.50	336.90	Dry	11.00	335.40	
3/28/2019	351.60	2.00	9.50	336.90	Dry	11.00	335.40	
4/25/2019	348.70	0.10	9.5	336.90	Dry	11	335.40	
5/30/2019	348.30	0.99	9.5	336.90	Dry	11	335.40	
6/26/2019	344.50	0.11	9.5	336.90	Dry	11	335.40	
7/5/2019	343.30	0.00	9.5	336.90	Dry	11	335.40	
7/30/2019	341.00	0.00	9.5	336.90	Dry	11	335.40	
8/27/2019	341.00	0.00	9.5	336.90	Dry	11	335.40	
9/26/2019	341.00	0.00	9.5	336.90	Dry	11	335.40	
10/24/2019	341.00	0.00	9.5	336.90	Dry	11	335.40	
11/26/2019	341.00	2.60	9.5	336.90	Dry	11	335.40	

Notes:

1. Readings in red are classified as erroneous

TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/16/2019	341.00	4.93	9.5	336.90	Dry	11	335.40	
1/28/2020	341.00	0.21	9.8	336.60	Dry	11	335.40	
2/26/2020	360.60	0.39	9.5	336.90	Dry	11	335.40	
3/24/2020	370.30	3.75	9.5	336.90	Dry	11	335.40	
4/23/2020	375.30	4.63	9.5	336.90	Dry	11	335.40	
5/28/2020	374.80	0.04			No data received			No data received
6/23/2020	373.60	0.00			No data received			No data received
7/29/2020	370.70	0.00			No data received			No data received
8/27/2020	367.80	0.00			No data received			No data received
9/29/2020	364.90	0.00			No data received			No data received
10/29/2020	354.80	0.00			No data received			No data received
11/24/2020	343.00	0.32			No data received			No data received
12/29/2020	343.50	1.14	9.5	336.90	Dry	11	335.40	
1/27/2021	355.70	2.45	9.50	336.90	Dry	11.00	335.40	
2/25/2021	365.90	0.03	9.50	336.90	Dry	11.00	335.40	
3/23/2021	370.80	1.27	9.50	336.90	Dry	11.00	335.40	
4/28/2021	371.70	0.03	9.50	336.90	Dry	11.00	335.40	
5/26/2021	370.00	0.05	9.50	336.90	Dry	11.00	335.40	
6/30/2021	366.30	0.00	9.50	336.90	Dry	11.00	335.40	
7/27/2021	361.50	0.03	9.50	336.90	Dry	11.00	335.40	
8/25/2021	356.30	0.00	9.50	336.90	Dry	11.00	335.40	
9/28/2021	350.60	0.03	7.50	338.90	Dry	11.00	335.40	
10/27/2021	343.50	0.79	9.50	336.90	Dry	11.00	335.40	
11/25/2021	343.40	0.00	9.50	336.90	Dry	11.00	335.40	
12/21/2021	348.90	6.14	9.00	337.40	Dry	11.00	335.40	
1/25/2022	372.70	0.01	9.50	336.90	Dry	11.00	335.40	Dry
2/23/2022	374.60	0.32	9.50	336.90	Dry	11.00	335.40	Dry
3/29/2022	370.90	1.21	9.50	336.90	Dry	11.00	335.40	Dry
4/26/2022	367.80	0.04	9.50	336.90	Dry	11.00	335.40	Dry
5/25/2022	360.70	0.03	9.50	336.90	Dry	11.00	335.40	Dry
6/29/2022	343.70	0.00	9.50	336.90	Dry	11.00	335.40	Dry
7/26/2022	343.10	0.00	9.50	336.90	Dry	11.00	335.40	Dry
8/30/2022	342.00	0.03	9.50	336.90	Dry	11.00	335.40	Dry

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			VBW/8			VBW/9		
Top of Well Elevation -->			345.30	346.4	Raised 6/23/2015	344.90	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			336.80	336.8		335.40	335.4	
Depth of Well			8.50	9.6		9.50	11.0	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
9/29/2022	342.00	0.32	10.50	335.90	Dry	11.30	335.10	Dry
10/26/2022	342.00	0.32	10.50	335.90	Dry	11.30	335.10	Dry
11/23/2022	342.00	2.04	9.50	336.90	Dry	11.00	335.40	Dry
12/28/2022	341.60	2.11	10.20	336.20	Dry	11.20	335.20	Dry
1/26/2023	342.70	7.19	10.20	336.20	Dry	11.10	335.30	Dry
2/28/2023	343.50	3.28	8.50	337.90	Dry	10.40	336.00	
3/29/2023	346.30	6.30	10.60	335.80	Dry	11.70	334.70	Dry
4/25/2023	346.30	0.14	9.50	336.90	Dry	11.00	335.40	Dry
5/24/2023	346.00	1.15	9.50	336.90	Dry	11.00	335.40	Dry
6/28/2023	345.80	0.11	9.5	336.90	Dry	11.00	335.40	Dry
7/27/2023	343.90	0.00	0		Omitted	11.00	335.40	Dry
8/29/2023	343.00	2.25	8.26	338.14	Dry	10.14	336.26	
9/27/2023	342.70	0.00	9.50	336.90	Dry	11.00	335.40	Dry
10/26/2023	342.00	0.18	9.50	336.90	Dry	11.00	335.40	Dry
11/29/2023	346.30	0.70	9.50	336.90	Dry	11.00	335.40	Dry
12/21/2023	341.40	1.08	9.50	336.90	Dry	11.00	335.40	Dry
1/30/2024	341.50	2.03	9.50	335.80		11.00	333.90	
2/22/2024	344.00	9.11	9.50	335.80		11.00	333.90	
3/26/2024	343.00	3.07	9.50	335.80		11.00	333.90	
4/25/2024	343.00	1.62	9.50	335.80		11.00	333.90	
5/1/2024	343.30	0	9.50	335.80		11.00	333.90	
5/23/2024	343.00	0.2	9.50	335.80		11.00	333.90	
6/27/2024	342.00	0	9.50	335.80		11.00	333.90	
7/25/2024	343.00	0	9.50	335.80		11.00	333.90	
8/28/2024	343.00	0	9.50	335.80		11.00	333.90	
9/25/2024	343.00	0	9.50	335.80		11.00	333.90	
10/29/2024	343.00	0	9.50	335.80		11.00	333.90	
11/26/2024	343.00	0.11	9.50	335.80		11.00	333.90	
12/18/2024	343.00	0.01	9.50	335.80		11.00	333.90	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
1/1/2008					
2/1/2008					
3/25/2008	365.10				
4/25/2008	366.40				
5/28/2008	365.30				
6/25/2008	365.00				
7/18/2008	364.50				
8/25/2008	363.50				
9/25/2008	363.00				
10/21/2008	362.00				
11/25/2008	365.00				
12/23/2008	365.00				
1/26/2009	364.50		32.00	8.45	
2/24/2009	364.50		32.00	8.45	
3/23/2009	368.50		37.85	10.00	
4/27/2009	367.50		37.85	10.00	
5/22/2009	367.00		32.00	8.45	
6/29/2009	372.00		56.78	15.00	
7/31/2009	371.00		37.85	10.00	
8/26/2009	370.00		56.78	15.00	
9/29/2009	369.50		45.42	12.00	
10/30/2009	369.00		37.85	10.00	
11/30/2009	368.00		37.85	10.00	
12/30/2009	368.00		37.85	10.00	
3/1/2010	368.00		131.00	34.61	Drain was clogges
3/30/2010	368.00		46.80	12.36	
4/4/2010	368.70		38.40	10.14	
4/27/2010	368.40		40.20	10.62	
5/26/2010	367.84		37.50	9.91	
6/29/2010	367.00		39.00	10.30	
7/27/2010	367.00		31.50	8.32	
8/27/2010	366.80		31.24	8.25	
9/28/2010	366.80		31.57	8.34	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
10/26/2010	368.50		35.28	9.32	
11/30/2010	371.40		37.50	9.91	
12/28/2010	374.70		75.00	19.81	
1/4/2011	374.80		69.00	18.23	
1/6/2011	374.80				
1/7/2011	374.80				
1/8/2011	374.80		30.30	8.00	
1/9/2011	374.80		31.20	8.24	
1/10/2011	374.80				
1/11/2011	374.80		28.57	7.55	
1/17/2011	374.80				
1/19/2011	374.70		33.80	8.93	
1/21/2011	374.80				
1/27/2011	374.60		45.00	11.89	
2/3/2011	374.60				
2/8/2011	374.70				
2/28/2011	374.70		34.30	9.06	
3/28/2011	372.50	2.35	52.92	13.98	
4/28/2011	372.10	0.27	11.70	3.09	
5/18/2011	371.80	0.03	16.60	4.39	
5/25/2011	371.70	0.30	13.00	3.43	
6/28/2011	370.90	0.03	29.10	7.69	
7/26/2011	370.30	0.03	3.64	0.96	
8/24/2011	369.60	0.03	7.00	1.85	
8/30/2011	369.40		7.00	1.85	
9/13/2011	364.30	0.00	31.50	8.32	
9/27/2011	361.90		0.05	0.01	
10/11/2011	358.50	1.03	0.05	0.01	
10/25/2011	356.00	1.03	0.00	0.00	
11/29/2011	355.00	1.51	0.00	0.00	
12/28/2011	355.00	0.28	0.00	0.00	
1/26/2012	355.00	1.05	0.00	0.00	
2/28/2012	355.00	0.73	0.00	0.00	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
3/27/2012	352.40	0.73	0.00	0.00	
4/23/2012	352.10	1.35	0.00	0.00	
5/30/2012	352.20	0.07	0.00	0.00	
6/13/2012	352.20		0.00	0.00	
6/26/2012	352.20	0.00	0.00	0.00	
7/24/2012	352.20	0.23	0.00	0.00	
8/8/2012	352.20	0.23	0.00	0.00	
8/28/2012	351.80	0.00	0.00	0.00	
8/29/2012	351.80	0.00	0.00	0.00	
9/25/2012	351.30	0.00	0.00	0.00	
10/31/2012	351.00	0.09	0.00	0.00	reservoir was low
11/27/2012	351.00	0.87	0.00	0.00	reservoir was low
12/12/2012	351.00	1.13	0.00	0.00	reservoir was low
1/29/2013	366.10	1.30			reservoir was low
2/21/2013	372.10	0.42			reservoir was low
3/28/2013	371.90	0.79			reservoir was low
4/25/2013	371.40	0.00			reservoir was low
5/22/2013	370.90	0.00			reservoir was low
6/25/2013	370.20	0.00			reservoir was low
7/23/2013	369.40	0.00			reservoir was low
8/21/2013	368.60	0.00			reservoir was low
9/25/2013	367.70	0.00			reservoir was low
10/30/2013	366.90	0.00	23.60	6.23	reservoir was low
11/26/2013	366.50	0.59	22.20	5.86	reservoir was low
12/17/2013	366.20	0.70	23.60	6.23	reservoir was low
1/28/2014	365.50	0.00	18.42	4.87	reservoir was low
2/25/2014	365.40	0.76	15.00	3.96	reservoir was low
3/25/2014	365.30		17.28	4.56	reservoir was low
3/28/2014	365.30	2.02	11.82	3.12	vault is being relocated
4/25/2014	364.50	0.52	18.00	4.76	vault is being relocated
5/28/2014	363.80	0.00	14.98	3.96	vault is being relocated
6/25/2014	363.00	0.00	14.19	3.75	vault is being relocated
7/30/2014	361.90	0.00	14.68	3.88	vault is being relocated

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
8/27/2014	361.10	0.04	15.20	4.02	vault is being relocated
9/23/2014	360.50	0.00	13.20	3.49	vault is being relocated
10/29/2014	359.50	0.00	12.00	3.17	vault is being relocated
11/24/2014	359.40	0.32	8.70	2.30	vault is being relocated
12/30/2014	359.40	3.98	8.10	2.14	seepage point is back
1/27/2015	359.00	1.42	6.90	1.82	
2/26/2015	358.60	0.46	6.40	1.69	
3/27/2015	358.00	0.63	6.10	1.61	
4/26/2015	331.00	0.22	0.00	0.00	
5/27/2015	332.00	1.79	0.00	0.00	
6/23/2015	331.00	0.00	0.00	0.00	
7/30/2015	331.00	0.00	0.00	0.00	
8/25/2015	331.00	0.00	0.00	0.00	
9/30/2015	331.00	1.97	0.00	0.00	
10/29/2015	331.00	0.18	0.00	0.00	
11/25/2015	331.00	0.17	0.00	0.00	
12/30/2015	331.00	1.42	0.00	0.00	
1/26/2016	343.70	2.97	0.00	0.00	
2/24/2016	363.80	0.26	0.00	0.00	
3/29/2016	374.90	1.50	0.85	0.22	
4/28/2016	375.50	0.09	3.90	1.03	
5/24/2016	374.40	0.13	4.20	1.11	
6/29/2016	373.70	0.00	4.60	1.22	
7/28/2016	372.20	0.00	5.10	1.35	
8/25/2016	367.10	0.00	3.84	1.01	
9/27/2016	363.30	0.00	1.80	0.48	
10/25/2016	362.10	0.82	3.40	0.90	
11/22/2016	361.80	1.69	4.86	1.28	
12/28/2016	368.55	3.61	6.12	1.62	
1/25/2017	375.80	6.48	22.00	5.81	
2/28/2017	375.90	3.95	22.30	5.89	
3/15/2017	375.80	3.61	22.30	5.89	
3/28/2017	375.50	0.09	25.70	6.79	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
4/26/2017	375.00	0.04	28.00	7.40	
5/23/2017	374.60	0.00	16.32	4.31	
6/22/2017	373.80	0.00	30.12	7.96	
7/26/2017	371.40	0.00	30.60	8.08	
8/30/2017	368.60	0.00	36.00	9.51	
9/28/2017	364.80	0.00	16.00	4.23	
10/26/2017	359.00	0.00	2.80	0.74	
11/29/2017	357.80	0.15	9.20	2.43	
12/27/2017	357.30	0.00	6.80	1.80	
1/24/2018	357.30	1.84	5.70	1.51	
2/21/2018	361.00	0.18	6.20	1.64	
3/28/2018	366.90	2.19	22.00	5.81	
4/25/2018	367.00	0.05	12.80	3.38	
5/30/2018	366.40	0.36	14.16	3.74	
6/28/2018	365.60	0.00	11.20	2.96	
7/25/2018	363.20	0.00	12.84	3.39	
8/28/2018	357.30	0.00	4.00	1.06	
9/27/2018	354.60	0.00	1.02	0.27	
10/24/2018	351.90	1.49	0.00	0.00	
11/28/2018	348.60	0.56	0.00	0.00	
12/21/2018	348.80	2.04	0.00	0.00	
1/30/2019	348.90	4.41	0.00	0.00	
2/27/2019	351.70	8.05	0.00	0.00	
3/28/2019	351.60	2.00	0.00	0.00	
4/25/2019	348.70	0.10	0.00	0.00	
5/30/2019	348.30	0.99	0.00	0.00	
6/26/2019	344.50	0.11	0.00	0.00	
7/5/2019	343.30	0.00	0.00	0.00	
7/30/2019	341.00	0.00	0.00	0.00	
8/27/2019	341.00	0.00	0.00	0.00	
9/26/2019	341.00	0.00	0.00	0.00	
10/24/2019	341.00	0.00	0.00	0.00	
11/26/2019	341.00	2.60	0.00	0.00	

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TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
12/16/2019	341.00	4.93	0.00	0.00	
1/28/2020	341.00	0.21	0.00	0.00	
2/26/2020	360.60	0.39	0.00	0.00	
3/24/2020	370.30	3.75	0.03	0.01	
4/23/2020	375.30	4.63	0.90	0.24	
5/28/2020	374.80	0.04	1.10	0.29	
6/23/2020	373.60	0.00	2.20	0.58	
7/29/2020	370.70	0.00	1.32	0.35	
8/27/2020	367.80	0.00	0.97	0.26	
9/29/2020	364.90	0.00	0.54	0.14	
10/29/2020	354.80	0.00	0.63	0.17	
11/24/2020	343.00	0.32	0.00	0.00	
12/29/2020	343.50	1.14	0.00	0.00	
1/27/2021	355.70	2.45	0.00	0.00	
2/25/2021	365.90	0.03	1.50	0.40	
3/23/2021	370.80	1.27	3.66	0.97	
4/28/2021	371.70	0.03	4.32	1.14	
5/26/2021	370.00	0.05	4.80	1.27	
6/30/2021	366.30	0.00	5.40	1.43	
7/27/2021	361.50	0.03	4.88	1.29	
8/25/2021	356.30	0.00	3.00	0.79	
9/28/2021	350.60	0.03	1.40	0.37	
10/27/2021	343.50	0.79	0.00	0.00	
11/25/2021	343.40	0.00	0.00	0.00	
12/21/2021	348.90	6.14	0.00	0.00	
1/25/2022	372.70	0.01	2.81	0.74	
2/23/2022	374.60	0.32	7.5	1.98	
3/29/2022	370.90	1.21	5.07	1.34	
4/26/2022	367.80	0.04	1.35	0.36	
5/25/2022	360.70	0.03	3.36	0.89	
6/29/2022	343.70	0.00	0.00	0.00	
7/26/2022	343.10	0.00	0.00	0.00	
8/30/2022	342.00	0.03	0.00	0.00	

Notes:

1. Readings in red are classified as erroneous

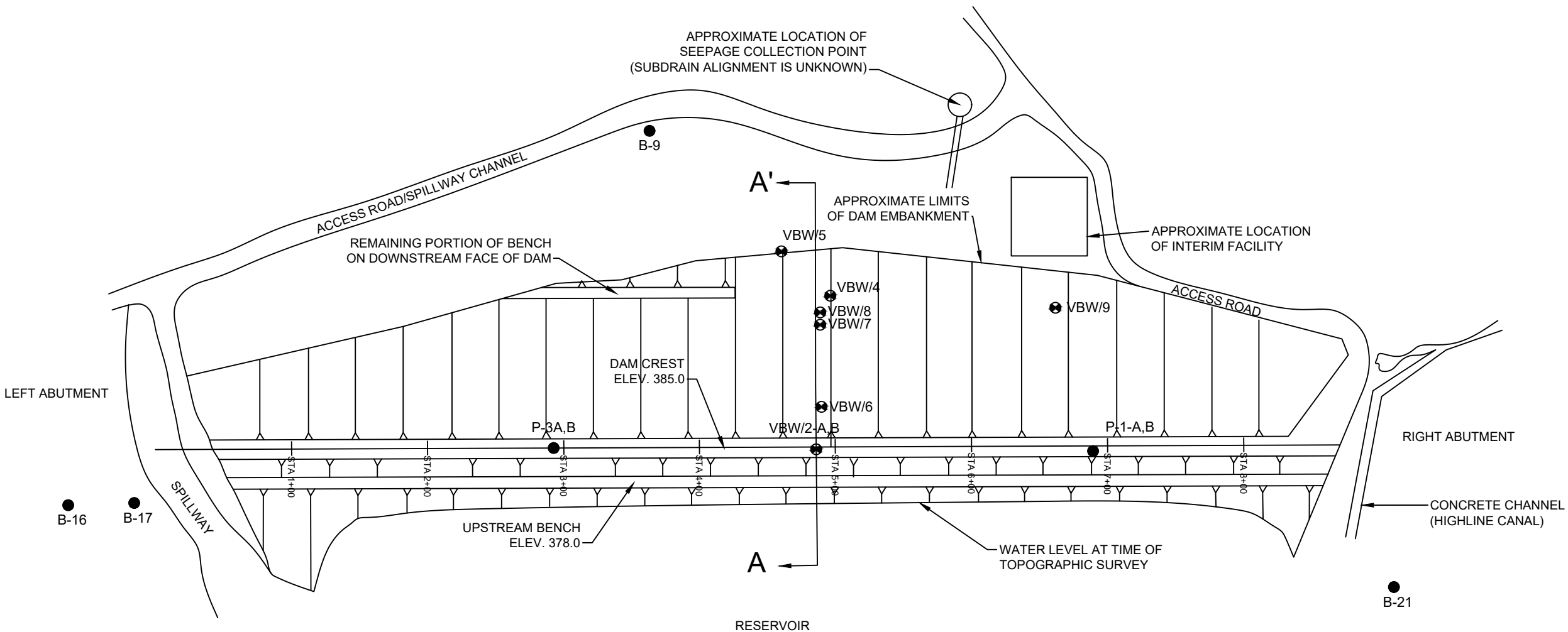
TABLE 3
SYPHON CANYON DAM
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS
JANUARY 2008 THROUGH DECEMBER 2024

Monitoring Well -->			Seepage Flow Point		
Top of Well Elevation -->			(liter/min)		
Bottom of Well Elevation -->					
Depth of Well					
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading		Comment
			(liter/min)	(gal/min)	
9/29/2022	342.00	0.32	0.00	0.00	
10/26/2022	342.00	0.32	0.00	0.00	
11/23/2022	342.00	2.04	0.00	0.00	
12/28/2022	341.60	2.11	0.00	0.00	
1/26/2023	342.70	7.19	0.00	0.00	
2/28/2023	343.50	3.28	0.00	0.00	
3/29/2023	346.30	6.30	0.00	0.00	
4/25/2023	346.30	0.14	0.00	0.00	
5/24/2023	346.00	1.15	0.00	0.00	
6/28/2023	345.80	0.11	0.00	0.00	
7/27/2023	343.90	0.00	0.00	0.00	
8/29/2023	343.00	2.25	0.00	0.00	
9/27/2023	342.70	0.00	0.00	0.00	
10/26/2023	342.00	0.18	0.00	0.00	
11/29/2023	346.30	0.70	0.00	0.00	
12/21/2023	341.40	1.08	0.00	0.00	
1/30/2024	341.50	2.03	0.00	0.00	
2/22/2024	344.00	9.11	0.00	0.00	
3/26/2024	343.00	3.07	0.00	0.00	
4/25/2024	343.00	1.62	0.00	0.00	
5/1/2024	343.30	0	0.00	0.00	
5/23/2024	343.00	0.2	0.00	0.00	
6/27/2024	342.00	0	0.00	0.00	
7/25/2024	343.00	0	0.00	0.00	
8/28/2024	343.00	0	0.00	0.00	
9/25/2024	343.00	0	0.00	0.00	
10/29/2024	343.00	0	0.00	0.00	
11/26/2024	343.00	0.11	0.00	0.00	
12/18/2024	343.00	0.01	0.00	0.00	

Notes:

1. Readings in red are classified as erroneous

Figures



LEGEND

- VBW/4 VIBRATING WIRE PIEZOMETER
- P-1A OPEN WELL PIEZOMETER
- STATION ALONG AXIS OF DAM
- LINE OF SECTION

NOTES:
(1) TOPOGRAPHIC SURVEY PROVIDED BY C&V CONSULTANTS ON 2/26/2011
(2) ELEVATIONS ARE IN FEET RELATIVE TO NGVD29
(3) SECTION A-A' IS SHOWN ON FIGURE 2

NOT TO SCALE

Annual Surveillance Report from Jan. 2024 to Dec. 2024 Syphon Canyon Dam Irvine, CA	GEI Consultants	SITE AND INSTRUMENTATION PLAN	
Irvine Ranch Water District Irvine, CA		Project 2305575	May 2025

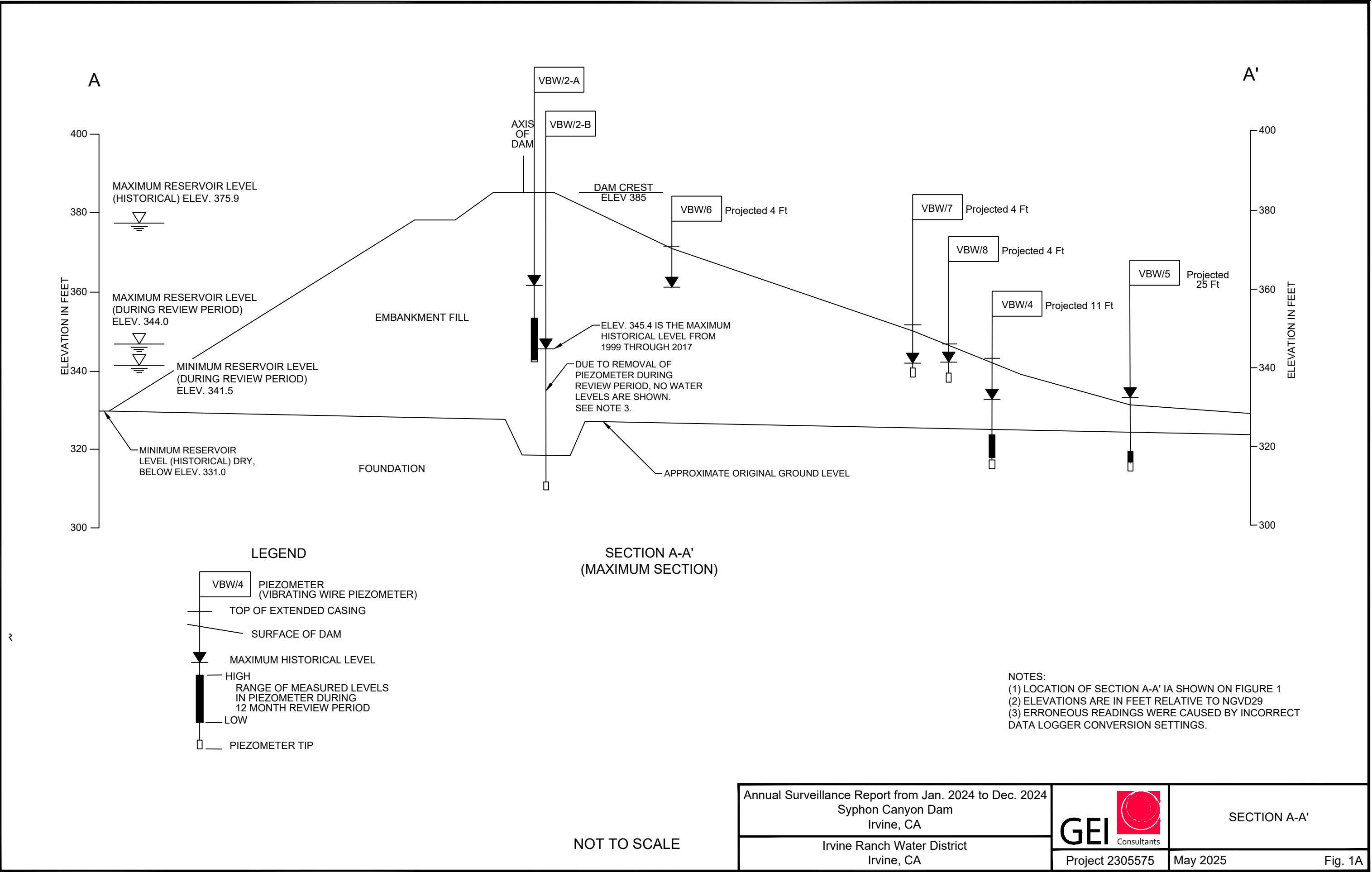


Figure 2
2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-1A, P-1B AND VBW/9
JANUARY 2023 THROUGH DECEMBER 2024

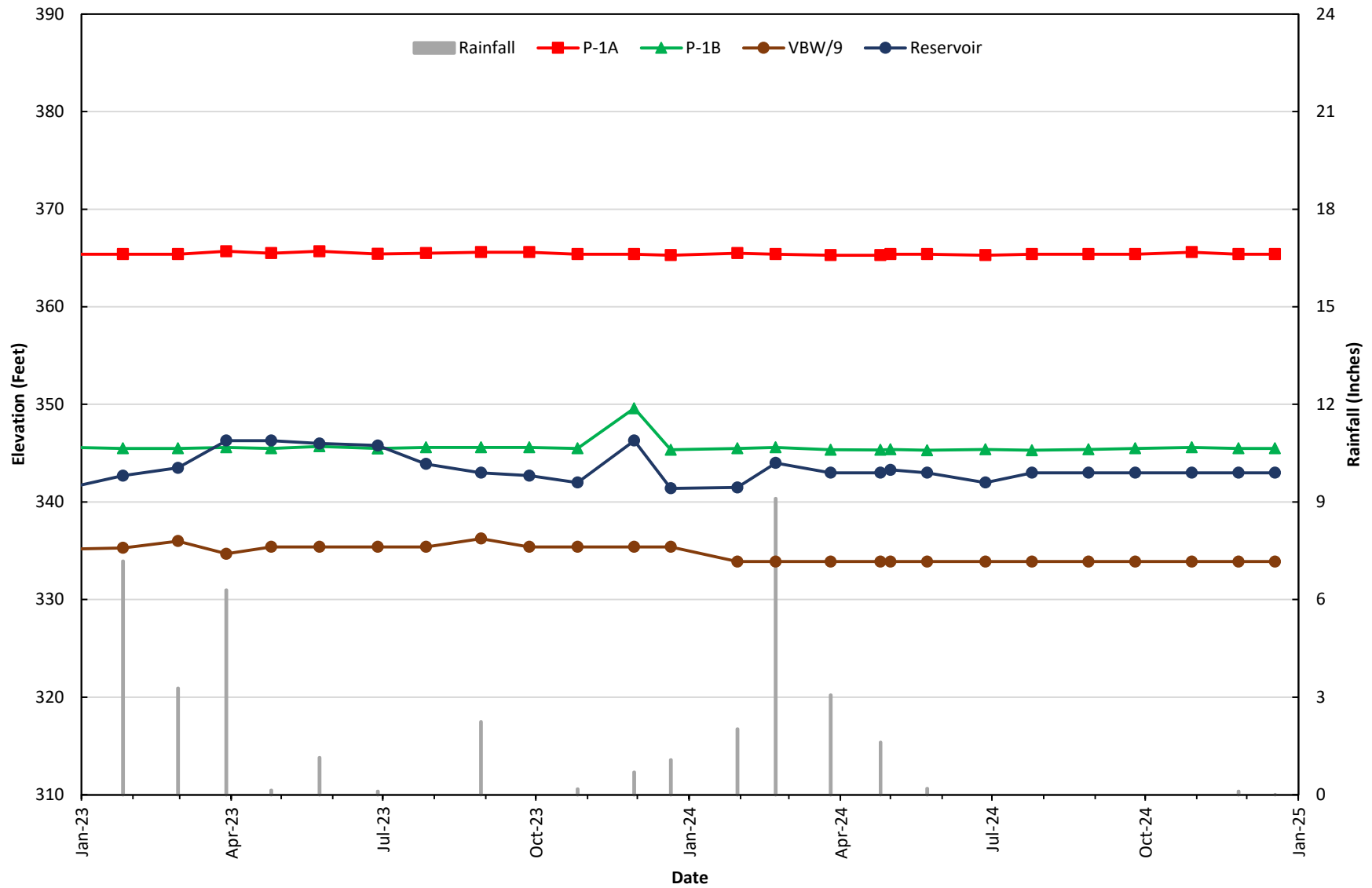


Figure 3
2-YR VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
VIBRATING WIRE PIEZOMETERS VBW/2-A, VBW/2-B, AND VBW/6
JANUARY 2023 THROUGH DECEMBER 2024

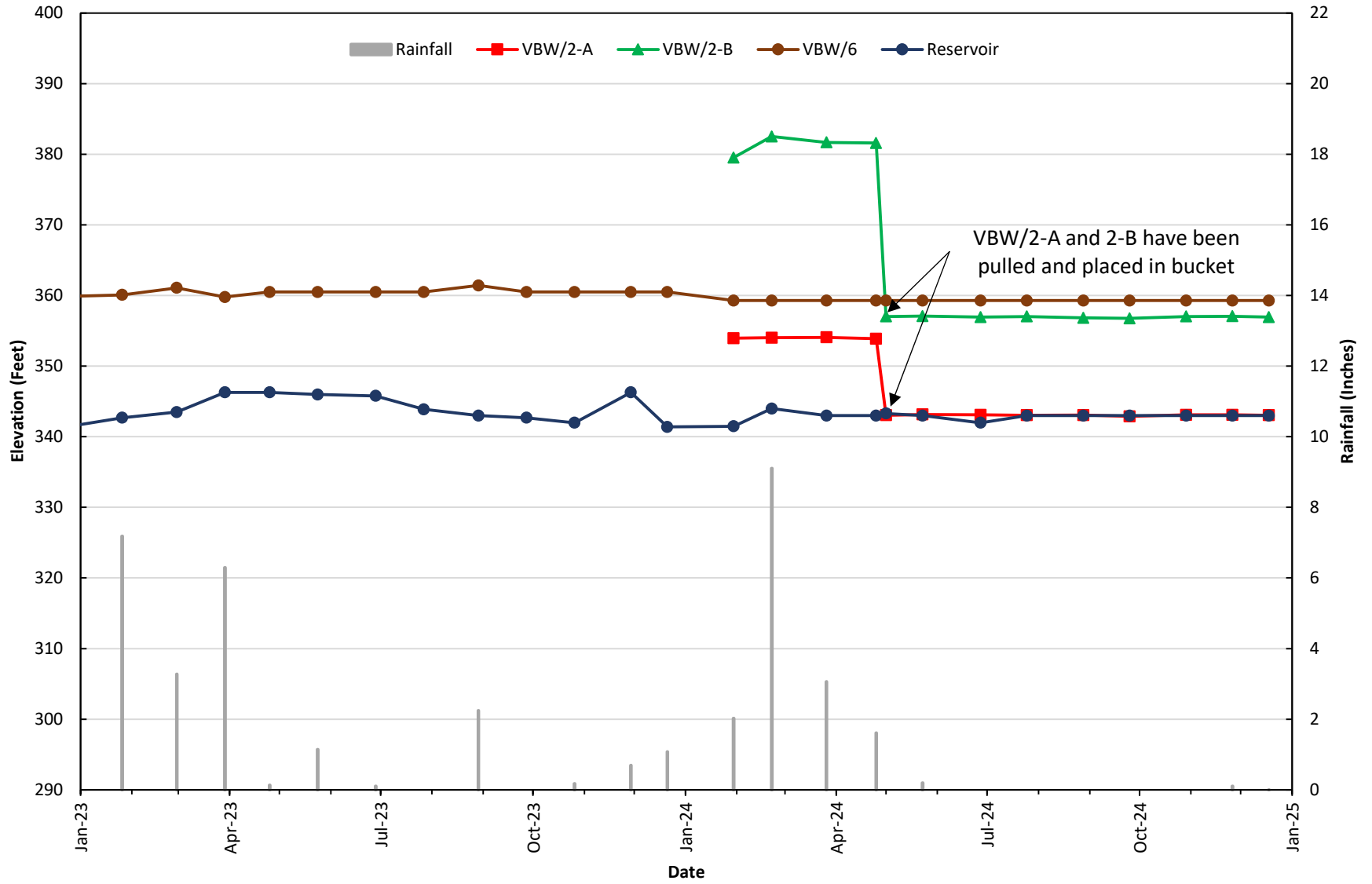


Figure 4
2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-3A AND P-3B
JANUARY 2023 THROUGH DECEMBER 2024

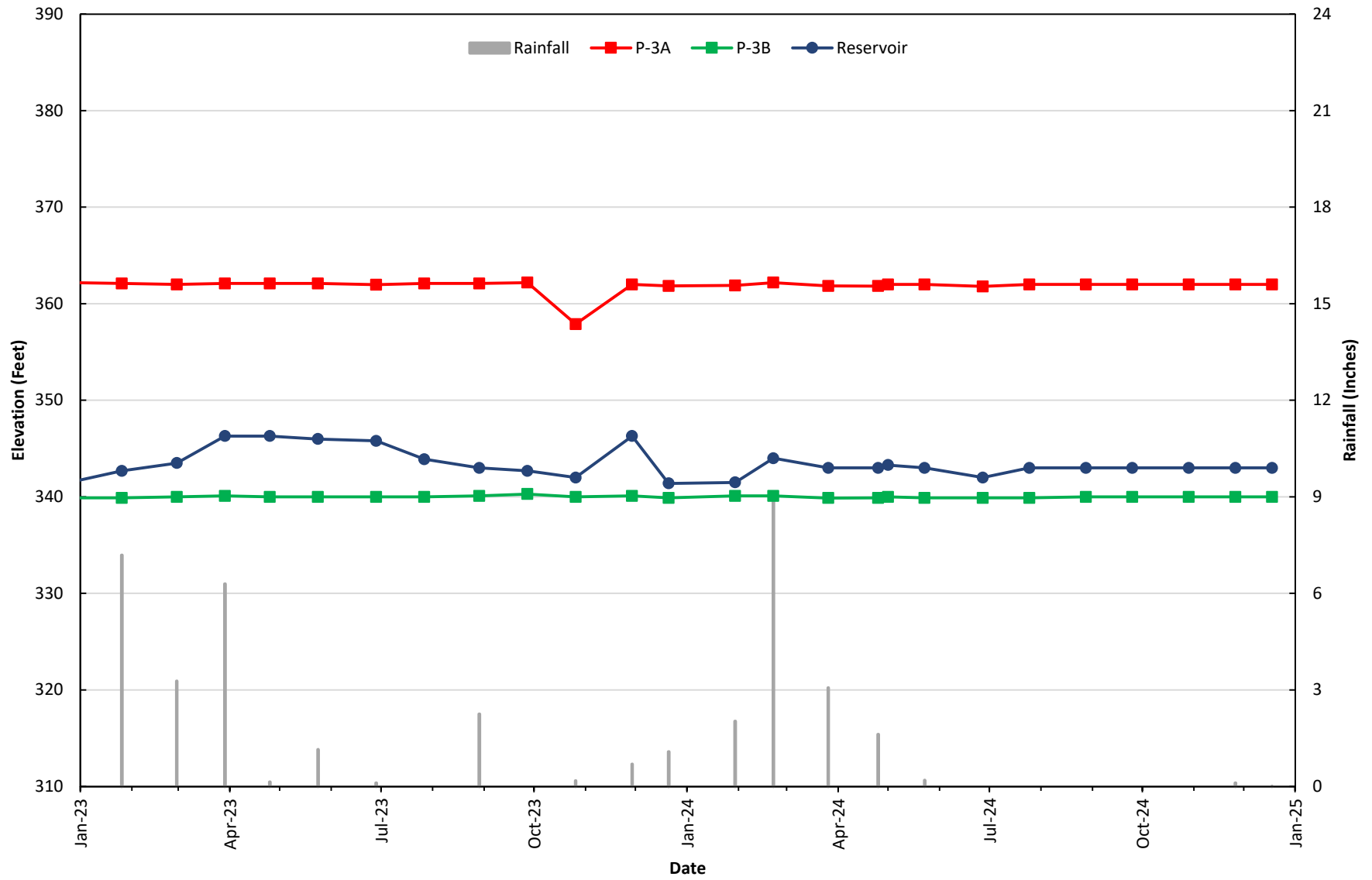


Figure 5
2-YR VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
VIBRATING WIRE PIEZOMETERS VBW/4, VBW/5, VBW/7, AND VBW/8
JANUARY 2023 THROUGH DECEMBER 2024

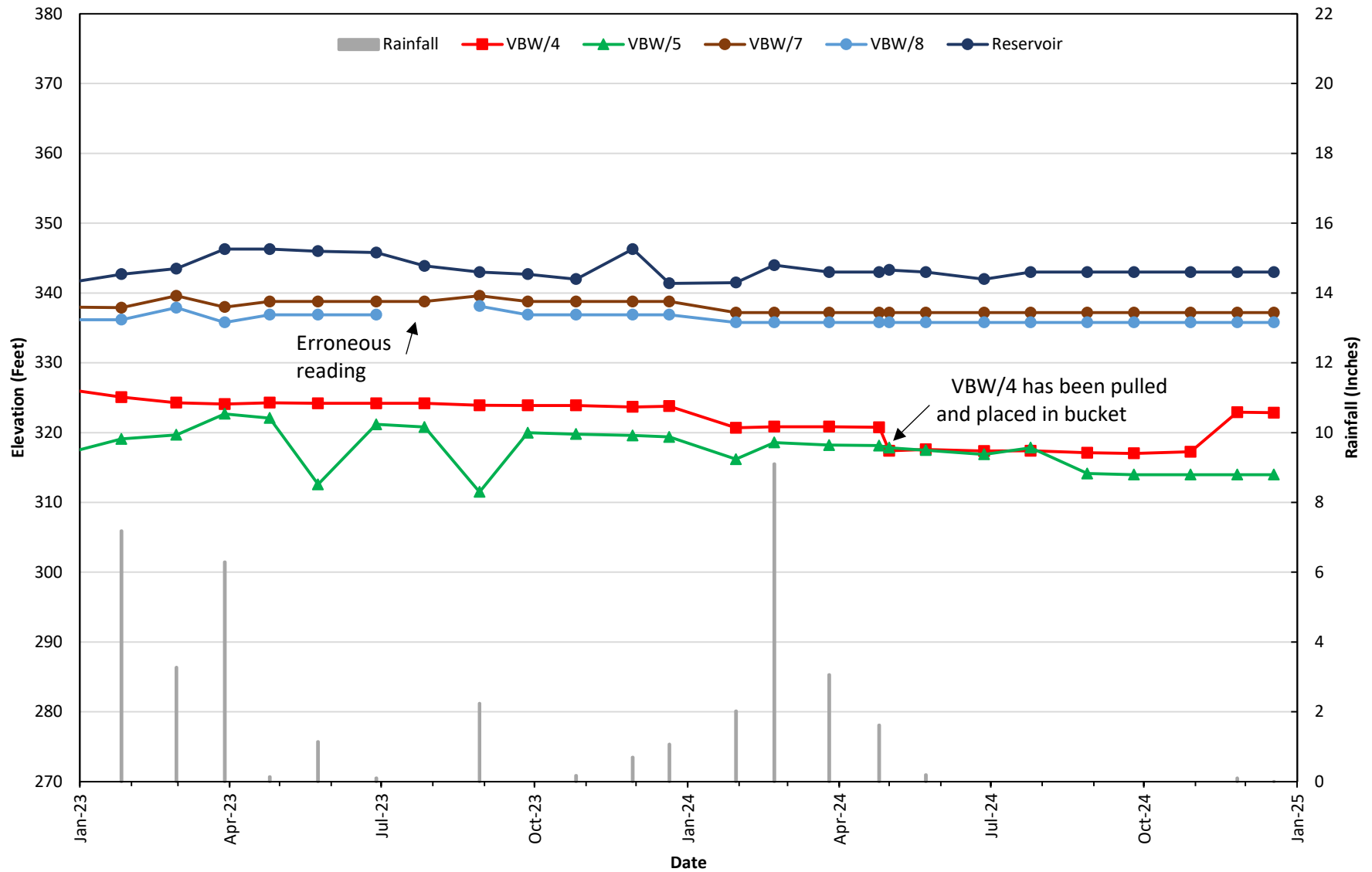


Figure 6
HISTORICAL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
PIEZOMETERS P-1A, P-1B, AND VBW/9
JANUARY 2014 THROUGH DECEMBER 2024

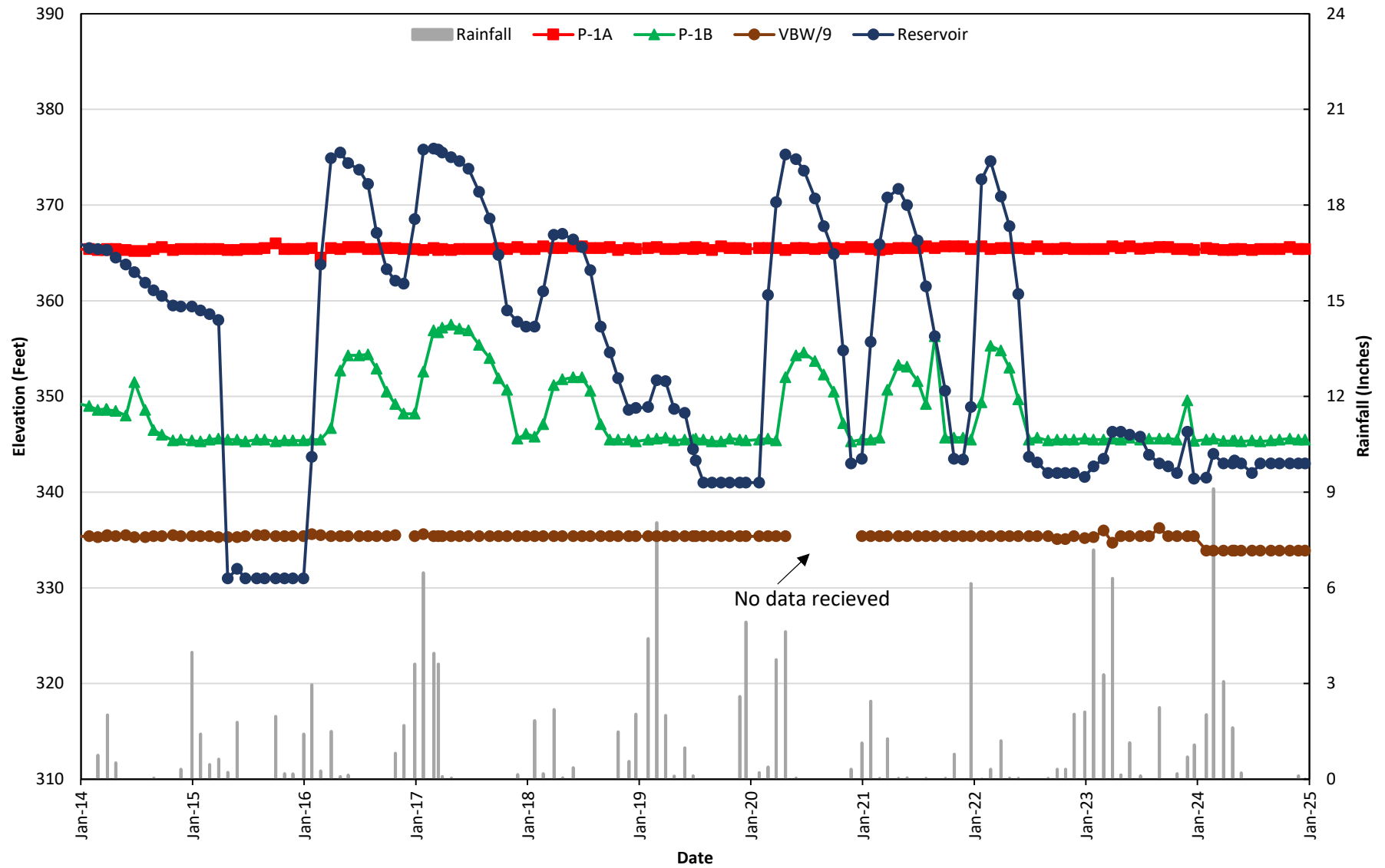


Figure 7
HISTORICAL VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
VIBRATING WIRE PIEZOMETERS VBW/2-A, VBW/2-B, AND VBW/6
JANUARY 2014 THROUGH DECEMBER 2024

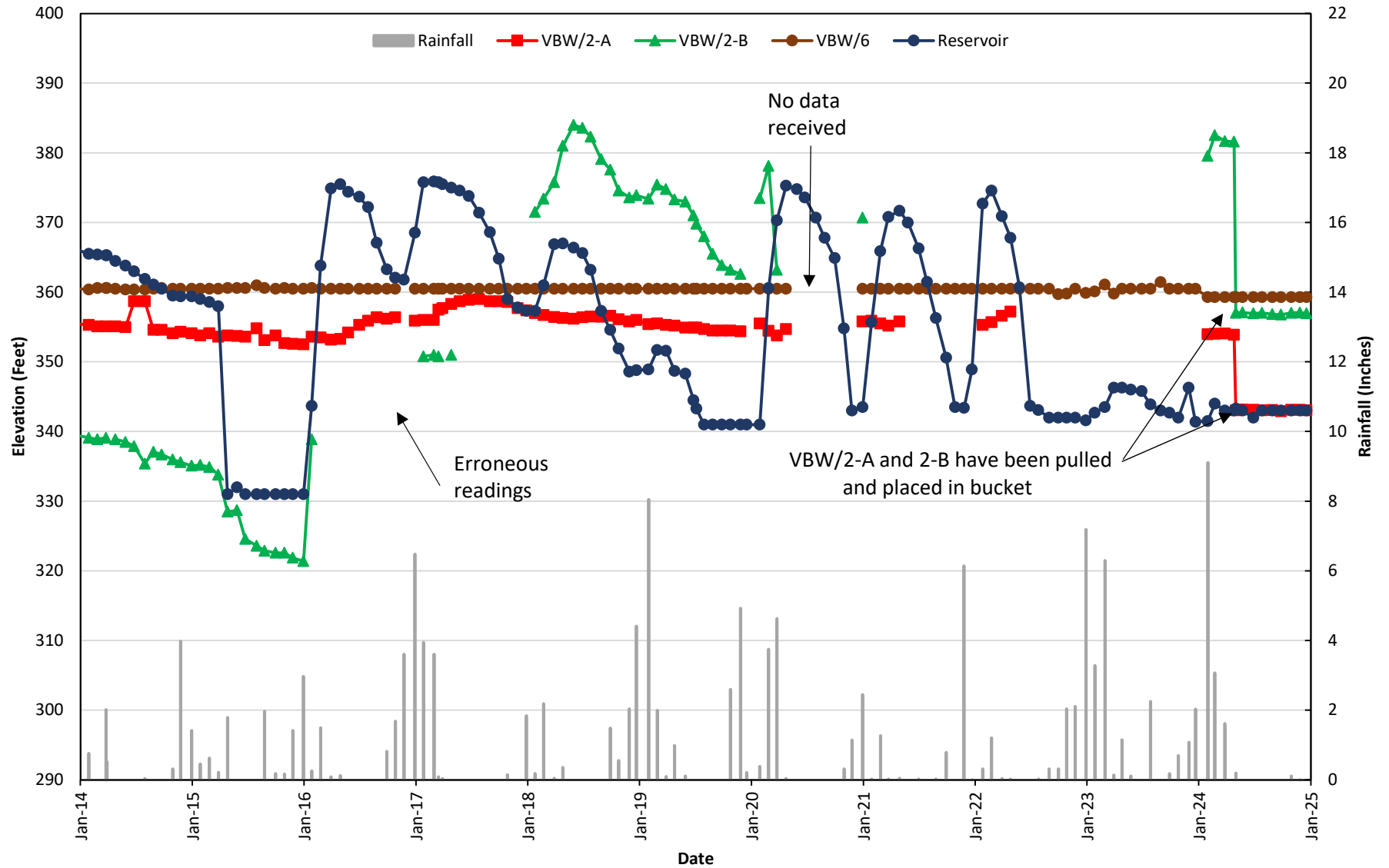


Figure 8
HISTORICAL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
PIEZOMETERS P-3A AND P-3B
JANUARY 2014 THROUGH DECEMBER 2024

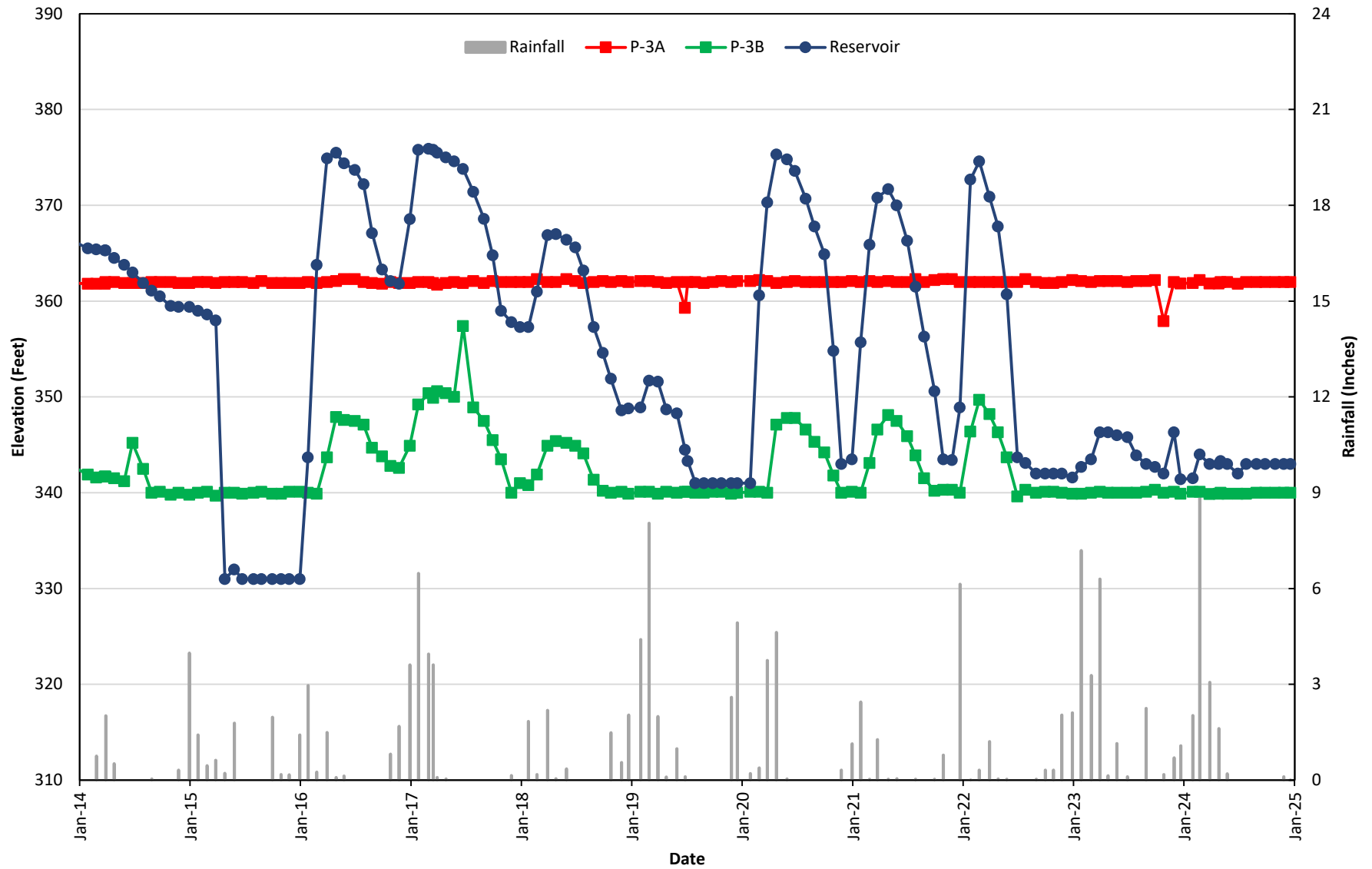


Figure 9
HISTORICAL VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
VIBRATING WIRE PIEZOMETERS VBW/4, VBW/5, VBW/7, AND VBW/8
JANUARY 2014 THROUGH DECEMBER 2024

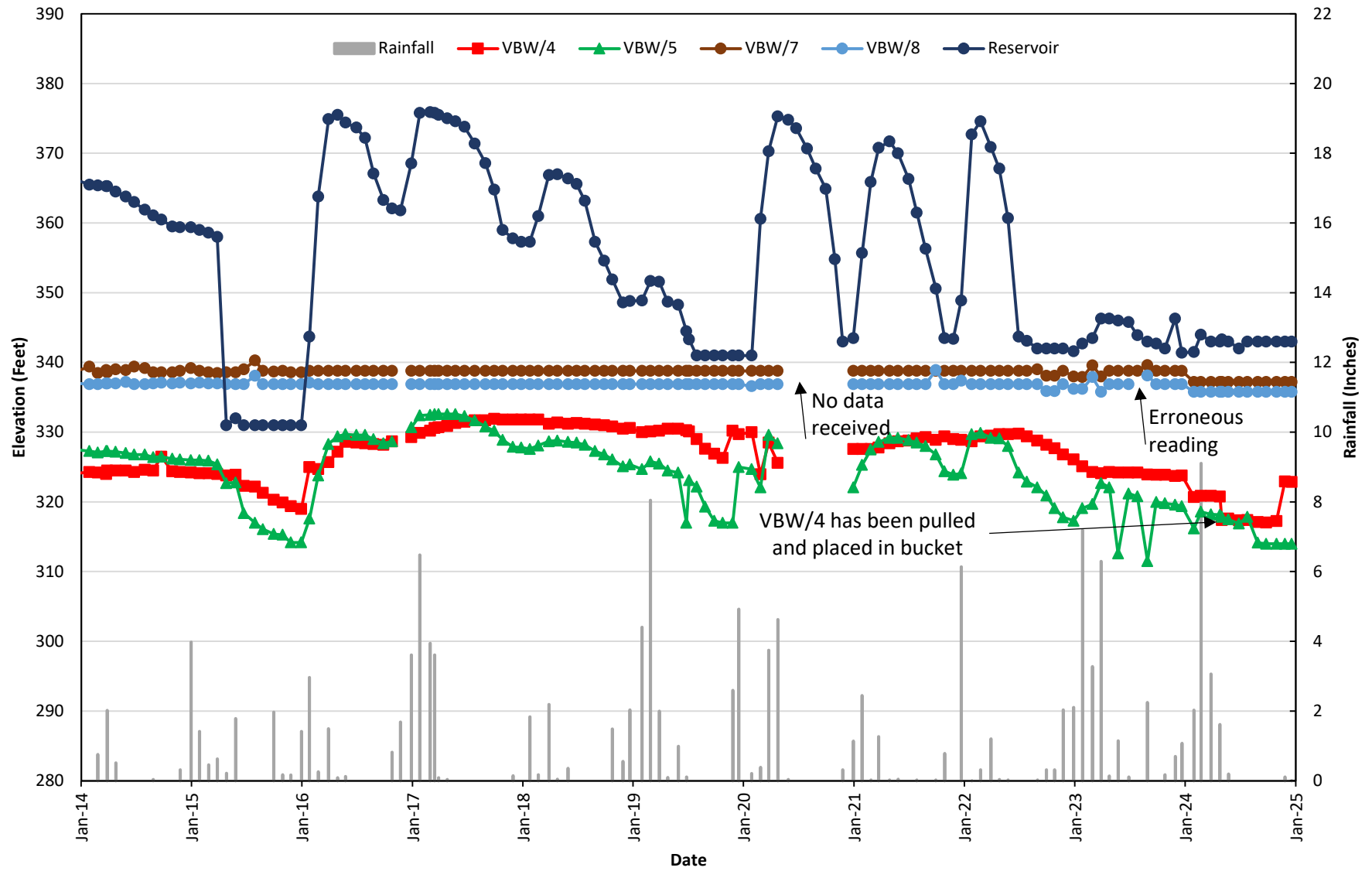


Figure 10
2-YR SEEPAGE, RESERVOIR WATER SURFACE ELEVATIONS, AND RAINFALL
SEEPAGE FLOW POINT
JANUARY 2023 THROUGH DECEMBER 2024

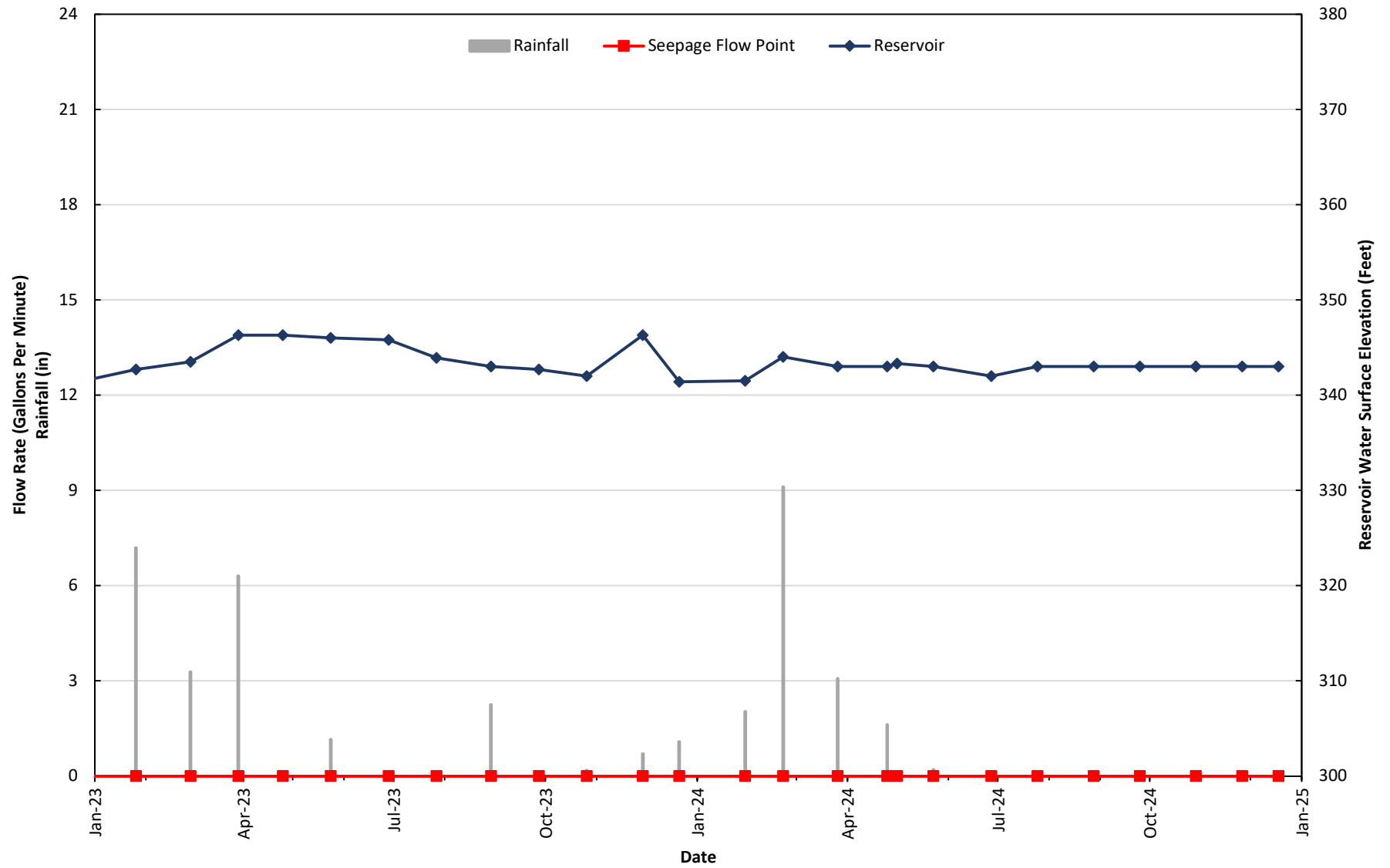
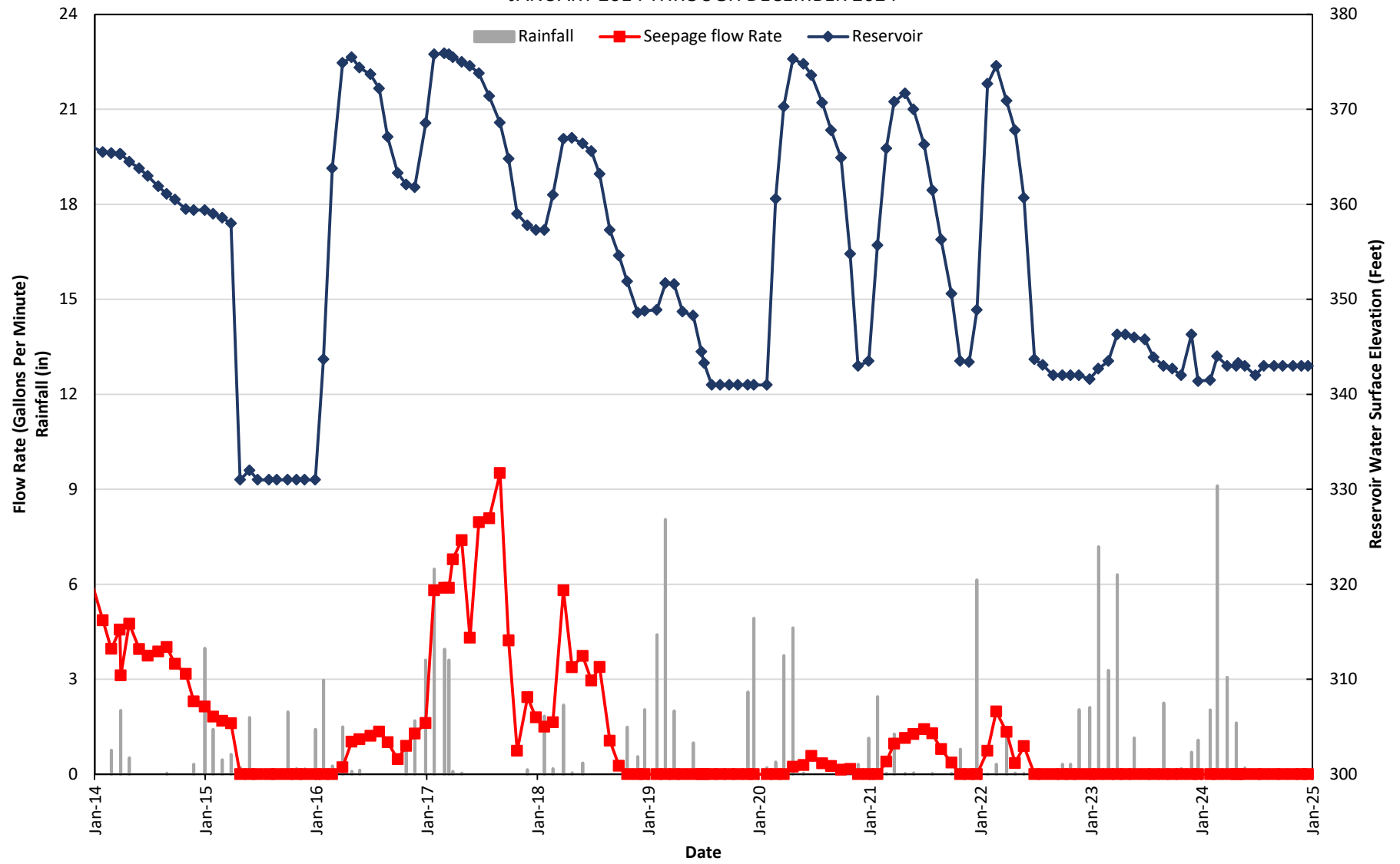


Figure 11
HISTORICAL SEEPAGE AND RESERVOIR WATER SURFACE ELEVATIONS
SEEPAGE FLOW POINT
JANUARY 2014 THROUGH DECEMBER 2024



Appendix

Inspection Photograph Log of Syphon Canyon Dam – March 25, 2024

IRWD Dam Outlet Valve Exercising Log

Inspection Photograph Log of Syphon Canyon Dam
March 25, 2024



Photo 1) Upstream face looking towards right abutment showing bench and low water level in reservoir.



Photo 2) Downstream face looking towards right abutment.



Photo 3) Crest, upstream face, and downstream face looking towards left abutment.



Photo 4) Syphon reservoir and reservoir staff gauge. Note low water level from recent rain.



Photo 5) Downstream face looking towards left abutment.



Photo 6) Downstream face from toe looking towards left abutment.



Photo 7) Spillway approach looking downstream.



Photo 8) Spillway channel looking downstream.



Photo 9) Outlet valve wheel and stem and reservoir staff gauge.



Photo 10) Drain outfall inside dry seepage vault.

IRWD Dam Outlet Exercising Log



IRWD DAM OUTLET VALVE EXERCISING LOG

SYPHON CANYON DAM VALVE EXERCISING

DATE	INITIALS	12" OUTLET # OF TURNS	DOWNSTREAM MAIN # OF TURNS	BLOW-OFF VALVE	EMERGENCY VALVE FLOW (CFS)	TIME (MIN)	TOTAL GALLONS	REASON	COMMENT
4/10/2013		Exercised	Exercised	Exercised			0		
2014							0	Reservoir empty	Reservoir empty
2015							0	Reservoir empty	Reservoir empty
5/26/2016		36	36	36			0	DSOD	
7/14/2016		36	36	36			0		
4/18/2017		36	36	36			0		
5/2/2018		36	36	36			0	DSOD	
4/1/2019		36	36	36			0		
1/14/2020		36	36	36			0	DSOD	
4/27/2021		36	36	36			0		
4/14/2022		36	36	36			0		
4/19/2023		36	36	36			0	DSOD	
							0		
							0		
							0		
							0		
							0		
							0		