Annual Surveillance Report January 2025 to December 2025 for Rattlesnake Canyon Dam

DSOD Dam No. 1029-003

Irvine, California

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

Prepared by:
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May 1, 2026
GEI Project No. 2305575

GEI Consultants

Consulting Engineers and Scientists

May 1, 2026
GEI Project No. 2305575

Mr. Jacob Moeder,
Engineering Manager – Dams & Storage
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

Re: Rattlesnake Canyon Dam, DSOD Dam No. 1029-003,
Annual Surveillance Report from January 2025 to December 2025

Dear Mr. Moeder:

GEI Consultants, Inc. (GEI) is pleased to submit this Annual Surveillance Report for Rattlesnake Canyon Dam covering January 2025 to December 2025. 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 Nichole Tollefson at ntollefson@geiconsultants.com or Rich Sanchez at rsanchez@geiconsultants.com with any questions.

Sincerely,

GEI CONSULTANTS, INC.

Richard Sanchez, P.E.
Principal Engineer

Nichole Tollefson, P.M.P.
Senior Engineer

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Acronyms and Abbreviations

AC	asphalt concrete
AF	acre-feet
CML&C	cement-mortar-lined and coated
District	Irvine Ranch Water District
D/S	Downstream
DSOD	State of California, Department of Water Resources, Division of Safety of Dams
DSP	Dam Safety Program
El, EL, Elev	elevation
FP	Flow Point
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
mm	Millimeter
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
OW	Observation Well
P.E.	Professional Engineer
P or Piez	Piezometer
RCP	reinforced concrete pipe

Res.	Reservoir
TIC	The Irvine Company
VW, VWP, VB	Vibrating Wire Piezometer
U/S	Upstream
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 program for Rattlesnake Canyon Dam conducted by the Irvine Ranch Water District (District) and GEI Consultants, Inc. (GEI) between January 2025 and December 2025. It includes a review of previous surveillance reports, a compilation of 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 presents summaries of piezometer maximum and minimum water level ranges, subdrain maximum and minimum flow rate ranges, cumulative horizontal movement displacement, and cumulative vertical movement displacement, as presented in Tables 1 through 4 in Section 2 of this report.

Table 5 provides location and elevation details of active and abandoned piezometers, observation wells, and seepage flow points. Tables 6 and 7 present piezometer/well water level measurements and seepage flow rate measurements from Jan 2007 through December 2025. A profile view of the embankment and piezometers is shown in Figure 2 and the piezometric levels and seepage flow rates with respect to reservoir water surface elevations are shown in Figures 3 through 18 for the two-year period (January 2024 through December 2025), as well as for a 10-year historical period (January 2015 through December 2025). The historical plots reflect long-term trends and overall performance of the dam and reservoir. The use of long-term and short-term plots help to identify any adverse trends or significant deviations more easily in the data.

Tables 8 through 11 and Figures 19 through 20 present field measurements of horizontal and vertical movement based on survey data collected at the site from 1985 through 2025. No surveys were conducted in calendar years 2017 and 2021. The survey for the 2025 review period was performed in October 2025.

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

Rattlesnake Canyon Dam is a homogeneous earthfill dam with a chimney drain. The channel section of the dam is founded on alluvium which overlies the bedrock. The abutment sections of the dam are founded on rock. It is located on Rattlesnake Canyon Wash in Irvine, California. The dam was completed in 1959. A site and instrumentation plan and cross section of the dam are provided in Figures 1 and 2.

Modifications to the dam have occurred over the years. Currently, the height of the dam is 79 feet (ft) with a crest length of 980 ft and a crest width of 15 ft. The crest of the dam has an asphalt concrete (AC) cover and is at Elevation 418.0 ft.

The upstream face of the dam has a slope gradient of 3H:1V (Horizontal:Vertical) and a 20-foot-wide bench at approximate Elevation 385.0 ft. The upper portion of the upstream slope is lined with 2-inch-thick AC for erosion protection extending from the crest of the dam to the inside edge of the bench (i.e., not including the bench).

The downstream face of the dam has a slope gradient of 2.5H:1V and also has a 20-foot-wide bench at approximate Elevation 385.0 ft. The downstream slope is covered with grass.

In 2004, a stability berm with a blanket drain was constructed on the right abutment to remediate a seismically deficient portion of the dam. Seepage drains were also installed along the downstream toe of the dam to help control and monitor seepage. Left and right designations are viewed looking downstream.

The reservoir has a watershed drainage area of about two square miles. The reservoir has a maximum storage capacity of 1,480 acre-feet at the spillway crest Elevation of 412.0 ft. Due to concerns regarding the stability of the dam under seismic loading conditions, the maximum reservoir level is currently restricted by the District to Elevation 406.0 ft, which is 6.0 ft below the spillway crest. Therefore, the total freeboard restriction is 12 ft.

1.3 Spillway

Located on the right abutment, the spillway consists of an AC lined approach section, an ungated ogee weir, and a concrete-lined side channel. The open concrete-lined trapezoidal channel has a 15-foot-wide bottom with 1H:1V side slopes. The spillway channel conveys the water to a stilling basin at the bottom of the spillway chute which then flows into a channel. As noted above, the spillway crest is at Elevation 412.0 ft, which provides 6 ft of freeboard without the District's additional restriction.

1.4 Outlet Works

The outlet works, located near the left abutment, consist of an inclined intake pipe supported on the upstream face of the dam with four intake valves (identified as "Main, Middle, Top, and Bottom") at various elevations. The inlet valves are manually operated by the hand wheel controls located at the upstream edge of the crest of the dam. The intake pipe connects to a 24-inch-diameter steel outlet pipe near the upstream toe. The outlet pipe extends approximately 460 ft under the left portion of the dam to a 24-inch-diameter gate valve located in the Outlet Meter Vault near the left downstream toe area of the dam. Adjacent to the access road and approximately 15 ft downstream of the Outlet Meter Vault is the Outlet Valve Vault where the 24-inch-diameter line has a 24-inch-diameter butterfly valve that serves as an emergency blowoff valve (Figure 1). The District currently plans to reline the outlet and will eventually replace the outlet valves.

The District provided the Rattlesnake Valve Exercising Log which stated that no valves were exercised in 2025. IRWD indicated that the intake valve at elevation 375 ft was broken and in the closed position and was set to be repaired in late 2026. The table is provided in the Appendix of this report.

2.0 Instrumentation Measurements

2.1 General

There are 16 active piezometers and observation wells, seven seepage subdrains (measured at eight flow points), and seven survey monuments that are being monitored at Rattlesnake Canyon Dam. A Site and Instrumentation Plan showing the layout of the dam and appurtenances, as well as the locations of the piezometers, seepage collection subdrains, and survey monuments is shown in Figure 1. The left and right designations are viewed looking downstream.

District personnel measure the levels in the piezometers, observation wells, reservoir, and subdrain seepage flow rates monthly and immediately following significant seismic events. The survey monuments are surveyed annually by a licensed surveyor under contract with the District. Precipitation is measured at an on-site rain gauge.

IRWD contracted Genterra Consultants to establish thresholds and action levels for piezometer readings, seepage flows, and movement monitoring (Genterra, 2023). These thresholds and action levels are based on a review of historical performance data, previous reports, and a statistical analysis of piezometer readings in relation to reservoir water levels. Genterra developed four alarm levels based on an expected instrument reading range per instrument set by an upper and lower band for each alarm level. If an instrument reading falls outside its expected range, it moves into the next alarm level. Alarm Levels are designated as Alarm Level I (Green Alarm), II (Yellow Alarm), III (Orange Alarm), and IV (Red Alarm). The lower and upper bands for each alarm level and the required response for each alarm level are shown in Table 2 of Guideline No. 4 (Seepage & Piezometer Monitoring) and Table 2 of Guideline No. 6 (Movement Monitoring) in IRWD's Dam Safety Program (IRWD, 2023). The 2025 piezometer readings, seepage readings, and movement surveys were assessed using these alarm levels. Tables 1 through 3 summarize the readings for the 2025 review period.

Currently IRWD has contracted GHD (previously Genterra Consultants) to update the thresholds and action levels based on historical data. This will be updated in the 2027 Dam Safety Program.

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

Based on the ten-year historical data from January 2015 through December 2025, the reservoir water surface elevation varied from a minimum Elevation of 358.7 ft to a maximum Elevation of 402.4 ft. During the 2025 review period, the reservoir water surface elevation varied from a minimum Elevation of 378.9 ft to a maximum Elevation of 387.3 ft (24.7 ft below the spillway). The reservoir elevations that were read on the same dates as the instrumentation are shown in Tables 6 and 7. The reservoir water surface elevations during the 2025 review period remained within historical limits. Monthly rainfall data is included in Tables 6 and 7 and Figures 3 through 18.

2.2 Piezometers

There are 16 open-well piezometers and one observation well currently being monitored at Rattlesnake Canyon Dam (P-1A, P-2, P-3A, P-30B, P-35A/B/C, P-52, P-61, P-62, P-63, P-64, P-65, P-66, P-67, and VBW/OW-3). An open-well piezometer is a small-diameter well (~2-inch diameter) used mainly to measure water levels. It is typically installed as a casing in a vertical borehole and has a discrete perforated zone near its bottom to enable monitoring of water levels within that zone. More than one piezometer can be installed within a single, larger-diameter, outer well casing (~4-inch diameter). These groups of piezometers are often referred to as multi-stage or nested piezometers. The tip of each piezometer is generally placed at its own discrete depth range within the outer well casing. The outer well casing is perforated along the vertical zones corresponding to the depths of the piezometer tips. At Rattlesnake Canyon Dam, Piezometers P-30A & B and P-35A, B, & C are nested, each having two or three piezometers in them, designated as A, B, or C. Piezometers P-1A & B are also nested, but Piezometer P-1B has been abandoned.

Table 5 lists information about each piezometer and observation well indicating whether they are operational or abandoned. The location of each piezometer and observation well is shown on Figure 1. Table 6 provides the reservoir water surface elevation and piezometer water levels since January 2007. Figures 3 through 7 are graphical presentations of piezometer water levels and reservoir water surface elevations during the two-year period from January 2024 through December 2025. Figures 8 through 12 are graphical presentations that cover a historical period from January 2015 through December 2025. Data that is considered erroneous are marked as omitted in Table 6 and are excluded from the figures.

The piezometers at the site were most recently cleaned in June 2024, when IRWD contracted Confluence Environmental. A copy of the cleaning report is included as Appendix G.

Piezometer P-30A has a blockage which gives inaccurate readings. Due to the blockage, no accurate threshold or alarm levels can be applied to this piezometer and is not discussed further in this report. The District and GEI agreed to stop taking piezometers readings at this location until further notice. At the time of this report, IRWD has not flagged the piezometer casing with a “to-be abandoned” sign.

There are three Observation Wells at Rattlesnake Canyon Dam with two currently abandoned (VBW/OW-1 & 2), and one currently being monitored (VBW/OW-3). These wells were formerly identified as OW97-3, OW97-2, and OW97-1, respectively, and are located to the north of the spillway. Unlike a piezometer, an observation well is typically perforated the entire length of the well, or most of it. OW-1 and OW-2 were removed in August 2016 due to grading on a residential development in the area where the wells were located and their monitoring is not included in this report. The only observation well at the site currently being monitored, OW-3, was not monitored between August 2016 and June 2018 due to nearby construction.

Four vibrating wire piezometers are currently being monitored at Rattlesnake Canyon Dam and were installed in October 2023 by AECOM (P-101A/B and P-102A/B). The VWPs were installed as part of a larger geotechnical exploration program and were originally identified as 23SPT-3 and 23SPT-5A, respectively. The VWPs were installed in two separate boreholes, with two piezometers nested in each hole. As-built details for the VWPs are included in Appendix D of this report.

Presented below for each piezometer is a summary of the water level measurements during 2025 and a discussion of the historical trends and changes that were noted in the reported measurements. Table 1 provides the maximum and minimum water levels recorded during the current review period, as well as the historical range for each piezometer. Outlier 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)	2015-2025 10-Year Range (ft)	2025 Range (ft)	2025 Maximum Alarm Level	Comment
P-1A	287.4	353.5 – 357.4	353.5 – 353.8	Level I	
P-2	363.4	402.8 – 405.6	403.2 – 404.2	N/A	
P-3A	303.7	335.6 – 348.1	336.1 – 338.4	Level I	
P-30A	371.7	--	--	N/A	Confirmed blocked during field inspection. To be abandoned in the future.
P-30B	337.1	363.2 – 379.6	366.9 – 367.1	N/A	
P-35A	357.3	357.2 – 357.8	357.3 – 357.6	N/A	
P-35B	313.4	334.2 – 343.1	334.2 – 336.3	Level III	Continue to monitor changes. Perform Alarm Level III response per Table 2 of Dam Safety Program Guideline No. 4 (Seepage & Piezometer Monitoring).
P-35C	343.2	341.7 – 345.8	343.4 – 343.8	Level I	
P-52	361.2	369.7 – 390.7	372.6 – 377.2	Level I	
P-61	311.0	323.7 – 332.8	326.7 – 328.2	Level I	
P-62	365.5	372.9 – 393.0	374.3 – 377.9	Level III	One time reading, alarm level returned to Alarm level I. Continue to monitor changes.

Piezometer	Tip Elevation (ft)	2015-2025 10-Year Range (ft)	2025 Range (ft)	2025 Maximum Alarm Level	Comment
					Perform Alarm Level III response per Table 2 of Dam Safety Program Guideline No. 4 (Seepage & Piezometer Monitoring).
P-63	335.0	351.5 – 369.4	359.1 – 360.5	N/A	
P-64	302.0	337.7 – 347.1	338.0 – 340.3	Level I	
P-65	325.5	338.3 – 348.5	339.2 – 340.1	Level I	
P-66	301.0	331.6 – 339.8	332.6 – 334.5	Level I	
P-67	282.5	325.1 – 333.0	327.1 – 328.4	Level I	
VBW/OW-3	386.3	386.5 – 397.6	389.4 – 389.4	N/A	
P-101A (VW4)	261.9	349.9 – 356.7	349.9 – 353.5	N/A	Installed October 2023.
P-101B (VW2)	287.7	348.5 – 356.3	348.5 – 352.1	N/A	Installed October 2023.
P-102A (VB4)	327.3	357.8 – 364.5	357.8 – 359.1	N/A	Installed October 2023.
P-102B (VB2)	353.4	345.5 – 351.1	345.5 – 347.6	N/A	Installed October 2023.

Piezometer P-1A is located on the crest of the dam, near the maximum section of the dam. The tip of Piezometer P-1A is located near the underlying bedrock below the dam, and measures water surface levels in the alluvium. The length of the piezometer was extended in January 2005 by about two feet. The water levels observed in Piezometer P-1A during 2025 were within historical levels (Figure 4). The water level in Piezometer P-1A has gradually dropped by approximately 5 ft over the last 10 years due to the reservoir level now being operated 5 to 10 ft lower than its 2011 levels.

Piezometer P-2 is located on the crest of the dam, near the maximum section of the dam and has its tip located in the upper embankment fill at El 363.4 ft. The piezometer was cleaned in 2015 and in June 2024, but levels returned to the same levels prior to cleaning, see Figure 9. Historically, Piezometer P-2 levels have been above the reservoir water level. Based on prior measurement notes, see Table 6, P-2 is considered dry but could have some blockage at approximately El 403 ft (Figure 4). IRWD should consider abandoning P-2 due to its blockage at a shallow depth. There are other functional piezometers in the vicinity and along this section of the dam.

Piezometer P-3A is located on the downstream bench at El 385 ft and its tip is located in the foundation bedrock. The piezometer was cleaned in 2008 and again in 2015. Piezometer P-3A tracked the reservoir level in 2025. Water levels recorded in Piezometer P-3A during the report period were within historical limits (Figure 10).

Piezometer P-30A is located on the crest of the dam and its tip is located within the embankment material at El 371.7 ft. Several attempts were made to clean a blockage from this piezometer in

2008 and the District confirmed in 2015 that the standpipe is blocked at a shallow depth. In April 2016, AECOM recommended Piezometer P-30A be abandoned due to long-term blockage. GENTERRA previously recommended another attempt to clear the blockage in Piezometer P-30A before deciding to abandon it altogether. The District attempted to clean the piezometer a couple times again in June 2024, however during the annual inspection, GEI confirmed the blockage of P-30A is still present. GEI concurs it should be abandoned due to its blockage at a shallow depth and having other functional piezometers in the vicinity and along the maximum section of the dam.

Piezometer P-30B is nested with P-30A at the crest of the dam and its tip is located within the embankment material at El 337.1 ft. The piezometer was cleaned in 2008 which successfully unblocked it. In July 2015, the piezometer was cleaned again. The piezometer water level was within historical limits and continued to respond to the reservoir level changes during the 2025 review period (Figure 5 and 10).

Piezometers P-35A, P-35B, and P-35C are located on the downstream bench at Elevation 385 ft. Piezometer P-35A measures water levels in the embankment material downstream and above the inclined chimney drain. The water levels did not fluctuate much throughout 2025 and remained generally “dry.” Piezometers P-35B and P-35C are located in the chimney drain. P-35C showed minor fluctuations throughout the review period while P-35B responded to reservoir level changes. Readings in piezometer P-35C have historically been reported near the piezometer tip elevation or below the piezometer tip elevation. The water level observed in Piezometers P-35A, B, and C during the 2025 review period were within historical levels (Figure 8). However, throughout the review period, P-35B fluctuated between Alarm Levels I, II and III, mostly due to the piezometer readings being lower than expected. At the end of the review period, Piezometer P-35B was in Alarm Level I.

Piezometer P-52 is located on the crest of the dam with its tip in the foundation bedrock near the right abutment. The District cleaned this piezometer in 2008 and successfully unblocked the piezometer to a depth of 58.5 ft. Piezometer P-52 tracked the reservoir level closely in 2025 (Figure 7). Water levels recorded in Piezometer P-52 during the 2025 review period were within historical limits (Figure 12).

Piezometer P-61 is located near the downstream toe of the dam at the contact with the left abutment, with its tip in the foundation bedrock. Piezometer P-61 was installed in late 2004 and readings began on January 18, 2005. Piezometer P-61 tracked the reservoir level slightly in 2025 (Figure 7). Water levels recorded in Piezometer P-61 during the 2025 report period were within historical limits (Figure 12).

Piezometer P-62 is located in the right abutment stability berm with its tip in the foundation bedrock. Piezometer P-62 tracked the reservoir level closely in 2025 (Figure 7). Water levels recorded in Piezometer P-62 during the 2025 report period were within historical limits (Figure

12). However, the water level in Piezometer P-62 dropped 2.1 ft on November 19, 2025 despite an increased reservoir level at the time when it entered Alarm Level III. It returned to Alarm Level I the following month.

Piezometer P-63 is located on the crest of the dam with its tip in the left abutment bedrock at El 335 ft. The piezometer was cleaned in 2008, 2015 and in June 2024, but the water level readings did not show any response as a result of the cleaning. In April 2016, AECOM recommended that Piezometer P-63 be abandoned due to long-term blockage. In November 2018, GENTERRA recommended a maintenance cleaning to further evaluate the condition of Piezometer P-63. GENTERRA also recommended the elevation of top of casing be surveyed and that the depth to the bottom of piezometer be measured periodically to verify that the casing is not blocked (Genterra, 2018). The water level of Piezometer P-63 dropped by approximately 17 ft following a 25-ft drop in the reservoir water level during February 2018. Historically, the water levels in the piezometer have been gradually increasing. The water level in Piezometer P-63 dropped 6.6 ft in June 2024 as a result of the cleaning and has gradually increased through the 2025 review period (Figure 12). The District should continue monthly monitoring of this piezometer.

Piezometer P-64 is located on the downstream bench at Elevation 385 ft with its tip in foundation alluvium at El 302 ft. Piezometer P-64 was installed in late 2004 and readings began on January 18, 2005. Piezometer water levels are responsive to reservoir water level changes; Piezometer P-64 tracked the reservoir levels in 2025 (Figure 4). Water levels recorded in Piezometer P-64 during the 2025 report period were within historical limits (Figure 9).

Piezometer P-65 is located in the southern portion of the right abutment stability berm, to the south of P-62 and further away from the reservoir. Piezometer P-65 was installed in late 2004 and readings began on January 18, 2005. P-65 had minor responses to the reservoir levels changes in 2025 (Figure 7). Water levels recorded in Piezometer P-65 during the 2025 review period were within historical limits (Figure 12).

Piezometer P-66 is located at the downstream toe of the dam with its tip in the foundation bedrock. Piezometer P-66 was installed in late 2004 and readings began on January 18, 2005. Piezometer P-66 tracked and was responsive to the reservoir levels changes in 2025 (Figure 4). Water levels recorded in Piezometer P-66 during the 2024 review period were within historical limits and responsive to reservoir level changes (Figure 9).

Piezometer P-67 is located at the downstream toe of the dam with its tip in bedrock. Piezometer P-67 was installed in late 2004 and readings began on January 18, 2005. Piezometer P-67 was slightly responsive to reservoir level changes in 2025 (Figure 3). Water levels recorded in Piezometer P-67 during the 2025 review period were within historical limits and responsive to reservoir level changes (Figure 8).

Observation Well VBW/OW-3 (formerly identified as OW97-1) is located to the north of the spillway. Readings were discontinued at OW-3 in August 2016 due to nearby construction of a residential development and were resumed on June 28, 2018. The bottom of OW-3 is noted at El 386.3 ft. Based on the location of OW-3 (right abutment/north of the spillway) and its bottom tip elevation, Observation Well OW-3 is mostly considered dry. According to IRWD, OW-3 has been dry since the grading performed in August 2016. During the 2025 review period, OW-3 did not fluctuate as it did during the 2024 review period. Measured levels in Observation Well OW-3 during the 2025 report period are shown in Figure 6 and historical readings in Figure 11.

VWPs P-101A and P-101B are located on the dam crest with P-101A tip installed in the foundation bedrock and P-101B tip installed in the alluvium overlying the bedrock. VWPs P-102A and P-102B are located on the downstream bench near the right access road with P-102A tip installed in the foundation bedrock and P-102B tip installed in the alluvium. The VWPs were installed by AECOM in October 2023 as part of a larger geotechnical investigation. VWPs P-101A and P-101B showed responses to the reservoir level, see Figures 3 and 8. VWPs P-102A and P-102B showed minor responses to the reservoir level, see Figures 7 and 12. All four VWPs remain within historical levels during the 2025 review period.

Based on GEI's review of the piezometer data, there are no indications of any dam safety concerns at the dam embankment, abutments, right abutment stability berm, or foundation. It is recommended that the District continue attempting to clean out piezometer P-63, have the top elevations of the casings re-surveyed, and re-measure the depth to the bottom of the piezometer to verify that the piezometer is not blocked above its as-built depth. It is recommended that piezometer P-2 and P-30A be marked for abandonment and readings discontinued. It is also recommended that IRWD follows the appropriate response for the alarm level changes per Table 2 of Dam Safety Program Guideline No. 4 (Seepage & Piezometer Monitoring). GEI will continue to assist the District and closely monitor the water levels in each piezometer.

2.3 Seepage Flows

Several modifications to the seepage monitoring system have occurred over the years at Rattlesnake Canyon Dam. Seepage flow rates from seven subdrains are currently being measured monthly at eight flow points by the District. Six subdrains (2, 3, 4, 5, 8 and 11) are monitored at six flow points (FP-2, FP-3, FP-4, FP-5, FP-8 and FP-11), which are assigned the same identification number as the drain. These six flow points are located downstream of the dam in the Seepage Vault shown on Figure 1. The remaining two flow points, FP-1 North and FP-1 South (or FP-1N and FP-1S), are read in Manhole No. 1, which is located about 600 ft downstream of the Seepage Vault structure.

The existing Manholes 2, 3, and 4, and Flow Points FP-9 and FP-10 were removed as part of the alterations to the dam. The existing Seepage Vault structure was constructed to replace the three manholes that were removed.

Flow Points FP-2, FP-3, and FP-4 collect seepage from the chimney drain within the dam (Subdrains 2 through 4). Flow Point FP-5 collects seepage from the Longitudinal Drain along the right portion of the downstream bench, as well as seepage from the Groin Drain along the right abutment contact (Subdrain 5). Flow Point FP-8 collects seepage from the toe drain (Subdrain 8). Flow Point FP-11 collects seepage from Subdrain 11 in the downstream right abutment contact.

Prior to April 2008, the seepage flow rate measured from Flow Point FP-1 was sometimes recorded as a combined measurement of Flow Points FP-9 and FP-10, and no record was kept of the individual readings. Since April 2008, the measurements of Flow Points FP-9 and FP-10 have been recorded separately as Flow Points FP-1 South and FP-1 North, respectively. Flow Point FP-1 North measures the seepage from the spillway stilling basin in Subdrain 10, and Flow Point FP-1 South represents the combined seepage from the Seepage Vault, which contains Subdrains 2, 3, 4, 5, 8, and now 11.

Historical seepage flow rates since 2007 at the subdrain flow points are listed in Table 7. Figures 13, 14, and 15 present the 2-year period seepage rates from January 2024 through December 2025, and Figures 16, 17, and 18 present the historical seepage rates since 2015.

Table 2 provides maximum and minimum flow rates from each drain recorded during the current review period, as well as the historical range for each drain.

Table 2. Subdrain Flow Rates – Maximum and Minimum Flow Rate Ranges

Subdrain	2015-2025 10-Year Range (gpm)	2025 Range (gpm)	2025 Maximum Alarm Level	Comment
FP-1 South	0.00 – 6.18	0.00 – 1.85	Level I	
FP-1 North	0.00 – 9.27	0.00 – 2.59	Level I	
FP-2	0.00 – 0.17	Dry	Level I	Dry all year.
FP-3	0.42 – 1.90	0.74 – 1.37	Level I	
FP-4	0.23 – 1.27	0.25 – 0.58	Level I	
FP-5	0.00 – 1.25	Dry	Level I	Dry all year.
FP-8	0.00 – 0.08	Dry	N/A	Dry all year.
FP-11	Dry	Dry	N/A	Dry all year.

All seepage flows tracked the reservoir levels closely and were within historical ranges. There was no reported or observed signs of increased turbidity or suspended solids in the subdrain flows. Based on GEI's review of the subdrain data, the seepage flow rates appeared to follow historical rates with no indications of any adverse conditions.

2.4 Movement Surveys

A total of seven survey monuments (A, B, B-1, C, D, E, and E-1) are being monitored at Rattlesnake Canyon Dam. All seven survey monuments and three benchmarks (BM-1, BM-3,

and BM-4) are located on the crest of the dam spanning from the left abutment to the right abutment (Figure 1).

There were originally four benchmarks, BM-1, BM-2, BM-3, and BM-4. Benchmarks BM-1 and BM-3 are located on the left abutment of the dam. Benchmarks BM-2 and BM-4 were both located on the right abutment of the dam, to the right of the spillway channel. Benchmark BM-2 was destroyed in 1996, and BM-4 was destroyed between 2015 and 2016. BM-4 was re-established in 2018. The re-established BM-4 has been used as the new control point on the right side of the dam to develop the control line for the horizontal surveys since 2018. The District informed GEI that BM-3 was destroyed on October 7, 2022, due to The Irvine Company's (TIC) grading operations for new developments. BM-3 was re-established and placed in a well monument on December 14, 2023, during the annual survey.

Survey monuments A, C, D, and E were initially read on October 19, 1985; Survey Monument B-1 was initially read on October 5, 1990; and Survey Monuments B and E-1 were initially read on May 3, 2001. It is highlighted that crest monuments E and E-1 are within two feet of each other and crest monuments B and B-1 are less than a foot apart.

The survey monuments are surveyed annually by a licensed surveyor under contract with the District. No surveys were conducted in calendar years 2017 and 2021. A survey was performed on October 9, 2025, and the report has been included in Appendix C of this report. Table 3 and Table 4 provide a summary of the cumulative horizontal and vertical displacement, respectively, as well as the appropriate alarm level trigger.

Table 3. Horizontal Movement Survey – Cumulative Horizontal Displacement

Monument ID	Historical Cumulative Horizontal Displacement Range (in)	2025 Cumulative Horizontal Displacement (in)	2025 Alarm Level	Comment
A	-0.120 to 0.840	0.144	Level I	
B	0.000 to 0.960	0.622	Level I	
B-1	-0.240 to 0.972	0.828	Level I	
C	0.000 to 1.440	1.008	Level I	
D	0.000 to 0.960	0.756	Level I	
E	0.000 to 1.512	1.356	Level I	
E-1	-0.120 to 0.180	0.036	Level I	

Table 4. Vertical Movement Survey – Cumulative Vertical Displacement

Monument ID	Historical Cumulative Vertical Displacement Range (in)	2025 Cumulative Vertical Displacement (in)	2025 Alarm Level	Comment
A	0.000 to 2.580	1.956	Level I	
B	0.000 to 0.888	0.840	Level I	
B-1	0.000 to 1.524	1.476	Level II	Continue to monitor changes. Perform Alarm Level II response per Table 2 of Dam Safety Program Guideline No. 6 (Movement Monitoring).
C	0.000 to 0.960	0.864	Level I	

D	-0.180 to 0.840	0.360	Level I	
E	-1.200 to 0.000	-0.780	Level I	
E-1	-0.840 to 0.000	-0.468	Level I	

Table 8 presents the yearly horizontal movement of the survey monuments relative to their baseline measurements, and Table 9 presents the yearly cumulative horizontal displacement of the survey monuments. Table 10 presents the elevations of the survey monuments, whereas Table 11 presents the cumulative vertical movement of the survey monuments. Tables 8 through 11 cover a date range from 1985 through 2025. Figures 19 and 20 are graphical presentations of the cumulative horizontal displacement and cumulative vertical movement of the survey monuments since 1985, respectively.

Based on an evaluation of the 2025 survey data using the Dam Safety Program (DSP) guidelines established by IRWD, the cumulative horizontal displacement of each survey monument falls within the Level I alarm level (normal). The cumulative horizontal displacement for all the survey monuments has continued to respond to the changes in reservoir water level. Horizontal displacement appears to increase during times of higher reservoir water level and decrease during lower levels, see Figure 19. Survey monument E has shown the most response to changes in the reservoir level and the area around it should be inspected.

The cumulative vertical movement of Monument B-1 fell within the Level II alarm level (out of range) and has done so since October 2022. The cumulative vertical movement of the remaining survey monuments fall within the Level I alarm level. It is recommended that the District performs routine visual inspection of the area around Monument B-1 in accordance with the DSP guidelines. In 2022, there was an increase in settlement in all the survey monuments, but since then settlement appears to have leveled out, see Figure 20.

Within the 2024 annual report, GEI requested IRWD perform the annual survey in October to evaluate how movement changes during a low reservoir level. For the 2025 review period, the annual survey was performed in October when the reservoir level was at El 386.5 ft. There was no significant change in vertical movement of the survey monuments with the lower reservoir level. However, for horizontal movement, several survey monuments responded to the lower reservoir level. Survey data continued to follow historical trends and typical response to reservoir water level changes were observed which helps verify the Alarm Level II at survey monument B-1 may be an anomaly. It is also recommended that IRWD continues to follow the appropriate response for alarm level changes per Table 2 of Dam Safety Program Guideline No. 6 (Movement Monitoring).

3.0 Field Evaluations

3.1 Field Evaluation of June 17, 2025

A field evaluation and inspection were performed by Emerson Revolorio and Santiago Martinez-Granata of GEI, and Christian Wimenta, Anthony Zaragoza, Nick Pizanie, and Steve Habiger of the District on June 17, 2025. The reservoir level was noted at Elevation 386.0 ft during the inspection. Weather conditions were sunny with temperatures in the mid-80s. Photos taken by GEI are included in Appendix A of this report.

3.1.1 Dam

The crest of dam, upstream and downstream slopes, and abutment access roads were walked, and there were no visible signs of dam safety related concerns or instability, see Photos 1-8. As noted in the 2024 inspection, the District had recently sealed up the AC shrinkage-expansion cracks on the crest and upstream slope, see Photos 2-5. Since then, some additional cracking has occurred at the crest, see Photos 3 and 4. The downstream embankment slope, and both groin areas were inspected, and no signs of instability or erosion were seen, see Photos 1 and 6-8. No signs of surficial slope movement or instability were observed on the slopes or abutments of the dam. Remnants of rodent activity were observed along the left downstream face but the rodent holes were not actively open, see Photo 9. Currently, IRWD is utilizing carbon monoxide as an effective treatment for rodent control. The downstream toe area of the dam was walked, and no visual signs of slope instability, unusual movement, or erosion were seen. No unusual signs of seepage or wet spots were seen on the downstream face of the dam. During the inspection the District attempted to take readings of piezometers P-30A and P-2, see Photo 10. District staff encountered debris while reading piezometer P-30A and was able to push the water level sensor deeper into the piezometer after a few attempts which, upon removal, revealed mud coating the water level sensor. The District believes that the piezometer is still clogged. The District encountered red mud when reading piezometer P-2 and stated that mud has been encountered historically.

Overall, the condition of the dam remains largely unchanged from the conditions observed during the March 2024 inspection. Overall, the dam was well maintained with no signs of instability, or distress. No adverse visual dam safety observations were found during the inspection.

3.1.2 Spillway

The approach and ungated control spillway sections were clear. The separation between the crest AC pavement and the spillway concrete liner joint noted in previous inspections was

recently repaired with asphalt, see Photo 11. The side channel spillway was clear and was unchanged from previous observations. A section of the spillway approach was also recently filled with asphalt, see Photo 12. Minor vegetation has regrown in the stilling basin and sediment still lines both the stilling basin and the downstream channel, see Photos 15 and 16. GEI did not perform a visual inspection of the concrete surfaces in the stilling basin and downstream spillway channel due to the sedimentation buildup.

A spillway inspection was performed by Emerson Revolorio and Matt Corrado of GEI after the dam inspection. The entire spillway was walked, and each wall panel was inspected within the spillway. The inspection was supplemented by taking aerial images using a DJI Phantom 4 Pro V2 drone. An exhibit as requested by IRWD was prepared using Orthomosaic imagery created from the drone photos, and from the notes taken from the inspection. The inspection documented significant deficiencies with the spillway. Cracks, joint openings, and joint offsets greater than or equal to ¼-inch were classified as significant. The spillway inspection exhibit was created to document the inspection findings and is provided in Appendix F of this report. As shown in the exhibit, there are various deficiencies. A photo log of the spillway inspection is provided in Appendix F of this report.

3.1.3 Outlet Works

DSOD requires the outlet and emergency blowoff valves to be exercised periodically. The four upstream outlet gates and controls were not exercised during this inspection. The District provided a Dam Outlet Valve Exercising Log which stated that no valves were exercised in 2025. IRWD indicated that the intake valve at elevation 375 ft was broken and in the closed position. During the inspection, the District reported that the outlets were fully operational, see Photo 17. The District noted plans to inspect and repair the valves at elevation 375 ft in October 2025. No deficiencies were seen at the downstream 24-inch blowoff valve and operator at the left downstream toe area of the dam.

3.1.4 Seepage

Seepage flow rates continue to be monitored and measured monthly by District staff. The downstream seepage vault was inspected, and no unusual conditions or safety deficiencies were found. Small seepage flow observations were estimated as follows: FP-2 (dry), FP-3 (approximately 0.91 gpm), FP-4 (0.4 gpm), and others (FP-5, FP-8, and FP-11) were dry, see Photo 18. Total seepage at FP-1 South was 1.0 gpm and FP-1 North was dry, see Photo 19. The observed seepage conditions were within past seepage flow levels and observations and the seepage water appeared clear as observed from the top of the vault. No signs of sediment were seen on the floor of the seepage vault as observed from the top of the vault.

4.0 Conclusions and Recommendations

4.1 Conclusions

1) Based on the review of available instrumentation data and the field inspection, the dam does not appear to have signs of structural deficiencies, seepage, and instability under the current reservoir water level restriction.

2) Overall piezometer levels during the report period are within historical limits.

3) Piezometer P-30A has had long term blockage and should be abandoned. IRWD should flag the piezometer casing with a "to-be abandoned" sign.

4) Water level readings in Piezometer P-2 have been reporting above the reservoir water level. The District has also reported the piezometer as dry in the past. During this year's inspection the District attempted to read the piezometer and encountered red mud on the water level sensor. The District reported that they have encountered the red mud in previous readings.

5) Observation well OW-3 is dry and has been potentially disturbed by nearby construction activities.

6) Water level in Piezometer P-63 dropped 6.6 ft on June 2024 and gradually increased since then through to the end of the 2025 report period.

7) Seepage flow rates during this review period were within historical limits and trends. Subdrains FP-2, FP-5, FP-8, and FP-11 were dry during the review period.

8) All surveys monuments had a sharp and somewhat equal settlement recording during the survey in October 2022. Since then and due to the universal shift downwards, Survey Monument B-1 has remained at the Level II alarm threshold. Since then, the settlement has stabilized across all survey monuments (see Figure 20).

9) Cumulative horizontal displacements of all monuments continue to correlate with reservoir levels—generally increasing with higher levels and decreasing with lower levels (see Figure 19). Monument E shows the greatest response.

10) Shrinkage and expansion cracks in the crest and upstream AC liner have been sealed. However, new cracking was observed during the June 2025 inspection.

11) 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 caretake houses and other IRWD facilities.

12) The District has recently repaired the separation between the AC pavement and the spillway concrete joint. The separation was filled with fresh asphalt.

13) The District recently repaired a section of the AC approach channel where it connects to the ogee control structure. The separation was filled with fresh asphalt.

14) GEI conducted an inspection of the spillway and created an exhibit documenting the significant deficiencies with the spillway.

15) GEI's spillway inspection documented several minor deficiencies as noted in the appendix of this report. IRWD reported that a detailed spillway condition assessment is underway as part of an issue Evaluation Study.

16) The four upstream outlet gates and controls were not exercised during this inspection. IRWD indicated that the intake valve at elevation 375 ft was broken and in the closed position. IRWD is planning to repair the valve in late 2026.

4.2 Recommendations

1) GEI recommends re-surveying the top elevation of the casing and that the District re-measure the depth to the bottom of piezometer P-63 to verify it is not blocked. Piezometers should be cleaned out if blocked. Piezometers should continue to be monitored monthly.

2) GEI recommends abandoning piezometers P-2 and P-30A due to blockage and IRWD should flag the piezometer casings with a "to-be abandoned" sign. There are other piezometers in the vicinity of these two that can continue to provide data.

3) GEI recommends cleaning and re-surveying observation well OW-3 due to site construction disturbance.

4) 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) GEI recommends repairing the outlet gate valve at elevation 375 ft and fully exercising it to confirm its operability.

6) The District should perform close visual inspection of the area around survey monument B-1 in accordance with the DSP guidelines.

7) Continue to perform appropriate instrument alarm level response per Table 2 of Dam Safety Program Guideline No. 4 (Seepage & Piezometer Monitoring) and Table 2 Guideline No. 6 (Movement Monitoring).

8) During normal inspection and operation of the dam and its appurtenances, the District personnel should continue to observe the condition of the dam and appurtenances, looking for any signs of distress or movement, increased seepage, or other unusual conditions, and verifying that the critical facilities are functional. Any unusual observations should be reported immediately to the Dam Safety Engineer.

9) GEI recommends following IRWD's 2026 Dam Safety Program Guideline No. 3 (Seismic Monitoring) post-earthquake.

Rattlesnake Canyon Dam Action Item Summary

Item	Location	Maintenance	Measures
Rodent activity	Throughout dam	Active rodent holes and lack of poison in rodent control feeder boxes	The District should continue collaborating with pest management companies to determine the 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.
Piezometers	P-63	Providing erratic readings	Re-survey the top of casing elevations and re-measure the depth to the bottom. Clean out piezometer if blocked. Monitor monthly.
Piezometer	P-2 and P-30A	Providing erratic readings	Abandon. The District should flag the piezometer casings with a "to-be abandoned" sign.
Observation well	OW-3	Dry and area construction disturbance	Clean and resurvey.
Gate valve at elevation 375 ft	Upstream face near left abutment	Broken	Repair and fully exercise to confirm operability.
Survey monuments	Survey monument B-1	Inspection	Perform close visual inspection of the area around survey monument in accordance with the DSP guidelines.

5.0 Limitations

This report was prepared exclusively for the use of Irvine Ranch Water District. The findings and conclusions, if any provided by GEI in this report, are based solely on the information reported to GEI as of the date of this report. Future investigations or additional information not provided to GEI at the time of this report may result in modification of this report. GEI's scope of work did not include verifying the completeness or accuracy of information provided by others. Accordingly, GEI shall not be liable for any damages, costs, or other consequences resulting from reliance on such information if it is later determined to be inaccurate or incomplete. GEI's professional services for this project have been performed in a manner consistent with that degree of skill and care ordinarily exercised by members of the same profession currently practicing in the same locality, performing similar services under similar conditions. GEI makes no other representations and no warranties, express or implied.

This report presents observations made, conclusions drawn, and opinions formed from (1) a visual inspection of the Rattlesnake Canyon Dam and its appurtenant structures, and (2) a review of instrumentation data, including piezometer levels, survey data and seepage rates, collected by the District and reported since 2007. 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 report represents the results of our surveillance program for Rattlesnake Canyon Dam, covering safety.

6.0 References

DSOD (California Department of Water Resources, Division of Safety of Dams), Inspection of Dam and Reservoir in Certified Status October 20, 2020.

Genterra, 2018, Annual Surveillance Report January 2017 through December 2017 Rattlesnake Canyon Dam DSOD Dam No. 1029-003, Irvine, CA, by Genterra Consultants Inc., November 26, 2018.

Irvine Ranch Water District (IRWD), Dam Safety Program Guidelines & Governance, July 2023.

Tables

TABLE 5
RATTLESNAKE CANYON DAM
DETAILS FOR PIEZOMETERS, OBSERVATION WELLS, AND SEEPAGE FLOW POINTS

ID	Location	Original Reference Data			Current (2005) Reference Data			Material at Tip (if known)	Installation or First Reading	Final Reading
		Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)	Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)			
Active Operating Piezometers										
P-1A	Dam Crest	418.50	287.40	131.10	420.43	287.40	133.00	Foundation Alluvium	4/1965	--
P-2	Dam Crest	418.70	363.40	55.30	420.62	363.40	57.20	Embankment	4/1965	--
P-3A	Downstream Bench Elev. 385	385.40	303.70	81.70	385.40	303.70	81.70	Foundation Bedrock	4/1965	--
P-30A	Dam Crest	417.90	371.70	46.20	420.81	371.70	49.10	Embankment	1966	--
P-30B	Dam Crest	417.90	337.10	80.80	420.81	337.1	83.70	Embankment	1966	--
P-35A*	Downstream Slope just above Bench Elev. 385	385.30	357.30	28.00	388.73	357.30	31.40	Embankment D/S of and above Chimney Drain	1966	--
P-35B	Downstream Slope just above Bench Elev. 385	385.50	313.40	72.10	388.45	313.40	75.10	Chimney Drain	1966	--
P-35C	Downstream Slope just above Bench Elev. 385	385.30	343.20	42.10	388.34	343.20	45.10	Chimney Drain	1966	--
P-52	Dam Crest near Right Abutment	418.60	361.20	57.40	421.03	361.20	59.80	Foundation Bedrock	1976	--
P-61	Downstream Left Groin	354.00	311.00	43.00	357.01	311.00	46.00	-Data Not Provided-	9/28/2004	--
P-62	On Right Abutment Stability Berm	419.00	365.50	53.50	412.03	365.50	46.50	-Data Not Provided-	1/18/2005	--
P-63	Dam Crest at Left Abutment	418.00	335.00	83.00	422.08	335.00	87.10	Abutment Bedrock	9/28/2004	--
P-64	Downstream Bench Elev. 385	385.00	302.00	83.00	388.00	302.00	86.00	Foundation Alluvium	9/28/2004	--
P-65	On Right Abutment Stability Berm	370.00	325.50	44.50	374.72	325.50	49.20	-Data Not Provided-	1/18/2005	--
P-66	Downstream near Toe of Dam	352.00	301.00	51.00	359.31	301.00	58.30	Foundation Bedrock	9/28/2004	--
P-67	Downstream near Toe of Dam	352.00	282.50	69.50	355.04	282.50	72.50	Foundation Bedrock	1/18/2005	--
OW-3	Right Abutment just above Spillway Inlet	--	--	--	418.87	386.27	32.60	Abutment Bedrock	3/29/2001	--
P-101A	Dam Crest	--	--	--	419.88	261.88	158.00	Foundation Bedrock	12/20/2023	--
P-101B	Dam Cres	--	--	--	419.88	287.68	132.20	Embankment	12/20/2023	--
P-102A	Downstream Bench Elev. 385	--	--	--	390.30	327.30	63.00	Foundation Bedrock	12/20/2023	--
P-102B	Downstream Bench Elev. 385	--	--	--	390.30	353.40	36.90	Foundation Alluvium	12/20/2023	--
Abandoned Piezometers										
P-1B	Dam Crest	385.4	--	--	--	--	--	Foundation Alluvium	4/1965	12/1969
P-3B	Downstream Bench Elev. 385	385.4	345.2	40.2	--	--	--	Data Not Provided	4/1965	3/30/2004
P-4	Downstream Bench Elev. 385	385.3	286.8	98.5	--	--	--	Foundation Bedrock	4/1965	3/30/2004
P-5	Downstream Bench Elev. 385	385.2	345..2	40 .0	--	--	--	Embankment	4/1965	3/30/2004
P-6A	Downstream near Toe of Dam	350.6	333.3	17.3	--	--	--	Foundation Alluvium	4/1965	3/30/2004
P-6B	Downstream near Toe of Dam	350.6	292	58.6	--	--	--	Foundation Bedrock	4/1965	3/30/2004
P-7A	Downstream Toe of Dam	343.5	334.6	8.9	--	--	--	-Data Not Provided-	9/1965	Unknown
P-7B	Downstream Toe of Dam	343.5	283.2	60.3	--	--	--	-Data Not Provided-	9/1965	Unknown
P-8A	Downstream Toe of Dam	340.6	295.9	44.7	--	--	--	Alluvium	9/1965	3/30/2004
P-8B	Downstream Toe of Dam	340.5	325.2	15.3	--	--	--	Alluvium	9/1965	3/30/2004
P-9A	Downstream Toe of Dam	341.4	318.8	22.6	--	--	--	Alluvium	9/1965	3/30/2004
P-9B	Downstream Toe of Dam	341.4	331.1	10.3	--	--	--	Alluvium	9/1965	3/30/2004
P-21	Downstream near Toe of Dam	354.3	328.7	25.6	--	--	--	Abutment Bedrock	6/16/1967	3/30/2004
P-22	Downstream near Toe of Dam	354.2	328.9	25.3	--	--	--	-Data Not Provided-	6/16/1967	Unknown
P-23	Downstream Bench Elev. 385	385.8	357.9	27.9	--	--	--	Abutment Bedrock	6/16/1967	3/30/2004
P-27	Right Abutment Stability Berm at Bench Elev. 385	386.7	367.1	19.6	--	--	--	Abutment Sand	6/16/1967	3/30/2004
P-29	Right Abutment Stability Berm above Bench Elev. 385	397.7	382.8	14.9	--	--	--	Abutment Sand	6/16/1967	3/30/2004
P-31A	Dam Crest near Right Abutment	418.3	390	28.3	--	--	--	Embankment	1966	3/30/2004
P-31B	Dam Crest near Right Abutment	418.3	364.7	53.6	--	--	--	Embankment	1966	3/30/2004
P-32A	Dam Crest near Right Abutment	417.8	397.7	20.1	--	--	--	Embankment	1966	3/30/2004
P-32B	Dam Crest near Right Abutment	417.8	380.2	37.6	--	--	--	Foundation Bedrock	1966	3/30/2004
P-33	Dam Crest near Left Abutment	417.8	390	27.8	--	--	--	Abutment Bedrock	1966	3/30/2004
P-34	Right Abutment in line with crest	--	--	--	--	--	--	Abutment Bedrock	1966	3/30/2004
P-36A	Downstream near Toe of Dam	351	338.3	12.7	--	--	--	Embankment	1966	3/30/2004
P-36B	Downstream near Toe of Dam	351	307.3	43.7	--	--	--	Foundation Alluvium	1966	3/30/2004
P-37	Right Abutment (downstream)	370.8	346.9	23.9	--	--	--	Abutment	1966 (?)	Unknown
P-38	Downstream of Dam	328.5	292.9	35.6	--	--	--	-Data Not Provided-	1966 (?)	3/30/2004
P-42	Downstream of Dam	341.7	321.9	19.8	--	--	--	-Data Not Provided-	1966	3/30/2004
P-51	Dam Crest	417.9	--	--	--	--	--	-Data Not Provided-	1976	3/30/2004
P-53A	Downstream Bench Elev. 385	384.7	--	--	--	--	--	-Data Not Provided-	1976	3/30/2004
P-53B	Downstream Bench Elev. 385	384.9	--	--	--	--	--	-Data Not Provided-	1976	3/30/2004
P-54	Right Abutment Stability Berm above Bench Elev. 385	390.4	--	--	--	--	--	Abutment Bedrock	1976	3/30/2004
P-55	Right Abutment Stability Berm below Bench Elev. 385	356	--	--	--	--	--	Abutment Bedrock	1976	3/30/2004
P-82	Right Abutment near Spillway Inlet	442	--	--	--	--	--	-Data Not Provided-	12/28/1993	3/30/2004
P-83	Unknown	426	--	--	--	--	--	-Data Not Provided-	1/31/1994	3/30/2004
P-89	Right Abutment (North of Spillway Chute)	431	--	--	--	--	--	-Data Not Provided-	12/28/1993	3/30/2004
P-91	Right Abutment just below Dam Crest	439	--	--	--	--	--	-Data Not Provided-	12/28/1993	3/30/2004
P-92	Right Abutment above Bench Elev. 385	400	--	--	--	--	--	-Data Not Provided-	12/28/1993	3/30/2004
OW-1	Right Abutment just above Spillway Inlet	--	--	--	468.16	433.46	34.7	Abutment Bedrock	3/29/2001	7/26/2016
OW-2	Right Abutment just above Spillway Inlet	--	--	--	442.91	407.91	35	Abutment Bedrock	3/29/2001	7/26/2016
Flow Points										
FP-1	Combined discharge from Subdrains 9 & 10	--	--	--	--	--	--	--	--	3/27/2008
FP-2	Right part of Chimney Drain	--	--	--	--	--	--	--	1960	--
FP-3	Center part of Chimney Drain	--	--	--	--	--	--	--	1960	--
FP-4	Left part of Chimney Drain	--	--	--	--	--	--	--	1960	--
FP-5	Right Abutment contact	--	--	--	--	--	--	--	1969	--
FP-8	Downstream Toe of Dam	--	--	--	--	--	--	--	1966	--
FP-9	Carries discharge from Subdrains 2, 3, 4, 5 & 8 (replaced by FP--1S)	--	--	--	--	--	--	--	1966	4/28/2008
FP-10	Stilling Basin (replaced by FP--1N)	--	--	--	--	--	--	--	1966	4/28/2008
FP-11	Right Abutment Stability Berm	--	--	--	--	--	--	--	1/6/2005	--
FP-1N	Stilling Basin (former FP--10)	--	--	--	--	--	--	--	4/28/2008	--
FP-1S	Carries discharge from Subdrains 2, 3, 4, 5, 8 & 11 (former FP--9)	--	--	--	--	--	--	--	4/28/2008	--

Note:
1. Piezometer data based on NGVD 29 datum.
*P-35A to be abandoned.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-1A			P-2			P-3A		
Top of Well Elevation -->			420.43				420.62			385.40	
Bottom of Well Elevation -->			287.40				363.40			303.70	
Depth of Well			133.0				57.2			81.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90		61.6	358.8		15.9	404.7		38.4	347.0	
2/28/2007	380.90		63.3	357.1		16.0	404.6		38.5	346.9	
3/29/2007	397.00		61.7	358.7		15.9	404.7		38.5	346.9	
4/27/2007	405.60		61.4	359.0		16.0	404.6		38.5	346.9	
5/24/2007	404.40		61.4	359.0		15.9	404.7		38.4	347.0	
6/28/2007	396.90		61.9	358.5		16.1	404.5		38.6	346.8	
7/31/2007	392.60		61.5	358.9		16.0	404.6		38.5	346.9	
8/29/2007	388.60		61.3	359.1		16.0	404.6		38.5	346.9	
9/2/2007	387.40		61.4	359.0		16.0	404.6		38.5	346.9	
9/26/2007	387.90		61.8	358.6		16.0	404.6		38.6	346.8	
10/25/2007	382.00		61.8	358.6		16.1	404.5		38.5	346.9	
11/27/2007	380.30		61.4	359.0		16.0	404.6		38.5	346.9	
12/27/2007	381.40		61.7	358.7		16.0	404.6		38.5	346.9	
1/31/2008	381.20		61.5	359.0	Dry	16.0	404.6	Dry	38.5	346.9	
2/28/2008	393.10		61.8	358.6	Dry	15.6	405.0		38.5	346.9	
3/27/2008	387.90		31.2	389.2	Cleaning	17.4	403.2		45.5	339.9	
4/28/2008	404.70		34.2	386.2	Blocked	17.4	403.2		39.7	345.7	
5/28/2008	404.00		36.6	383.8	Blocked	17.4	403.2	Dry	39.5	345.9	
6/25/2008	400.20		38.2	382.2	Blocked	17.4	403.2		40.1	345.3	
7/29/2008	398.70		39.4	381.0	Blocked	17.4	403.2		40.8	344.6	
7/30/2008	398.70	0.00	39.5	380.9	Blocked	17.5	403.1		41.0	344.4	
8/29/2008	395.00	0.00	7.7	412.7	Cleaning	17.6	403.0	Dry	42.7	342.7	
9/25/2008	391.70	0.00	15.6	404.8		17.7	402.9	Dry	43.9	341.5	
10/28/2008	384.05	0.00	23.0	397.4		17.7	403.0		47.0	338.5	
11/26/2008	391.10	1.94	28.2	392.2		17.7	402.9		45.8	339.6	
12/31/2008	397.90	3.20	32.2	388.2		17.7	402.9		42.4	343.0	
1/29/2009	393.40	0.34	34.8	385.6		16.8	403.8		43.5	341.9	
2/25/2009	398.60	3.91	36.8	383.6		17.7	402.9		42.2	343.2	
3/31/2009	393.40	0.16	38.6	381.8		17.6	403.0		43.0	342.4	
4/28/2009	400.70	0.10	40.1	380.3		17.7	402.9		41.1	344.3	
5/18/2009	400.80	0.00	40.8	379.6		17.7	402.9		40.8	344.6	
5/27/2009	400.10	0.00	61.6	358.8		17.6	403.0	Dry	41.0	344.4	
6/29/2009	403.00	0.15	61.0	359.4		17.7	402.9		39.9	345.5	
7/28/2009	396.53	0.00	60.9	359.5		17.7	402.9		41.9	343.6	
8/25/2009	396.60	0.00	60.8	359.6		17.6	403.0		42.2	343.2	
9/30/2009	393.10	0.00	61.1	359.3		17.6	403.0		43.7	341.7	
10/28/2009	401.60	0.42	61.0	359.4		17.7	402.9		40.9	344.5	
11/30/2009	402.50	0.00	60.9	359.5		17.7	402.9		40.1	345.3	
12/29/2009	399.90	2.80	60.8	359.6		17.7	402.9		40.8	344.6	
1/26/2010	401.10	6.75	60.8	359.6		17.6	403.0		40.8	344.6	
2/23/2010	402.50	2.66	60.8	359.6		17.7	402.9	Dry	40.0	345.4	
3/30/2010	400.00	1.25	60.6	359.8		17.7	402.9		40.7	344.7	
4/4/2010	399.60		60.6	359.8		17.7	402.9	Dry	40.9	344.5	
4/27/2010	403.80	1.32	60.6	359.8		17.6	403.0		39.8	345.6	
5/26/2010	403.60	0.03	60.5	359.9		17.6	403.0	Dry	39.7	345.7	
6/29/2010	397.70	0.00	59.4	361.0		17.6	403.0		41.6	343.8	
7/27/2010	396.30	0.00	60.4	360.0		17.6	403.0		42.3	343.1	
8/26/2010	390.70	0.00	60.6	359.8		17.4	403.2		44.2	341.2	
9/28/2010	390.30	0.00	60.6	359.8		17.6	403.0		45.0	340.4	
10/26/2010	403.20	1.56	60.6	359.8		17.2	403.4		41.0	344.4	
11/30/2010	397.10	1.34	60.6	359.8		17.6	403.0		42.0	343.4	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-1A			P-2			P-3A		
Top of Well Elevation -->			420.43				420.62		385.40		
Bottom of Well Elevation -->			287.40				363.40		303.70		
Depth of Well			133.0				57.2		81.7		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03	60.6	359.8		17.7	402.9	Dry	40.9	344.5	
1/27/2011	393.80	1.10	60.6	359.8		17.6	403.0	Dry	42.7	342.7	
2/23/2011	391.70	1.17	60.6	359.8		17.7	402.9		44.0	341.4	
3/29/2011	403.00	3.10	60.7	359.7		17.5	403.1		40.6	344.8	
4/27/2011	401.20	0.33	60.7	359.8		17.6	403.0		40.9	344.5	
5/26/2011	399.50	0.48	60.6	359.8		17.8	402.8		41.4	344.0	
6/28/2011	391.00	0.02	60.6	359.8		17.6	403.0		44.0	341.4	
7/26/2011	384.00	0.00	60.8	359.6		17.5	403.1		47.0	338.4	
8/24/2011	382.80	0.00	60.9	359.5		17.5	403.1		47.6	337.8	
9/27/2011	381.80	0.08	61.2	359.2		17.6	403.0		48.2	337.2	
10/26/2011	383.90	0.98	61.2	359.2		17.7	402.9		47.5	337.9	
11/22/2011	389.80	1.46	61.4	359.0		17.6	403.0		45.8	339.6	
12/28/2011	382.30	0.35	61.5	358.9		17.7	402.9		47.5	337.9	
1/25/2012	387.50	1.17	61.7	358.7		17.7	402.9		47.6	337.8	
2/28/2012	381.10	0.79	61.8	358.6		17.6	403.0		48.8	336.6	
3/27/2012	387.70	1.61	62.0	358.4		17.6	403.0		47.1	338.3	
4/23/2012	392.30	1.51	62.0	358.4		17.7	403.0				Bees nest in can
5/25/2012	388.30	0.06	62.3	358.1		17.7	402.9		45.6	339.8	
6/13/2012	385.10	0.06	62.1	358.3		17.6	403.0		46.6	338.8	
6/26/2012	386.90	0.00	62.2	358.2		17.6	403.0		46.3	339.1	
7/24/2012	378.00	0.10	62.3	358.1		17.6	403.0		49.0	336.4	
8/8/2012	382.90	0.10	62.4	358.0		17.6	403.0		47.9	337.5	
8/29/2012	382.70	0.00	62.5	357.9		17.6	403.0		48.4	337.0	
8/29/2012	382.70	0.00	62.5	357.9		17.6	403.0		48.4	337.0	
9/25/2012	381.90	0.00	62.7	357.7		17.6	403.0		48.0	337.4	
10/24/2012	384.40	0.08	62.8	357.6		17.7	402.9		48.1	337.3	
11/27/2012	389.60	0.86	63.1	357.3		17.6	403.0		45.8	339.6	
12/18/2012	394.70	1.96	63.1	357.3		17.6	403.0		43.9	341.5	
1/23/2013	393.00	1.53	63.1	357.3		17.7	402.9		43.5	341.9	
2/26/2013	391.50	0.49	63.1	357.3		17.7	402.9		44.2	341.2	
3/26/2013	394.40	1.00	63.1	357.3		17.6	403.0		44.1	341.3	
4/25/2013	391.00	0.01	63.0	357.4		17.7	402.9		44.4	341.0	
5/22/2013	392.00	0.00	63.2	357.2		17.7	402.9		43.9	341.5	
6/25/2013	380.60	0.00	63.1	357.3		17.6	403.0		47.4	338.0	
7/23/2013	380.20	0.00	63.2	357.2		17.7	402.9	Dry	48.6	336.8	
8/21/2013	379.60	0.00	63.4	357.0		17.6	403.0	Wet	48.6	336.8	
9/25/2013	382.20	0.00	63.5	356.9		17.6	403.0	Dry	48.4	337.0	
10/29/2013	382.00	0.00	63.7	356.7		17.7	402.9	Wet	48.9	336.5	
11/26/2013	390.10	0.44	63.7	356.7		17.6	403.0	Wet	46.5	338.9	
12/17/2013	394.70	1.10	63.8	356.6		17.6	403.0	Wet	44.1	341.3	
1/28/2014	392.30	0.00	63.8	356.6		17.6	403.0	Wet	43.9	341.5	
2/26/2014	389.90	0.72	63.7	356.7		17.2	403.4	Wet	44.7	340.7	
3/26/2014	387.20		63.8	356.6		17.6	403.0	Wet	45.6	339.8	
3/28/2014	387.20	1.78	63.7	356.7		17.7	402.9	Wet	45.8	339.6	
4/23/2014	393.00	0.34	63.9	356.5		17.6	403.0	Dry	44.4	341.0	
5/28/2014	387.50	0.00	63.9	356.5		17.6	403.0	Dry	45.7	339.7	
6/25/2014	388.70	0.00	63.9	356.5		17.7	402.9	Wet	45.5	339.9	
7/29/2014	382.80	0.00	64.0	356.4		17.6	403.0	Wet	47.4	338.0	
8/28/2014	386.80	0.04	64.0	356.4		17.6	403.0	Wet	46.9	338.5	
9/24/2014	387.90	0.00	64.1	356.3		17.6	403.0	Wet	45.9	339.5	
10/29/2014	383.90	0.00	64.2	356.2		17.3	403.3	Wet	47.4	338.0	

Note:
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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-1A			P-2			P-3A		
Top of Well Elevation -->			420.43				420.62			385.40	
Bottom of Well Elevation -->			287.40				363.40			303.70	
Depth of Well			133.0				57.2			81.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35	64.2	356.2		17.6	403.0	Wet	46.0	339.4	
12/22/2014	399.80	4.75	64.2	356.2		17.2	403.4	Wet	42.1	343.3	
1/28/2015	396.90	1.28	64.3	356.1		17.7	402.9	Wet	42.5	342.9	
2/24/2015	392.70	0.34	64.2	356.2		17.6	403.0	Wet	43.6	341.8	
3/31/2015	388.90	0.67	64.1	356.3		17.6	403.0	Wet	44.3	341.1	
4/23/2015	390.30	0.20	64.1	356.3		17.7	402.9	Wet	44.6	340.8	
5/28/2015	400.30	1.87	64.1	356.3		17.6	403.0	Wet	41.2	344.2	
6/24/2015	400.70	0.00	64.0	356.4		17.6	403.0	Wet	40.9	344.5	
7/30/2015	400.20	0.00	64.0	356.4		3.8	416.8	Cleaning	41.0	344.4	
8/25/2015	384.00	0.00	63.0	357.4		5.7	414.9		45.1	340.3	
9/23/2015	388.60	2.17	64.0	356.4		8.0	412.6		45.2	340.2	
10/29/2015	387.60	0.16	64.0	356.4		10.4	410.2		45.8	339.6	
11/25/2015	386.90	0.15	64.1	356.3		12.7	407.9		46.0	339.4	
12/23/2015	395.90	1.55	64.1	356.3		13.6	407.0		44.4	341.0	
1/26/2016	401.20	2.86	64.0	356.4		15.0	405.6		41.2	344.2	
2/24/2016	393.60	0.39	64.0	356.4		15.3	405.3		43.3	342.1	
3/29/2016	397.10	1.55	63.9	356.5		16.1	404.5		42.2	343.2	
4/29/2016	391.60	0.04	63.9	356.5		16.5	404.1		43.8	341.6	
5/24/2016	401.60	0.13	63.8	356.6		16.5	404.1		41.3	344.1	
6/29/2016	392.50	0.00	63.8	356.6		17.0	403.6		43.3	342.1	
7/26/2016	377.70	0.00	63.8	356.6		17.5	403.1		47.8	337.6	
8/24/2016	388.10	0.00	63.9	356.5		17.7	402.9		46.1	339.3	
9/29/2016	388.20	0.00	64.0	356.4		17.7	402.9		45.7	339.7	
10/26/2016	392.10	0.96	64.0	356.4		17.7	402.9		45.1	340.3	
11/22/2016	395.70	1.42	64.2	356.2		17.7	402.9		43.3	342.1	
12/28/2016	400.70	4.11	64.2	356.2		17.8	402.8		41.1	344.3	
1/26/2017	402.40	6.70	64.0	356.4		17.8	402.8		40.5	344.9	
2/28/2017	389.60	4.01	63.9	356.5		17.6	403.0		44.4	341.0	
3/29/2017	391.80	0.14	63.9	356.5		17.6	403.0		44.3	341.1	
4/26/2017	387.00	0.04	63.9	356.5		17.7	402.9		45.5	340.0	
5/23/2017	399.40	0.30	63.9	356.5		17.7	402.9	Dry	41.9	343.5	
6/21/2017	392.60	0.00	63.8	356.6		17.7	402.9	Dry	43.5	341.9	
7/26/2017	384.60	0.00	63.8	356.6		17.7	402.9	Dry	46.4	339.0	
8/30/2017	383.00	0.00	54.1	366.3	Omitted	17.8	402.8	Dry	47.1	338.3	
9/27/2017	382.00	0.00	64.0	356.4		17.7	402.9		48.1	337.3	
10/27/2017	375.00	0.00	64.1	356.3		17.8	402.8		49.5	335.9	
11/30/2017	382.80	0.14	64.2	356.2		17.8	402.8		48.1	337.3	
12/21/2017	380.50	0.00	64.3	356.1		17.7	402.9		48.6	336.8	
1/24/2018	397.80	1.43	64.3	356.1		17.7	402.9		43.5	341.9	
2/21/2018	382.40	0.17	64.4	356.0		16.7	403.9		46.7	338.7	
3/29/2018	392.10	0.00	64.4	356.0		16.7	403.9		44.5	340.9	
4/25/2018	388.00	0.05	64.5	355.9		16.8	403.8		46.3	339.1	
5/30/2018	399.50	0.21	64.5	355.9		16.9	403.7		42.5	342.9	
6/28/2018	398.90	0.00	64.5	355.9		16.9	403.7		41.6	343.8	
7/25/2018	388.60	0.00	64.6	355.8		16.3	404.3		44.5	340.9	
8/24/2018	378.60	0.00	64.5	355.9		16.6	404.0		48.4	337.0	
9/27/2018	381.40	0.00	64.6	355.8		17.7	402.9		48.3	337.1	
10/18/2018	385.20	1.45	64.6	355.8		17.7	402.9		47.3	338.1	
11/28/2018	389.10	1.32	64.7	355.7		17.7	402.9		48.9	336.5	
12/20/2018	394.20	2.12	64.7	355.7		17.6	403.0		44.5	340.9	
2/21/2019	396.00	8.26	64.70	355.7		17.70	402.9	Dry	42.20	343.2	

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TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-1A			P-2			P-3A		
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Depth of Well			133.0				57.2			81.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88	65.00	355.4		17.70	402.9	Dry	47.40	338.0	
4/25/2019	377.70	0.03	64.70	355.7		17.70	402.9	Dry	48.04	337.4	
5/30/2019	395.30	0.92	64.80	355.6		17.50	403.1	Dry	47.40	338.0	
6/26/2019	388.40	0.01	64.80	355.6		17.70	402.9	Dry	45.00	340.4	
7/5/2019	385.50	0.00	64.90	355.5		17.70	402.9	Dry	47.60	337.8	
7/30/2019	385.20	0.00	64.90	355.5		17.70	402.9	Dry	47.60	337.8	
8/27/2019	387.90	0.00	65.00	355.4		17.70	402.9	Dry	45.60	339.8	
9/26/2019	380.00	0.00	65.00	355.4		17.60	403.0	Dry	48.20	337.2	
10/23/2019	378.90	0.00	65.00	355.4		17.60	403.0	Dry	49.20	336.2	
11/26/2019	383.80	2.60	65.20	355.2		17.80	402.8	Dry	48.30	337.1	
12/18/2019	389.20	4.63	65.30	355.1		17.80	402.8	Dry	46.10	339.3	
1/29/2020	388.20	0.15	65.20	355.2		16.30	404.3		45.60	339.8	
2/25/2020	384.70	0.33	65.20	355.2		17.60	403.0		46.80	338.6	
3/24/2020	391.70	3.91	65.20	355.2		17.60	403.0		45.00	340.4	
4/23/2020	399.40	4.05	65.20	355.2		17.50	403.1		41.60	343.8	
5/27/2020	388.50	0.40	65.10	355.3		17.10	403.5		45.00	340.4	
6/24/2020	388.00	0.01	65.20	355.2		17.70	402.9		45.30	340.1	
7/29/2020	358.70	0.00	65.20	355.2		17.60	403.0		46.10	339.3	
8/26/2020	379.30	0.00	65.40	355.0		17.40	403.2		48.80	336.6	
9/29/2020	381.30	0.00	65.40	355.0		17.70	402.9		48.40	337.0	
10/28/2020	376.50	0.00	65.40	355.0		17.60	403.0		49.80	335.6	
11/24/2020	380.70	0.25	65.60	354.8		17.70	402.9		49.20	336.2	
12/23/2020	384.10	1.40	65.50	354.9		17.00	403.6		47.90	337.5	
1/26/2021	386.2	2.42	65.6	354.83		17.7	402.92		46.9	338.5	
2/25/2021	385.4	0.07	65.6	354.83		17.5	403.12		46.5	338.9	
3/23/2021	394.8	1.35	65.6	354.83		17.5	403.12		43.9	341.5	
4/27/2021	384.1	0.04	65.6	354.83		17.6	403.02		46.6	338.8	
5/27/2021	383.5	0.04	65.6	354.83		17.6	403.02		46.9	338.5	
6/30/2021	385.4	0	65.8	354.63		17.8	402.82		47.1	338.3	
7/29/2021	381.7	0.03	65.7	354.73		17.1	403.52		48.7	336.7	
8/24/2021	383.4	0	65.8	354.63		17.6	403.02		48.3	337.1	
9/28/2021	381.3	0.06	65.7	354.73		17.7	402.92		48	337.4	
10/27/2021	382.7	0.71	65.8	354.63		17.6	403.02		48.8	336.6	
11/23/2021	381	0	65.9	354.53		17.6	403.02		49.1	336.3	
12/21/2021	386.3	6.1	65.9	354.53		17.6	403.02		47.5	337.9	
1/25/2022	382	0.05	65.9	354.53		17.5	403.12		48.1	337.3	
2/22/2022	382.3	0.36	66.1	354.33		17.2	403.42		48.9	336.5	
3/29/2022	390.6	1.33	66.1	354.33		17.7	402.92		46.3	339.1	
4/27/2022	393.2	0.02	66	354.43		17.6	403.02		44.5	340.9	
5/24/2022	391.4	0.05	66.2	354.23		17.7	402.92		37.3	348.1	
6/28/2022	392.7	0	66.4	354.03		17.7	402.92		44.1	341.3	
7/26/2022	386.1	0	66.1	354.33		17.4	403.22		45.9	339.5	
8/25/2022	382.2	0.02	66.1	354.33		17.6	403.02		47.5	337.9	
9/29/2022	392.7	0.36	66.4	354.03		17.7	402.92		44.1	341.3	
10/25/2022	390	0.32	66.2	354.23		17.6	403.02		46.1	339.3	
11/17/2022	391.4	2.12	66.3	354.13		17.6	403.02		44.8	340.6	
12/22/2022	386.4	2.28	66.3	354.13		17.6	403.02		46.9	338.5	
1/26/2023	391.6	7.39	66.30	354.13		15.80	404.82		44.80	340.60	
2/23/2023	389.9	3.88	66.28	354.15		17.63	402.99		45.00	340.40	
3/28/2023	390.8	5.62	66.30	354.13		17.60	403.02		44.80	340.60	
4/25/2023	390.8	0.16	66.30	354.13		16.90	403.72		44.40	341.00	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-1A			P-2			P-3A		
Top of Well Elevation -->			420.43				420.62		385.40		
Bottom of Well Elevation -->			287.40				363.40		303.70		
Depth of Well			133.0				57.2		81.7		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	66.28	354.15		17.60	403.02		44.27	341.13	
6/27/2023	388.80	0.14	66.20	354.23		17.60	403.02		44.70	340.70	
7/27/2023	384.40	0.00	66.30	354.13		17.60	403.02		46.50	338.90	
8/29/2023	382.80	2.22	69.50	350.93	Omitted	17.60	403.02		47.40	338.00	
9/26/2023	377.90	0.00	66.35	354.08		17.40	403.22		49.26	336.14	
10/30/2023	385.30	0.26	66.40	354.03		17.70	402.92		47.50	337.90	
11/30/2023	382.90	0.70	66.50	353.93		17.40	403.22		48.20	337.20	
12/20/2023	388.50	1.10	66.46	353.97		17.76	402.86		46.95	338.45	
1/24/2024	391.90	2.23	66.50	353.93		17.40	403.22		44.80	340.60	
2/22/2024	388.60	7.64	66.50	353.93		17.30	403.32		45.20	340.20	
3/27/2024	390.90	2.54	66.50	353.93		17.43	403.19		44.72	340.68	
4/23/2024	391.60	1.62	66.50	353.93		16.10	404.52		44.30	341.10	
5/1/2024	389.10	0.00	64.40	356.03		16.20	404.42		44.90	340.50	
5/23/2024	389.20	0.16	66.50	353.93		17.40	403.22		45.40	340.00	
5/30/2024	392.80	#N/A	66.50	353.93		15.80	404.82		44.40	341.00	
6/20/2024	392.90	0.00	66.50	353.93		13.00	407.62	Omitted	43.90	341.50	
7/24/2024	386.40	0.00	66.50	353.93		16.80	403.82		46.20	339.20	
8/27/2024	384.10	0.00	66.50	353.93		17.20	403.42		47.50	337.90	
9/24/2024	380.50	0.03	66.50	353.93		17.40	403.22		48.20	337.20	
10/29/2024	387.40	0.00	66.50	353.93		17.30	403.32		46.90	338.50	
11/21/2024	384.50	0.09	66.60	353.83		17.38	403.24		47.47	337.93	
12/17/2024	386.30	0.01	66.60	353.83		16.70	403.92		47.20	338.20	
1/28/2025	385.70	1.01	66.60	353.83		17.30	403.32		47.80	337.60	
2/26/2025	386.00	3.18	66.70	353.73		17.20	403.42		47.20	338.20	
3/20/2025	383.60	2.29	66.70	353.73		17.20	403.42		47.70	337.70	
4/14/2025	383.40	#N/A	66.70	353.73		17.40	403.22		48.00	337.40	
4/23/2025	385.20	0.35	66.70	353.73		17.40	403.22		47.50	337.90	
5/28/2025	384.50	0.08	66.70	353.73		17.40	403.22		47.60	337.80	
7/7/2025	386.00	0.20	66.80	353.63		17.20	403.42		47.70	337.70	
7/23/2025	387.30	0.00	66.73	353.7		17.44	403.18		47.00	338.40	
8/20/2025	378.90	0.00	66.80	353.63		17.40	403.22		49.30	336.10	
9/24/2025	387.00	0.13	66.90	353.53		17.40	403.22		47.50	337.90	
10/22/2025	386.40	1.20	66.90	353.53		17.40	403.22		47.00	338.40	
11/19/2025	387.30	5.70	66.90	353.53		16.40	404.22		47.40	338.00	
12/16/2025	381.60	2.28	66.90	353.53		17.45	403.17		48.74	336.66	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-30A			P-30B			P-35A		
Top of Well Elevation -->			420.81			420.81			388.73		
Bottom of Well Elevation -->			371.70			337.10			357.30		
Depth of Well			49.1			83.7			31.4		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90				Blocked,NotRead	47.5	373.3		31.1	357.6	
2/28/2007	380.90				Blocked,NotRead	37.5	383.3		31.3	357.4	
3/29/2007	397.00				Blocked,NotRead	47.5	373.3		31.2	357.5	
4/27/2007	405.60				Blocked,NotRead	47.5	373.3		31.3	357.4	
5/24/2007	404.40				Blocked,NotRead	46.6	374.2		35.3	353.4	
6/28/2007	396.90				Blocked,NotRead	45.8	375.0		31.3	357.4	
7/31/2007	392.60				Blocked,NotRead	45.0	375.8		31.2	357.5	
8/29/2007	388.60				Blocked,NotRead	45.3	375.5		31.3	357.4	
9/2/2007	387.40				Blocked,NotRead	47.5	373.3		31.3	357.4	
9/26/2007	387.90				Blocked,NotRead	47.0	373.8		31.2	357.5	
10/25/2007	382.00				Blocked,NotRead	47.9	372.9		31.2	357.5	
11/27/2007	380.30				Blocked,NotRead	47.5	373.3		31.3	357.4	
12/27/2007	381.40				Blocked,NotRead	47.6	373.2		31.4	357.3	
1/31/2008	381.20				Blocked,NotRead	47.5	373.3	Dry	31.3	357.4	
2/28/2008	393.10				Blocked,NotRead	46.7	374.1	Dry	33.3	355.4	
3/27/2008	387.90				Blocked,NotRead	48.3	372.5		31.4	357.3	Dry
4/28/2008	404.70				Blocked,NotRead	48.3	372.5	Dry	31.3	357.4	Dry
5/28/2008	404.00				Blocked,NotRead	46.6	374.2		31.4	357.3	Dry
6/25/2008	400.20				Blocked,NotRead	46.0	374.8		31.4	357.3	Dry
7/29/2008	398.70				Blocked,NotRead	44.0	376.8		31.3	357.4	Dry
7/30/2008	398.70	0.00			Blocked,NotRead	46.0	374.8		31.3	357.4	Dry
8/29/2008	395.00	0.00			Blocked,NotRead	47.1	373.7	Cleaning	31.3	357.4	Dry
9/25/2008	391.70	0.00			Blocked,NotRead	48.6	372.2		31.3	357.4	Dry
10/28/2008	384.05	0.00			Blocked,NotRead	51.0	369.8		31.3	357.4	Dry
11/26/2008	391.10	1.94			Blocked,NotRead	53.1	367.7		31.4	357.3	Dry
12/31/2008	397.90	3.20			Blocked,NotRead	48.6	372.2		31.3	357.4	Dry
1/29/2009	393.40	0.34			Blocked,NotRead	49.0	371.8		31.3	357.4	Dry
2/25/2009	398.60	3.91			Blocked,NotRead	48.6	372.2		31.3	357.4	Dry
3/31/2009	393.40	0.16			Blocked,NotRead	47.3	373.5		31.4	357.3	Dry
4/28/2009	400.70	0.10			Blocked,NotRead	47.1	373.7		31.2	357.5	
5/18/2009	400.80	0.00			Blocked,NotRead	45.5	375.3		30.3	358.4	
5/27/2009	400.10	0.00			Blocked,NotRead	45.6	375.2		31.1	357.6	Dry
6/29/2009	403.00	0.15			Blocked,NotRead	43.6	377.2		31.3	357.4	
7/28/2009	396.53	0.00			Blocked,NotRead	44.7	376.1		30.8	357.9	
8/25/2009	396.60	0.00			Blocked,NotRead	46.5	374.3		31.0	357.7	
9/30/2009	393.10	0.00			Blocked,NotRead	48.4	372.4		31.3	357.4	
10/28/2009	401.60	0.42			Blocked,NotRead	46.6	374.2		31.3	357.4	
11/30/2009	402.50	0.00			Blocked,NotRead	44.0	376.8		31.3	357.4	
12/29/2009	399.90	2.80			Blocked,NotRead	44.7	376.1		31.3	357.4	
1/26/2010	401.10	6.75			Blocked,NotRead	46.0	374.8		28.3	360.4	
2/23/2010	402.50	2.66			Blocked,NotRead	44.7	376.1		30.5	358.2	
3/30/2010	400.00	1.25			Blocked,NotRead	44.5	376.3		30.0	358.7	
4/4/2010	399.60				Blocked,NotRead	44.8	376.0		30.1	358.6	
4/27/2010	403.80	1.32			Blocked,NotRead	44.1	376.7		30.2	358.5	
5/26/2010	403.60	0.03			Blocked,NotRead	43.5	377.3		29.7	359.0	
6/29/2010	397.70	0.00			Blocked,NotRead	43.0	377.8		29.5	359.2	
7/27/2010	396.30	0.00			Blocked,NotRead	43.0	377.8		30.3	358.4	
8/26/2010	390.70	0.00			Blocked,NotRead	42.9	377.9		31.3	357.4	
9/28/2010	390.30	0.00			Blocked,NotRead	42.8	378.0		31.1	357.6	
10/26/2010	403.20	1.56			Blocked,NotRead	43.0	377.8		31.5	357.2	
11/30/2010	397.10	1.34			Blocked,NotRead	43.0	377.8		31.3	357.4	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-30A			P-30B			P-35A		
Top of Well Elevation -->			420.81			420.81			388.73		
Bottom of Well Elevation -->			371.70			337.10			357.30		
Depth of Well			49.1			83.7			31.4		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03			Blocked,NotRead	43.1	377.7		22.5	366.2	
1/27/2011	393.80	1.10			Blocked,NotRead	43.0	377.8		30.6	358.1	
2/23/2011	391.70	1.17			Blocked,NotRead	43.2	377.6		31.3	357.4	
3/29/2011	403.00	3.10			Blocked,NotRead	43.0	377.8		31.2	357.5	
4/27/2011	401.20	0.33			Blocked,NotRead	43.2	377.6	Dry	31.0	357.7	
5/26/2011	399.50	0.48			Blocked,NotRead	43.0	377.9	Dry	30.7	358.1	
6/28/2011	391.00	0.02			Blocked,NotRead	43.0	377.8		31.0	357.7	
7/26/2011	384.00	0.00			Blocked,NotRead	43.0	377.8		31.2	357.5	
8/24/2011	382.80	0.00			Blocked,NotRead	43.2	377.6		31.3	357.4	
9/27/2011	381.80	0.08			Blocked,NotRead	43.0	377.8		31.3	357.4	
10/26/2011	383.90	0.98			Blocked,NotRead	42.9	377.9		31.3	357.4	
11/22/2011	389.80	1.46			Blocked,NotRead	43.0	377.8		31.3	357.4	
12/28/2011	382.30	0.35			Blocked,NotRead	43.0	377.8		31.4	357.3	
1/25/2012	387.50	1.17			Blocked,NotRead	43.0	377.8		31.4	357.3	
2/28/2012	381.10	0.79			Blocked,NotRead	43.0	377.8		31.4	357.3	
3/27/2012	387.70	1.61			Blocked,NotRead	43.0	377.8		31.3	357.4	
4/23/2012	392.30	1.51			Blocked,NotRead	43.1	377.7		31.4	357.4	
5/25/2012	388.30	0.06			Blocked,NotRead	43.1	377.7		31.5	357.2	
6/13/2012	385.10	0.06			Blocked,NotRead	43.1	377.7		31.2	357.5	
6/26/2012	386.90	0.00			Blocked,NotRead	43.1	377.7		31.3	357.4	
7/24/2012	378.00	0.10			Blocked,NotRead	43.1	377.7		31.3	357.4	
8/8/2012	382.90	0.10			Blocked,NotRead	43.1	377.7		31.3	357.4	
8/29/2012	382.70	0.00			Blocked,NotRead	43.1	377.7		31.3	357.4	
8/29/2012	382.70	0.00			Blocked,NotRead	43.1	377.7		31.3	357.4	
9/25/2012	381.90	0.00			Blocked,NotRead	43.1	377.7		31.3	357.4	
10/24/2012	384.40	0.08			Blocked,NotRead	43.0	377.8		31.0	357.7	
11/27/2012	389.60	0.86			Blocked,NotRead	43.1	377.7		31.3	357.4	
12/18/2012	394.70	1.96			Blocked,NotRead	43.1	377.7		31.3	357.4	
1/23/2013	393.00	1.53			Blocked,NotRead	43.2	377.6		31.5	357.2	
2/26/2013	391.50	0.49			Blocked,NotRead	43.2	377.6		31.3	357.4	
3/26/2013	394.40	1.00			Blocked,NotRead	43.1	377.7		31.3	357.4	
4/25/2013	391.00	0.01			Blocked,NotRead	42.9	377.9		31.5	357.2	
5/22/2013	392.00	0.00			Blocked,NotRead	43.0	377.8		31.4	357.3	
6/25/2013	380.60	0.00			Blocked,NotRead	42.8	378.0		31.3	357.4	
7/23/2013	380.20	0.00			Blocked,NotRead	43.3	377.5		31.3	357.4	Dry
8/21/2013	379.60	0.00			Blocked,NotRead	43.0	377.8		31.3	357.4	Dry
9/25/2013	382.20	0.00			Blocked,NotRead	43.0	377.8	Dry	31.3	357.4	Dry
10/29/2013	382.00	0.00			Blocked,NotRead	43.2	377.6	Wet	31.2	357.5	Dry
11/26/2013	390.10	0.44			Blocked,NotRead	43.0	377.8		31.3	357.4	Dry
12/17/2013	394.70	1.10			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
1/28/2014	392.30	0.00			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
2/26/2014	389.90	0.72			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
3/26/2014	387.20				Blocked,NotRead	43.2	377.6	Wet	31.4	357.3	Dry
3/28/2014	387.20	1.78			Blocked,NotRead	43.0	377.8		31.3	357.4	
4/23/2014	393.00	0.34			Blocked,NotRead	43.1	377.7		31.3	357.4	
5/28/2014	387.50	0.00			Blocked,NotRead	42.9	377.9		31.5	357.2	
6/25/2014	388.70	0.00			Blocked,NotRead	43.2	377.6		31.3	357.4	Dry
7/29/2014	382.80	0.00			Blocked,NotRead	43.1	377.7		31.3	357.4	Dry
8/28/2014	386.80	0.04			Blocked,NotRead	43.1	377.7		31.2	357.5	
9/24/2014	387.90	0.00			Blocked,NotRead	43.0	377.8		31.2	357.5	Dry
10/29/2014	383.90	0.00			Blocked,NotRead	43.1	377.7		31.4	357.3	Dry

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-30A			P-30B			P-35A		
Top of Well Elevation -->			420.81			420.81			388.73		
Bottom of Well Elevation -->			371.70			337.10			357.30		
Depth of Well			49.1			83.7			31.4		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35			Blocked,NotRead	43.0	377.8		31.2	357.5	
12/22/2014	399.80	4.75			Blocked,NotRead	42.7	378.1		31.3	357.4	Dry
1/28/2015	396.90	1.28			Blocked,NotRead	43.1	377.7		31.4	357.3	Dry
2/24/2015	392.70	0.34			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
3/31/2015	388.90	0.67			Blocked,NotRead	43.1	377.7		31.5	357.2	Dry
4/23/2015	390.30	0.20			Blocked,NotRead	43.1	377.7		31.3	357.4	Dry
5/28/2015	400.30	1.87			Blocked,NotRead	42.9	377.9		31.4	357.3	Dry
6/24/2015	400.70	0.00			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
7/30/2015	400.20	0.00			Blocked,NotRead	43.1	377.7		31.4	357.3	Dry
8/25/2015	384.00	0.00			Blocked,NotRead	38.6	382.2	Omitted	31.3	357.4	Dry
9/23/2015	388.60	2.17			Blocked,NotRead	43.1	377.7		31.3	357.4	Dry
10/29/2015	387.60	0.16			Blocked,NotRead	43.2	377.6		31.5	357.2	Dry
11/25/2015	386.90	0.15			Blocked,NotRead	43.2	377.6		31.4	357.3	Dry
12/23/2015	395.90	1.55			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
1/26/2016	401.20	2.86			Blocked,NotRead	43.2	377.6		31.3	357.4	Dry
2/24/2016	393.60	0.39			Blocked,NotRead	43.1	377.7		31.4	357.3	Dry
3/29/2016	397.10	1.55			Blocked,NotRead	43.2	377.6		31.4	357.3	Dry
4/29/2016	391.60	0.04			Blocked,NotRead	43.0	377.8		31.4	357.3	Dry
5/24/2016	401.60	0.13			Blocked,NotRead	44.3	376.5		31.4	357.3	Dry
6/29/2016	392.50	0.00			Blocked,NotRead	43.1	377.7		31.3	357.4	Dry
7/26/2016	377.70	0.00			Blocked,NotRead	52.2	368.6		31.3	357.4	Dry
8/24/2016	388.10	0.00			Blocked,NotRead	53.3	367.5		30.4	358.3	Omitted
9/29/2016	388.20	0.00			Blocked,NotRead	52.5	368.3		31.4	357.3	Dry
10/26/2016	392.10	0.96			Blocked,NotRead	53.1	367.7		31.3	357.4	Dry
11/22/2016	395.70	1.42			Blocked,NotRead	43.1	377.7		31.3	357.4	Dry
12/28/2016	400.70	4.11			Blocked,NotRead	41.2	379.6		31.4	357.3	Dry
1/26/2017	402.40	6.70			Blocked,NotRead	43.2	377.6		31.4	357.3	Dry
2/28/2017	389.60	4.01			Blocked,NotRead	48.1	372.7		31.4	357.3	Dry
3/29/2017	391.80	0.14			Blocked,NotRead	50.6	370.2		31.3	357.4	
4/26/2017	387.00	0.04			Blocked,NotRead	43.0	377.8		31.3	357.4	
5/23/2017	399.40	0.30			Blocked,NotRead	43.3	377.5		31.4	357.3	Dry
6/21/2017	392.60	0.00			Blocked,NotRead	47.6	373.2		31.3	357.4	Dry
7/26/2017	384.60	0.00			Blocked,NotRead	50.6	370.2	Dry	31.4	357.3	Dry
8/30/2017	383.00	0.00			Blocked,NotRead	50.8	370.0	Dry	31.4	357.3	Dry
9/27/2017	382.00	0.00			Blocked,NotRead	50.6	370.2	Dry	31.3	357.4	Dry
10/27/2017	375.00	0.00			Blocked,NotRead	43.2	377.6	Omitted	31.4	357.3	
11/30/2017	382.80	0.14			Blocked,NotRead	53.4	367.4	Omitted	31.3	357.4	
12/21/2017	380.50	0.00			Blocked,NotRead	53.6	367.2	Dry	31.3	357.4	Dry
1/24/2018	397.80	1.43			Blocked,NotRead	53.4	367.4	Omitted	31.3	357.4	Dry
2/21/2018	382.40	0.17			Blocked,NotRead	43.3	377.5	Omitted	31.3	357.4	Dry
3/29/2018	392.10	0.00			Blocked,NotRead	52.3	368.5	Omitted	31.3	357.4	Dry
4/25/2018	388.00	0.05			Blocked,NotRead	50.7	370.1	Omitted	31.2	357.5	Dry
5/30/2018	399.50	0.21			Blocked,NotRead	50.5	370.3	Omitted	31.2	357.5	Dry
6/28/2018	398.90	0.00			Blocked,NotRead	47.0	373.8	Omitted	31.3	357.4	Dry
7/25/2018	388.60	0.00			Blocked,NotRead	49.1	371.7	Omitted	31.4	357.3	Dry
8/24/2018	378.60	0.00			Blocked,NotRead	43.2	377.6	Omitted	31.1	357.6	Dry
9/27/2018	381.40	0.00			Blocked,NotRead	50.5	370.3	Omitted	31.2	357.5	
10/18/2018	385.20	1.45			Blocked,NotRead	50.6	370.2	Omitted	31.3	357.4	Dry
11/28/2018	389.10	1.32			Blocked,NotRead	43.4	377.4	Omitted	31.3	357.4	
12/20/2018	394.20	2.12			Blocked,NotRead	50.5	370.3	Omitted	31.1	357.6	Dry
2/21/2019	396.00	8.26			Blocked,NotRead	47.70	373.1	Omitted	30.90	357.8	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-30A			P-30B			P-35A		
Top of Well Elevation -->			420.81			420.81			388.73		
Bottom of Well Elevation -->			371.70			337.10			357.30		
Depth of Well			49.1			83.7			31.4		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88			Blocked,NotRead			Blocked,NotRead	31.30	357.4	
4/25/2019	377.70	0.03			Blocked,NotRead			Blocked,NotRead	31.30	357.4	Dry
5/30/2019	395.30	0.92			Blocked,NotRead	52.60	368.2		31.20	357.5	Dry
6/26/2019	388.40	0.01	31.10	389.71	Blocked	53.20	367.6		31.30	357.4	Dry
7/5/2019	385.50	0.00	37.20	383.61	Blocked	51.70	369.1		31.30	357.4	Dry
7/30/2019	385.20	0.00	37.30	383.51	Blocked	53.22	367.6		31.30	357.4	
8/27/2019	387.90	0.00	37.30	383.51	Blocked	52.90	367.9		31.20	357.5	Dry
9/26/2019	380.00	0.00	37.20	383.61	Blocked	54.30	366.5		31.30	357.4	
10/23/2019	378.90	0.00	37.30	383.51	Blocked	53.20	367.6		31.20	357.5	
11/26/2019	383.80	2.60	37.30	383.51	Blocked	53.20	367.6		31.20	357.5	
12/18/2019	389.20	4.63	37.40	383.41	Blocked	53.50	367.3		31.40	357.3	
1/29/2020	388.20	0.15	37.30	383.51	Blocked	53.30	367.5		31.20	357.5	
2/25/2020	384.70	0.33	37.30	383.51	Blocked	53.20	367.6		31.20	357.5	
3/24/2020	391.70	3.91	37.30	383.51	Blocked	53.30	367.5		31.30	357.4	
4/23/2020	399.40	4.05	37.30	383.51	Blocked	53.30	367.5		31.30	357.4	
5/27/2020	388.50	0.40	37.20	383.61	Blocked	53.20	367.6		31.20	357.5	
6/24/2020	388.00	0.01	39.30	381.51	Blocked	52.20	368.6		31.30	357.4	
7/29/2020	358.70	0.00	41.20	379.61	Blocked	52.40	368.4		31.20	357.5	
8/26/2020	379.30	0.00	37.40	383.41	Blocked	53.40	367.4		31.30	357.4	
9/29/2020	381.30	0.00	37.30	383.51	Blocked	53.40	367.4		31.30	357.4	
10/28/2020	376.50	0.00	37.20	383.61	Blocked	53.60	367.2		31.30	357.4	
11/24/2020	380.70	0.25	37.30	383.51	Blocked	53.60	367.2		31.20	357.5	
12/23/2020	384.10	1.40	37.20	383.61	Blocked	55.40	365.4		31.30	357.4	
1/26/2021	386.2	2.42	37.30	383.51	Blocked	53.6	367.21		31.3	357.43	
2/25/2021	385.4	0.07	37.30	383.51	Blocked	53.4	367.41		31.2	357.53	
3/23/2021	394.8	1.35	37.30	383.51	Blocked	51.9	368.91		31.1	357.63	
4/27/2021	384.1	0.04	37.50	383.31	Blocked	53.2	367.61		31.3	357.43	
5/27/2021	383.5	0.04	37.30	383.51	Blocked	53.6	367.21		31.3	357.43	
6/30/2021	385.4	0	37.50	383.31	Blocked	53.8	367.01		31.3	357.43	
7/29/2021	381.7	0.03	37.30	383.51	Blocked	53.5	367.31		31.3	357.43	
8/24/2021	383.4	0	37.30	383.51	Blocked	53.6	367.21		31.3	357.43	
9/28/2021	381.3	0.06	37.40	383.41	Blocked	53.7	367.11		31.4	357.33	
10/27/2021	382.7	0.71	37.30	383.51	Blocked	53.5	367.31		31.3	357.43	
11/23/2021	381	0	37.40	383.41	Blocked	53.6	367.21		31.3	357.43	
12/21/2021	386.3	6.1	37.40	383.41	Blocked	53.6	367.21		31.3	357.43	
1/25/2022	382	0.05	37.20	383.61	Blocked	53.4	367.41		31.2	357.53	
2/22/2022	382.3	0.36	37.30	383.51	Blocked	53.4	367.41		31.3	357.43	
3/29/2022	390.6	1.33	37.50	383.31	Blocked	53.7	367.11		31.3	357.43	
4/27/2022	393.2	0.02	37.40	383.41	Blocked	52	368.81		31.3	357.43	
5/24/2022	391.4	0.05	44.40	376.41	Blocked	50.9	369.91		31.3	357.43	
6/28/2022	392.7	0	37.40	383.41	Blocked	50.7	370.11		31.4	357.33	
7/26/2022	386.1	0	37.20	383.61	Blocked	51.3	369.51		31.1	357.63	
8/25/2022	382.2	0.02	37.40	383.41	Blocked	53.5	367.31		31.1	357.63	
9/29/2022	392.7	0.36	37.40	383.41	Blocked	50.7	370.11		31.4	357.33	
10/25/2022	390	0.32	37.40	383.41	Blocked	53.5	367.31		31.2	357.53	
11/17/2022	391.4	2.12	37.30	383.51	Blocked	52	368.81		33.1	355.63	Omitted
12/22/2022	386.4	2.28	37.30	383.51	Blocked	53.6	367.21		31.2	357.53	
1/26/2023	391.6	7.39	37.40	383.41	Blocked	52.90	367.91		31.30	357.43	
2/23/2023	389.9	3.88	37.33	383.48	Blocked	51.61	369.20		31.33	357.40	
3/28/2023	390.8	5.62	37.40	383.41	Blocked	51.60	369.21		31.30	357.43	
4/25/2023	390.8	0.16	37.40	383.41	Blocked	51.00	369.81		31.40	357.33	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-30A			P-30B			P-35A		
Top of Well Elevation -->			420.81			420.81			388.73		
Bottom of Well Elevation -->			371.70			337.10			357.30		
Depth of Well			49.1			83.7			31.4		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	37.37	383.44	Blocked	50.60	370.21		31.33	357.40	
6/27/2023	388.80	0.14	37.40	383.41	Blocked	50.70	370.11		31.40	357.33	
7/27/2023	384.40	0.00	37.40	383.41	Blocked	53.70	367.11		31.30	357.43	
8/29/2023	382.80	2.22	37.40	383.41	Blocked	53.70	367.11		31.40	357.33	
9/26/2023	377.90	0.00	37.40	383.41	Blocked	53.60	367.21		31.30	357.43	
10/30/2023	385.30	0.26	37.30	383.51	Blocked	53.70	367.11		34.20	354.53	Omitted
11/30/2023	382.90	0.70	37.30	383.51	Blocked	53.60	367.21		31.00	357.73	
12/20/2023	388.50	1.10	37.53	383.28	Blocked	57.58	363.23		31.46	357.27	Dry
1/24/2024	391.90	2.23	37.40	383.41	Blocked	51.70	369.11		31.20	357.53	
2/22/2024	388.60	7.64	37.40	383.41	Blocked	52.00	368.81		31.30	357.43	
3/27/2024	390.90	2.54	37.37	383.44	Blocked	51.75	369.06		31.36	357.37	
4/23/2024	391.60	1.62	37.30	383.51	Blocked	50.60	370.21		31.30	357.43	
5/1/2024	389.10	0.00	37.40	383.41	Blocked	50.60	370.21		31.30	357.43	
5/23/2024	389.20	0.16	37.50	383.31	Blocked	52.40	368.41		31.40	357.33	
5/30/2024	392.80	#N/A	37.40	383.41	Blocked	52.30	368.51		31.40	357.33	
6/20/2024	392.90	0.00	37.70	383.11	Blocked	49.90	370.91		31.30	357.43	
7/24/2024	386.40	0.00	37.60	383.21	Blocked	52.70	368.11		31.30	357.43	
8/27/2024	384.10	0.00	37.60	383.21	Blocked	53.70	367.11		31.20	357.53	
9/24/2024	380.50	0.03	37.50	383.31	Blocked	53.60	367.21		31.00	357.73	
10/29/2024	387.40	0.00	37.60	383.21	Blocked	53.60	367.21		31.20	357.53	
11/21/2024	384.50	0.09	37.66	383.15	Blocked	53.75	367.06		31.33	357.40	
12/17/2024	386.30	0.01	37.70	383.11	Blocked	53.80	367.01		31.40	357.33	
1/28/2025	385.70	1.01	37.70	383.11	Blocked	53.80	367.01		31.40	357.33	
2/26/2025	386.00	3.18	37.60	383.21	Blocked	53.70	367.11		31.20	357.53	
3/20/2025	383.60	2.29	37.60	383.21	Blocked	53.80	367.01		31.20	357.53	
4/14/2025	383.40	#N/A	37.70	383.11	Blocked	53.80	367.01		31.30	357.43	
4/23/2025	385.20	0.35	37.80	383.01	Blocked	53.90	366.91		31.30	357.43	
5/28/2025	384.50	0.08	37.60	383.21	Blocked	53.80	367.01		31.10	357.63	
7/7/2025	386.00	0.20	40.80	380.01	Blocked	53.80	367.01		31.10	357.63	
7/23/2025	387.30	0.00	40.85	379.96	Blocked	53.89	366.92		31.31	357.42	
8/20/2025	378.90	0.00	40.90	379.91	Blocked	53.90	366.91		31.30	357.43	
9/24/2025	387.00	0.13	40.80	380.01	Blocked	53.90	366.91		31.30	357.43	
10/22/2025	386.40	1.20	40.80	380.01	Blocked	53.90	366.91		31.20	357.53	
11/19/2025	387.30	5.70	40.80	380.01	Blocked	53.90	366.91		31.30	357.43	
12/16/2025	381.60	2.28	40.86	379.95	Blocked	53.93	366.88		31.35	357.38	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-35B			P-35C			P-52		
Top of Well Elevation -->			388.45			388.34			421.03		
Bottom of Well Elevation -->			313.40			343.20			361.20		
Depth of Well			75.1			45.1			59.8		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90		44.1	344.4		44.3	344.0		35.3	385.7	
2/28/2007	380.90		44.1	344.4		44.6	343.7		35.2	385.8	
3/29/2007	397.00		46.1	342.4		44.7	343.6		35.2	385.8	
4/27/2007	405.60		44.1	344.4		43.9	344.4		28.7	392.3	
5/24/2007	404.40		44.3	344.2		43.0	345.3		28.1	392.9	
6/28/2007	396.90		44.4	344.1		42.8	345.5		35.3	385.7	
7/31/2007	392.60		44.3	344.2		43.1	345.2		33.3	387.7	
8/29/2007	388.60		44.1	344.4		43.4	344.9		34.5	386.5	
9/2/2007	387.40		44.1	344.4		43.3	345.0		35.1	385.9	
9/26/2007	387.90		44.1	344.4		43.5	344.8		35.1	385.9	
10/25/2007	382.00		44.2	344.3		44.0	344.3		35.6	385.4	
11/27/2007	380.30		44.1	344.4		44.4	343.9		35.0	386.0	
12/27/2007	381.40		44.2	344.3		44.7	343.6		35.3	385.7	
1/31/2008	381.20		44.2	344.3		44.7	343.7	Dry	35.1	385.9	Dry
2/28/2008	393.10		44.1	344.4		44.8	343.5	Dry	35.1	385.9	Dry
3/27/2008	387.90		49.6	338.9		44.6	343.7	Dry	40.9	380.1	
4/28/2008	404.70		44.3	344.2		44.1	344.2		29.2	391.8	
5/28/2008	404.00		44.0	344.5		43.1	345.2		28.1	392.9	
6/25/2008	400.20		44.5	344.0		42.5	345.8		27.3	393.7	Dry
7/29/2008	398.70		45.4	343.1		42.5	345.8		27.5	393.5	Dry
7/30/2008	398.70	0.00	45.5	343.0		42.5	345.8		27.8	393.2	Dry
8/29/2008	395.00	0.00	46.8	341.7		42.5	345.8		33.2	387.8	
9/25/2008	391.70	0.00	47.9	340.6		43.5	344.8		35.3	385.7	
10/28/2008	384.05	0.00	50.8	337.7		43.3	345.0		42.0	379.1	
11/26/2008	391.10	1.94	49.7	338.8		43.7	344.6		40.7	380.3	
12/31/2008	397.90	3.20	46.7	341.8		43.3	345.0		33.7	387.3	
1/29/2009	393.40	0.34	47.6	340.9		43.1	345.2		34.9	386.1	
2/25/2009	398.60	3.91	46.1	342.4		43.1	345.2		33.3	387.7	
3/31/2009	393.40	0.16	47.1	341.4		42.8	345.5		35.2	385.8	
4/28/2009	400.70	0.10	45.5	343.0		42.8	345.5		31.5	389.5	
5/18/2009	400.80	0.00	45.2	343.3		42.4	345.9		30.6	390.4	
5/27/2009	400.10	0.00	45.4	343.1		42.4	345.9		30.8	390.2	
6/29/2009	403.00	0.15	44.4	344.1		41.9	346.4		28.3	392.7	
7/28/2009	396.53	0.00	46.2	342.3		41.9	346.5		32.3	388.7	
8/25/2009	396.60	0.00	46.5	342.0		42.1	346.2		33.0	388.0	
9/30/2009	393.10	0.00	47.9	340.6		42.7	345.6		36.4	384.6	
10/28/2009	401.60	0.42	45.4	343.1		42.6	345.7		30.9	390.1	
11/30/2009	402.50	0.00	44.6	343.9		41.8	346.5		29.0	392.0	
12/29/2009	399.90	2.80	45.3	343.2		41.7	346.6		30.5	390.5	
1/26/2010	401.10	6.75	45.2	343.3		41.9	346.4		30.0	391.0	
2/23/2010	402.50	2.66	44.6	343.9		41.8	346.5		28.8	392.2	
3/30/2010	400.00	1.25	45.1	343.4		41.3	347.0		30.2	390.8	
4/4/2010	399.60		45.3	343.2		41.5	346.8		30.4	390.6	
4/27/2010	403.80	1.32	44.4	344.1		41.4	346.9		28.7	392.3	
5/26/2010	403.60	0.03	44.3	344.2		41.2	347.1		27.8	393.2	
6/29/2010	397.70	0.00	46.0	342.5		40.3	348.0		31.4	389.6	
7/27/2010	396.30	0.00	46.7	341.8		41.8	346.5		32.9	388.1	
8/26/2010	390.70	0.00	48.3	340.2		41.9	346.4		41.6	379.4	
9/28/2010	390.30	0.00	48.7	339.8		42.9	345.4		38.9	382.1	
10/26/2010	403.20	1.56	45.7	342.8		42.7	345.6		29.5	391.5	
11/30/2010	397.10	1.34	46.5	342.0		47.9	340.4	Erroneous	32.8	388.2	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-35B			P-35C			P-52		
Top of Well Elevation -->			388.45			388.34			421.03		
Bottom of Well Elevation -->			313.40			343.20			361.20		
Depth of Well			75.1			45.1			59.8		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03	45.5	343.0		42.0	346.3		29.7	391.3	
1/27/2011	393.80	1.10	47.1	341.4		41.8	346.5		33.4	387.6	
2/23/2011	391.70	1.17	48.3	340.2		42.4	345.9		36.7	384.3	
3/29/2011	403.00	3.10	45.2	343.3		42.1	346.2		29.7	391.3	
4/27/2011	401.20	0.33	45.5	343.0		41.5	346.8		30.3	390.7	
5/26/2011	399.50	0.48	46.0	342.5		41.7	346.6		31.3	389.7	
6/28/2011	391.00	0.02	48.4	340.1		42.0	346.3		36.6	384.4	
7/26/2011	384.00	0.00	50.9	337.6		42.8	345.5		43.6	377.4	
8/24/2011	382.80	0.00	51.6	336.9		43.5	344.8		45.9	375.1	
9/27/2011	381.80	0.08	52.2	336.3		44.0	344.3		47.4	373.6	
10/26/2011	383.90	0.98	51.5	337.0		44.2	344.1		46.2	374.8	
11/22/2011	389.80	1.46	50.1	338.4		44.4	343.9		42.9	378.1	
12/28/2011	382.30	0.35	51.5	337.0		44.1	344.2		45.8	375.2	
1/25/2012	387.50	1.17	51.5	337.0		44.5	343.8		47.3	373.8	
2/28/2012	381.10	0.79	52.6	335.9		44.7	343.6		49.0	372.0	
3/27/2012	387.70	1.61	51.2	337.3		44.7	343.6		46.6	374.4	
4/23/2012	392.30	1.51	49.3	339.2		44.7	343.6		42.0	379.0	
5/25/2012	388.30	0.06	49.6	338.9		44.4	343.9		41.8	379.2	
6/13/2012	385.10	0.06	50.8	337.7		44.4	343.9		44.4	376.6	
6/26/2012	386.90	0.00	50.4	338.1		44.2	344.1		43.9	377.1	
7/24/2012	378.00	0.10	52.8	335.7		44.5	343.8		49.1	371.9	
8/8/2012	382.90	0.10	51.9	336.6		44.7	343.6		47.5	373.5	
8/29/2012	382.70	0.00	52.3	336.2		44.7	343.6		48.3	372.7	
8/29/2012	382.70	0.00	52.3	336.2		44.7	343.6		48.3	372.7	
9/25/2012	381.90	0.00	52.9	335.6		44.7	343.6		49.7	371.3	
10/24/2012	384.40	0.08	52.1	336.4		44.6	343.7		48.1	372.9	
11/27/2012	389.60	0.86	50.0	338.5		44.5	343.8		43.4	377.6	
12/18/2012	394.70	1.96	48.4	340.1		44.6	343.7		39.5	381.5	
1/23/2013	393.00	1.53	47.9	340.6		43.8	344.5		37.4	383.6	
2/26/2013	391.50	0.49	48.4	340.1		43.6	344.7		38.2	382.8	
3/26/2013	394.40	1.00	48.5	340.0		43.7	344.6		39.0	382.0	
4/25/2013	391.00	0.01	48.8	339.7		43.7	344.6		39.3	381.7	
5/22/2013	392.00	0.00	48.4	340.1		43.5	344.8		38.2	382.8	
6/25/2013	380.60	0.00	51.4	337.1		43.8	344.5		44.7	376.3	
7/23/2013	380.20	0.00	52.5	336.0		44.3	344.0		47.9	373.1	
8/21/2013	379.60	0.00	52.5	336.0		44.6	343.7	Wet	47.8	373.2	
9/25/2013	382.20	0.00	52.4	336.1		44.7	343.6	Dry	47.8	373.2	
10/29/2013	382.00	0.00	52.8	335.7		44.7	343.6	Dry	48.8	372.2	
11/26/2013	390.10	0.44	50.8	337.7		44.7	343.6	Dry	46.1	374.9	
12/17/2013	394.70	1.10	48.6	339.9		44.7	343.6	Dry	39.5	381.5	
1/28/2014	392.30	0.00	48.3	340.2		43.9	344.4		38.5	382.5	
2/26/2014	389.90	0.72	49.0	339.5		43.8	344.5		39.6	381.4	
3/26/2014	387.20		49.1	339.4		43.8	344.5		41.3	379.7	
3/28/2014	387.20	1.78	49.9	338.6		43.9	344.4		41.7	379.3	
4/23/2014	393.00	0.34	48.8	339.7		43.9	344.4		39.5	381.5	
5/28/2014	387.50	0.00	49.9	338.6		43.8	344.5		41.0	380.0	
6/25/2014	388.70	0.00	49.8	338.7		44.7	343.6		40.8	380.2	
7/29/2014	382.80	0.00	51.5	337.0		43.8	344.5		44.8	376.2	
8/28/2014	386.80	0.04	51.1	337.4		44.4	343.9		44.0	377.0	
9/24/2014	387.90	0.00	50.2	338.3		44.4	343.9	Wet	41.8	379.2	
10/29/2014	383.90	0.00	51.5	337.0		44.5	343.8		44.4	376.6	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-35B			P-35C			P-52		
Top of Well Elevation -->			388.45			388.34			421.03		
Bottom of Well Elevation -->			313.40			343.20			361.20		
Depth of Well			75.1			45.1			59.8		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35	50.3	338.2		44.5	343.8		41.7	379.3	
12/22/2014	399.80	4.75	46.8	341.7		44.0	344.3		34.0	387.0	
1/28/2015	396.90	1.28	47.1	341.4		43.3	345.0		34.4	386.6	
2/24/2015	392.70	0.34	48.1	340.4		43.3	345.0		36.7	384.3	
3/31/2015	388.90	0.67	48.6	339.9		43.0	345.3		37.7	383.3	
4/23/2015	390.30	0.20	49.0	339.5		43.3	345.0		38.7	382.3	
5/28/2015	400.30	1.87	46.0	342.5		43.0	345.3		31.7	389.3	
6/24/2015	400.70	0.00	45.8	342.7		42.5	345.8		31.1	389.9	
7/30/2015	400.20	0.00	45.9	342.6		42.5	345.8		30.8	390.2	
8/25/2015	384.00	0.00	49.4	339.1		42.6	345.7		38.9	382.1	
9/23/2015	388.60	2.17	49.6	338.9		43.3	345.0		40.7	380.3	
10/29/2015	387.60	0.16	50.1	338.4		43.5	344.8		41.6	379.4	
11/25/2015	386.90	0.15	50.4	338.1		43.7	344.6		42.0	379.0	
12/23/2015	395.90	1.55	48.8	339.7		43.9	344.4		37.7	383.3	
1/26/2016	401.20	2.86	46.1	342.4		43.0	345.3		31.7	389.3	
2/24/2016	393.60	0.39	47.9	340.6		42.8	345.5		35.7	385.3	
3/29/2016	397.10	1.55	47.0	341.5		42.9	345.4		33.8	387.2	
4/29/2016	391.60	0.04	47.2	341.3		42.9	345.4		36.4	384.6	
5/24/2016	401.60	0.13	46.2	342.3		43.0	345.3		32.1	388.9	
6/29/2016	392.50	0.00	48.0	340.5		42.5	345.8		35.6	385.4	
7/26/2016	377.70	0.00	51.8	336.7		43.2	345.1		45.2	375.8	
8/24/2016	388.10	0.00	50.5	338.0		44.8	343.5		43.9	377.1	
9/29/2016	388.20	0.00	50.7	337.8		44.7	343.6		42.6	378.4	
10/26/2016	392.10	0.96	49.6	338.9		43.9	344.4		41.8	379.2	
11/22/2016	395.70	1.42	47.9	340.6		43.7	344.6		37.4	383.6	
12/28/2016	400.70	4.11	46.0	342.5		43.0	345.3		33.8	387.2	
1/26/2017	402.40	6.70	45.4	343.1		42.7	345.6		30.3	390.7	
2/28/2017	389.60	4.01	48.8	339.7		42.5	345.8		37.7	383.3	
3/29/2017	391.80	0.14	48.9	339.6		43.4	344.9		38.9	382.1	
4/26/2017	387.00	0.04	49.9	338.6		43.5	344.8		40.9	380.1	
5/23/2017	399.40	0.30	46.8	341.7		43.5	344.8		34.0	387.0	
6/21/2017	392.60	0.00	48.2	340.3		43.2	345.1		36.6	384.4	
7/26/2017	384.60	0.00	50.6	337.9		43.4	344.9		42.3	378.7	
8/30/2017	383.00	0.00	51.5	337.0		43.8	344.5		45.1	375.9	
9/27/2017	382.00	0.00	52.3	336.2		44.4	343.9		47.9	373.1	
10/27/2017	375.00	0.00	53.6	334.9		44.8	343.5	Dry	50.9	370.1	
11/30/2017	382.80	0.14	52.4	336.1		44.8	343.5	Dry	48.7	372.3	
12/21/2017	380.50	0.00	52.8	335.7		44.7	343.6	Dry	49.5	371.5	
1/24/2018	397.80	1.43	48.4	340.1		44.8	343.5		39.3	381.7	
2/21/2018	382.40	0.17	50.9	337.6		44.1	344.2		44.4	376.6	
3/29/2018	392.10	0.00	49.1	339.4		44.5	343.8		40.7	380.3	
4/25/2018	388.00	0.05	50.6	337.9		44.4	343.9		45.0	376.0	
5/30/2018	399.50	0.21	47.3	341.2		44.3	344.0		36.2	384.8	
6/28/2018	398.90	0.00	46.5	342.0		43.5	344.8		33.2	387.8	
7/25/2018	388.60	0.00	48.9	339.6		43.3	345.0		38.7	382.3	
8/24/2018	378.60	0.00	52.4	336.1		43.9	344.4		47.8	373.2	
9/27/2018	381.40	0.00	52.4	336.1		44.7	343.6		48.3	372.7	
10/18/2018	385.20	1.45	51.5	337.0		44.6	343.7		46.6	374.4	
11/28/2018	389.10	1.32	53.1	335.4		44.7	343.6		50.2	370.8	
12/20/2018	394.20	2.12	49.0	339.5		44.8	343.5		41.1	379.9	
2/21/2019	396.00	8.26	46.90	341.6		43.50	344.8		34.70	386.3	

Note:

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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-35B			P-35C			P-52		
Top of Well Elevation -->			388.45			388.34			421.03		
Bottom of Well Elevation -->			313.40			343.20			361.20		
Depth of Well			75.1			45.1			59.8		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88	52.30	336.2		46.60	341.7		43.80	377.2	
4/25/2019	377.70	0.03	52.03	336.4		44.30	344.0		47.00	374.0	
5/30/2019	395.30	0.92	48.30	340.2		44.50	343.8		39.10	381.9	
6/26/2019	388.40	0.01	49.40	339.1		44.10	344.2		40.70	380.3	
7/5/2019	385.50	0.00	51.10	337.4		44.10	344.2		42.50	378.5	
7/30/2019	385.20	0.00	51.40	337.1		44.30	344.0		46.20	374.8	
8/27/2019	387.90	0.00	50.00	338.5		44.50	343.8		42.40	378.6	
9/26/2019	380.00	0.00	52.10	336.4		44.60	343.7		47.90	373.1	
10/23/2019	378.90	0.00	53.10	335.4		44.60	343.7		50.30	370.7	
11/26/2019	383.80	2.60	52.50	336.0		44.70	343.6		49.10	371.9	
12/18/2019	389.20	4.63	51.40	337.1		44.10	344.2		44.50	376.5	
1/29/2020	388.20	0.15	49.90	338.6		44.60	343.7		43.00	378.0	
2/25/2020	384.70	0.33	51.00	337.5		44.60	343.7		45.10	375.9	
3/24/2020	391.70	3.91	49.40	339.1		44.70	343.6		41.90	379.1	
4/23/2020	399.40	4.05	47.80	340.7		44.70	343.6		34.40	386.6	
5/27/2020	388.50	0.40	49.30	339.2		43.70	344.6		58.50	362.5	Omitted
6/24/2020	388.00	0.01	49.60	338.9		43.90	344.4		41.40	379.6	
7/29/2020	358.70	0.00	50.30	338.2		44.00	344.3		42.50	378.5	
8/26/2020	379.30	0.00	52.30	336.2		44.30	344.0		47.90	373.1	
9/29/2020	381.30	0.00	52.50	336.0		44.70	343.6		48.50	372.5	
10/28/2020	376.50	0.00	53.70	334.8		44.70	343.6		51.30	369.7	
11/24/2020	380.70	0.25	53.10	335.4		44.80	343.5		50.20	370.8	
12/23/2020	384.10	1.40	52.20	336.3		44.60	343.7		48.00	373.0	
1/26/2021	386.2	2.42	51.2	337.25		44	344.34		45.6	375.43	
2/25/2021	385.4	0.07	74.7	313.75	Omitted	44.6	343.74		44.6	376.43	
3/23/2021	394.8	1.35	48.5	339.95		44.6	343.74		39.2	381.83	
4/27/2021	384.1	0.04	50.9	337.55		44.3	344.04		44.2	376.83	
5/27/2021	383.5	0.04	51.2	337.25		44.6	343.74		44.9	376.13	
6/30/2021	385.4	0	51.4	337.05		44.9	343.44		45.6	375.43	
7/29/2021	381.7	0.03	52.6	335.85		44.5	343.84		49.1	371.93	
8/24/2021	383.4	0	52.4	336.05		44.8	343.54		48.6	372.43	
9/28/2021	381.3	0.06	52.2	336.25		44.8	343.54		47.2	373.83	
10/27/2021	382.7	0.71	52.9	335.55		44.6	343.74		49.9	371.13	
11/23/2021	381	0	53.1	335.35		44.8	343.54		50.1	370.93	
12/21/2021	386.3	6.1	51.7	336.75		44.7	343.64		47.2	373.83	
1/25/2022	382	0.05	52.2	336.25		44.6	343.74		48	373.03	
2/22/2022	382.3	0.36	52.9	335.55		44.7	343.64		50.2	370.83	
3/29/2022	390.6	1.33	50.7	337.75		44.9	343.44		45.2	375.83	
4/27/2022	393.2	0.02	49	339.45		44.7	343.64		40.1	380.93	
5/24/2022	391.4	0.05	48.9	339.55		44.2	344.14		39.8	381.23	
6/28/2022	392.7	0	48.8	339.65		44.1	344.24		38.5	382.53	
7/26/2022	386.1	0	50.3	338.15		44	344.34		58.4	362.63	Omitted
8/25/2022	382.2	0.02	31.3	357.15	Omitted	44.3	344.04		45.3	375.73	
9/29/2022	392.7	0.36	48.8	339.65		44.1	344.24		38.5	382.53	
10/25/2022	390	0.32	50.3	338.15		44.6	343.74		43.2	377.83	
11/17/2022	391.4	2.12	49.2	339.25		44.5	343.84		40.2	380.83	
12/22/2022	386.4	2.28	51.1	337.35		44.7	343.64		45.6	375.43	
1/26/2023	391.6	7.39	49.10	339.35		44.90	343.44		41.10	379.93	
2/23/2023	389.9	3.88	49.53	338.92		44.30	344.04		40.68	380.35	
3/28/2023	390.8	5.62	48.70	339.75		44.20	344.14		39.10	381.93	
4/25/2023	390.8	0.16	48.80	339.65		38.90	349.44	Omitted	38.90	382.13	

Note:
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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-35B			P-35C			P-52		
Top of Well Elevation -->			388.45			388.34			421.03		
Bottom of Well Elevation -->			313.40			343.20			361.20		
Depth of Well			75.1			45.1			59.8		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	48.65	339.80		43.99	344.35		38.41	382.62	
6/27/2023	388.80	0.14	49.20	339.25		44.80	343.54		39.30	381.73	
7/27/2023	384.40	0.00	50.70	337.75		44.60	343.74		43.30	377.73	
8/29/2023	382.80	2.22	51.60	336.85		44.70	343.64		45.50	375.53	
9/26/2023	377.90	0.00	52.97	335.48		44.64	343.70		48.92	372.11	
10/30/2023	385.30	0.26	52.70	335.75		45.70	342.64		46.70	374.33	
11/30/2023	382.90	0.70	52.30	336.15		44.50	343.84		48.20	372.83	
12/20/2023	388.50	1.10	51.20	337.25		44.80	343.54		45.99	375.04	
1/24/2024	391.90	2.23	49.20	339.25		44.70	343.64		39.80	381.23	
2/22/2024	388.60	7.64	49.50	338.95		44.80	343.54		40.80	380.23	
3/27/2024	390.90	2.54	49.12	339.33		44.24	344.10		39.60	381.43	
4/23/2024	391.60	1.62	49.10	339.35		44.80	343.54		38.10	382.93	
5/1/2024	389.10	0.00	49.30	339.15		44.00	344.34		39.30	381.73	
5/23/2024	389.20	0.16	49.80	338.65		44.10	344.24		40.20	380.83	
5/30/2024	392.80	#N/A	49.00	339.45		44.20	344.14		38.60	382.43	
6/20/2024	392.90	0.00	49.10	339.35		43.90	344.44		37.00	384.03	
7/24/2024	386.40	0.00	51.20	337.25		44.30	344.04		42.00	379.03	
8/27/2024	384.10	0.00	52.50	335.95		44.50	343.84		45.60	375.43	
9/24/2024	380.50	0.03	53.20	335.25		44.50	343.84		46.30	374.73	
10/29/2024	387.40	0.00	52.10	336.35		44.50	343.84		44.20	376.83	
11/21/2024	384.50	0.09	52.63	335.82		44.65	343.69		45.22	375.81	
12/17/2024	386.30	0.01	52.40	336.05		44.70	343.64		44.70	376.33	
1/28/2025	385.70	1.01	53.00	335.45		44.70	343.64		46.10	374.93	
2/26/2025	386.00	3.18	53.70	334.75		44.60	343.74		44.50	376.53	
3/20/2025	383.60	2.29	52.70	335.75		44.50	343.84		45.30	375.73	
4/14/2025	383.40	#N/A	53.00	335.45		44.80	343.54		46.20	374.83	
4/23/2025	385.20	0.35	52.70	335.75		44.90	343.44		45.40	375.63	
5/28/2025	384.50	0.08	52.80	335.65		44.60	343.74		45.20	375.83	
7/7/2025	386.00	0.20	52.90	335.55		44.60	343.74		45.60	375.43	
7/23/2025	387.30	0.00	52.33	336.12		44.60	343.74		43.87	377.16	
8/20/2025	378.90	0.00	54.30	334.15		44.60	343.74		48.40	372.63	
9/24/2025	387.00	0.13	52.80	335.65		44.70	343.64		46.00	375.03	
10/22/2025	386.40	1.20	52.20	336.25		44.60	343.74		44.60	376.43	
11/19/2025	387.30	5.70	52.60	335.85		44.70	343.64		46.10	374.93	
12/16/2025	381.60	2.28	53.75	334.70		44.70	343.64		48.38	372.65	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-61			P-62			P-63		
Top of Well Elevation -->			357.01			412.03			422.08		
Bottom of Well Elevation -->			311.00			365.50			335.00		
Depth of Well			46.0			46.5			87.1		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90		27.5	329.5		26.8	385.2		44.9	377.2	
2/28/2007	380.90		28.3	328.7		30.5	381.5		45.5	376.6	
3/29/2007	397.00		28.5	328.5		27.3	384.7		45.8	376.3	
4/27/2007	405.60		24.3	332.7		17.6	394.4		46.0	376.1	
5/24/2007	404.40		21.4	335.6		15.9	396.1		46.1	376.0	
6/28/2007	396.90		20.8	336.2		17.8	394.2		46.0	376.1	
7/31/2007	392.60		22.9	334.1		21.7	390.3		46.2	375.9	
8/29/2007	388.60		24.3	332.7		24.5	387.5		46.7	375.4	
9/2/2007	387.40		24.6	332.4		24.0	388.0		46.7	375.4	
9/26/2007	387.90		25.2	331.8		25.3	386.7		46.8	375.3	
10/25/2007	382.00		26.5	330.5		27.3	384.7		47.4	374.7	
11/27/2007	380.30		27.8	329.2		30.6	381.4		47.8	374.3	
12/27/2007	381.40		33.3	323.7		32.0	380.0		48.2	373.9	
1/31/2008	381.20		29.3	327.7		31.8	380.3		48.8	373.3	
2/28/2008	393.10		28.7	328.3		26.3	385.7		49.0	373.1	
3/27/2008	387.90		27.6	329.4		23.5	388.5		49.3	372.8	
4/28/2008	404.70		23.7	333.3		15.8	396.2		49.5	372.6	
5/28/2008	404.00		22.1	334.9		14.3	397.7		44.5	377.6	
6/25/2008	400.20		21.2	335.8		15.5	396.5		49.3	372.8	
7/29/2008	398.70		21.6	335.4		16.3	395.7		49.1	373.0	
7/30/2008	398.70	0.00	21.6	335.4		16.3	395.7		49.2	372.9	
8/29/2008	395.00	0.00	22.4	334.6		18.7	393.3		4.2	417.9	Cleaning
9/25/2008	391.70	0.00	23.1	333.9		18.8	393.2		11.0	411.1	
10/28/2008	384.05	0.00	25.5	331.6		26.4	385.6		15.8	406.3	
11/26/2008	391.10	1.94	27.0	330.0		27.5	384.5		17.8	404.3	
12/31/2008	397.90	3.20	25.3	331.7		21.6	390.4		18.7	403.4	
1/29/2009	393.40	0.34	22.7	334.3		23.2	388.8		19.6	402.5	
2/25/2009	398.60	3.91	21.0	336.0		21.5	390.5		20.1	402.0	
3/31/2009	393.40	0.16	20.1	336.9		21.9	390.1		20.6	401.5	
4/28/2009	400.70	0.10	20.8	336.2		20.3	391.7		21.2	400.9	
5/18/2009	400.80	0.00	20.6	336.4		18.7	393.3		21.5	400.6	
5/27/2009	400.10	0.00	20.7	336.3		18.8	393.2		48.8	373.3	
6/29/2009	403.00	0.15	20.4	336.6		15.9	396.1		48.6	373.5	
7/28/2009	396.53	0.00	20.0	337.0		19.2	392.8		48.5	373.6	
8/25/2009	396.60	0.00	21.1	335.9		20.4	391.6		48.4	373.7	
9/30/2009	393.10	0.00	22.7	334.3		23.6	388.4		48.5	373.6	
10/28/2009	401.60	0.42	22.4	334.6		19.6	392.4		48.5	373.6	
11/30/2009	402.50	0.00	19.6	337.4		16.7	395.3		48.3	373.8	
12/29/2009	399.90	2.80	19.4	337.6		17.3	394.7		48.3	373.8	
1/26/2010	401.10	6.75	19.8	337.2		15.7	396.3		48.3	373.8	
2/23/2010	402.50	2.66	18.7	338.3		14.6	397.4		48.2	373.9	
3/30/2010	400.00	1.25	18.2	338.8		16.5	395.5		48.0	374.1	
4/4/2010	399.60		18.4	338.6		16.9	395.1		48.0	374.1	
4/27/2010	403.80	1.32	18.8	338.2		15.7	396.3		48.0	374.1	
5/26/2010	403.60	0.03	18.4	338.6		15.4	396.6		47.8	374.3	
6/29/2010	397.70	0.00	18.9	338.1		17.7	394.3		47.6	374.5	
7/27/2010	396.30	0.00	20.4	336.6		18.9	393.1		47.5	374.6	
8/26/2010	390.70	0.00	22.0	335.0		20.8	391.2		47.5	374.6	
9/28/2010	390.30	0.00	24.5	332.5		24.8	387.2		47.8	374.3	
10/26/2010	403.20	1.56	25.0	332.0		19.8	392.2		47.9	374.2	
11/30/2010	397.10	1.34	23.4	333.6		19.5	392.5		47.7	374.4	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-61			P-62			P-63		
Top of Well Elevation -->			357.01			412.03			422.08		
Bottom of Well Elevation -->			311.00			365.50			335.00		
Depth of Well			46.0			46.5			87.1		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03	23.5	333.5		12.0	400.0		47.7	374.4	
1/27/2011	393.80	1.10	23.2	333.8		17.2	394.8		47.7	374.4	
2/23/2011	391.70	1.17	24.3	332.7		22.0	390.0		47.8	374.3	
3/29/2011	403.00	3.10	24.3	332.7		17.6	394.4		47.8	374.3	
4/27/2011	401.20	0.33	23.3	333.7		17.2	394.8		47.7	374.4	
5/26/2011	399.50	0.48	23.1	333.9		18.2	393.8		47.7	374.4	
6/28/2011	391.00	0.02	23.8	333.2		22.6	389.4		47.7	374.4	
7/26/2011	384.00	0.00	25.3	331.7		26.2	385.8		47.8	374.3	
8/24/2011	382.80	0.00	26.7	330.3		30.6	381.4		48.1	374.0	
9/27/2011	381.80	0.08	25.9	331.1		32.0	380.0		48.6	373.5	
10/26/2011	383.90	0.98	28.2	328.8		31.9	380.1		48.6	373.5	
11/22/2011	389.80	1.46	28.3	328.7		29.9	382.1		48.9	373.2	
12/28/2011	382.30	0.35	28.2	328.8		31.5	380.5		49.0	373.1	
1/25/2012	387.50	1.17	28.7	328.3		34.0	378.0		49.4	372.7	
2/28/2012	381.10	0.79	29.0	328.0		34.6	377.4		49.6	372.5	
3/27/2012	387.70	1.61	29.3	327.7		34.2	377.8		49.8	372.3	
4/23/2012	392.30	1.51	28.9	328.1		31.1	380.9		50.0	372.1	
5/25/2012	388.30	0.06	28.2	328.8		28.9	383.1		50.2	371.9	
6/13/2012	385.10	0.06	27.9	329.1		30.7	381.3		50.2	371.9	
6/26/2012	386.90	0.00	25.9	331.1		30.9	381.1		50.3	371.8	
7/24/2012	378.00	0.10	28.3	328.7		33.6	378.4		50.4	371.7	
8/8/2012	382.90	0.10	28.7	328.3		30.6	381.4		50.6	371.5	
8/29/2012	382.70	0.00	29.0	328.0		33.8	378.2		50.8	371.3	
8/29/2012	382.70	0.00	29.0	328.0		33.8	378.2		50.8	371.3	
9/25/2012	381.90	0.00	29.3	327.7		33.8	378.2		50.9	371.2	
10/24/2012	384.40	0.08	29.7	327.3		33.0	379.0		51.2	370.9	
11/27/2012	389.60	0.86	29.1	327.9		30.8	381.2		51.4	370.7	
12/18/2012	394.70	1.96	28.5	328.5		28.6	383.4		51.4	370.7	
1/23/2013	393.00	1.53	27.4	329.6		25.0	387.0		51.5	370.6	
2/26/2013	391.50	0.49	26.8	330.2		25.7	386.3		51.4	370.7	
3/26/2013	394.40	1.00	27.3	329.7		27.0	385.0		51.6	370.5	
4/25/2013	391.00	0.01	26.8	330.2		26.4	385.6		51.6	370.5	
5/22/2013	392.00	0.00	26.8	330.2		25.0	387.0		51.6	370.5	
6/25/2013	380.60	0.00	27.0	330.0		28.4	383.6		51.8	370.3	
7/23/2013	380.20	0.00	27.9	329.1		30.5	381.5		51.9	370.2	
8/21/2013	379.60	0.00	28.5	328.5		30.8	381.2		52.1	370.0	
9/25/2013	382.20	0.00	29.2	327.8		30.9	381.1		52.4	369.7	
10/29/2013	382.00	0.00	29.8	327.2		32.4	379.6		52.6	369.5	
11/26/2013	390.10	0.44	29.7	327.3		31.6	380.4		52.7	369.4	
12/17/2013	394.70	1.10	29.3	327.7		28.0	384.0		52.8	369.3	
1/28/2014	392.30	0.00	28.2	328.8		24.5	387.5		52.8	369.3	
2/26/2014	389.90	0.72	27.4	329.6		25.5	386.5		52.8	369.3	
3/26/2014	387.20		27.5	329.5		26.8	385.2		52.9	369.2	
3/28/2014	387.20	1.78	22.5	334.5		27.0	385.0		52.9	369.2	
4/23/2014	393.00	0.34	27.7	329.3		26.8	385.2		52.9	369.2	
5/28/2014	387.50	0.00	27.5	329.5		24.9	387.1		53.0	369.1	
6/25/2014	388.70	0.00	28.7	328.3		25.8	386.2		53.0	369.1	
7/29/2014	382.80	0.00	27.9	329.1		28.6	383.4		53.2	368.9	
8/28/2014	386.80	0.04	28.4	328.6		28.6	383.4		53.3	368.8	
9/24/2014	387.90	0.00	28.5	328.5		27.2	384.8		53.3	368.8	
10/29/2014	383.90	0.00	28.7	328.3		28.4	383.6		53.5	368.6	

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Depth of Well			46.0			46.5			87.1		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35	28.8	328.2		26.7	385.3		53.6	368.5	
12/22/2014	399.80	4.75	28.5	328.5		22.2	389.8		53.5	368.6	
1/28/2015	396.90	1.28	27.5	329.5		21.6	390.4		53.7	368.4	
2/24/2015	392.70	0.34	27.2	329.8		22.8	389.2		53.5	368.6	
3/31/2015	388.90	0.67	26.8	330.2		23.1	388.9		53.4	368.7	
4/23/2015	390.30	0.20	27.0	330.0		24.2	387.8		53.4	368.7	
5/28/2015	400.30	1.87	27.0	330.0		19.9	392.1		53.5	368.6	
6/24/2015	400.70	0.00	26.5	330.5		19.5	392.5		53.3	368.8	
7/30/2015	400.20	0.00	26.3	330.7		19.0	393.0		53.2	368.9	
8/25/2015	384.00	0.00	26.1	330.9		23.8	388.2		52.9	369.2	
9/23/2015	388.60	2.17	27.0	330.0		28.1	383.9		53.2	368.9	
10/29/2015	387.60	0.16	27.5	329.5		29.1	382.9		53.2	368.9	
11/25/2015	386.90	0.15	27.9	329.1		29.6	382.4		53.3	368.8	
12/23/2015	395.90	1.55	27.4	329.6		27.8	384.3		53.2	368.9	
1/26/2016	401.20	2.86	32.7	324.3		21.4	390.7		53.2	368.9	
2/24/2016	393.60	0.39	27.0	330.0		23.3	388.7		53.1	369.0	
3/29/2016	397.10	1.55	26.8	330.2		22.5	389.5		53.1	369.0	
4/29/2016	391.60	0.04	27.0	330.0		24.4	387.7		52.9	369.2	
5/24/2016	401.60	0.13	26.8	330.2		22.5	389.5		52.9	369.2	
6/29/2016	392.50	0.00	26.6	330.4		22.9	389.1		52.8	369.3	
7/26/2016	377.70	0.00	27.2	329.8		30.0	382.0		52.9	369.2	
8/24/2016	388.10	0.00	27.9	329.1		32.9	379.1		52.9	369.2	
9/29/2016	388.20	0.00	28.3	328.7		31.9	380.1		52.9	369.2	
10/26/2016	392.10	0.96	28.4	328.6		32.5	379.5		53.0	369.1	
11/22/2016	395.70	1.42	28.2	328.8		28.3	383.7		53.1	369.0	
12/28/2016	400.70	4.11	27.6	329.4		24.2	387.8		53.1	369.0	
1/26/2017	402.40	6.70	26.8	330.2		19.3	392.7		52.8	369.3	
2/28/2017	389.60	4.01	26.6	330.4		24.5	387.5		52.8	369.3	
3/29/2017	391.80	0.14	27.0	330.0		27.6	384.4		52.8	369.3	
4/26/2017	387.00	0.04	27.3	329.7		28.7	383.3		52.8	369.3	
5/23/2017	399.40	0.30	27.5	329.5		24.9	387.1		52.9	369.2	
6/21/2017	392.60	0.00	27.2	329.8		25.0	387.0		52.7	369.4	
7/26/2017	384.60	0.00	24.2	332.8		29.6	382.4		52.7	369.4	
8/30/2017	383.00	0.00	28.1	328.9		32.9	379.1		52.7	369.4	
9/27/2017	382.00	0.00	28.6	328.4		35.6	376.4		52.9	369.2	
10/27/2017	375.00	0.00	29.2	327.8		37.5	374.5		53.2	368.9	
11/30/2017	382.80	0.14	29.8	327.2		37.7	374.3		53.2	368.9	
12/21/2017	380.50	0.00	29.8	327.2		37.7	374.3		53.3	368.8	
1/24/2018	397.80	1.43	30.1	326.9		33.2	378.8		53.5	368.6	
2/21/2018	382.40	0.17	29.0	328.0		32.0	380.0		70.6	351.5	
3/29/2018	392.10	0.00	28.7	328.3		30.7	381.3		70.2	351.9	
4/25/2018	388.00	0.05	28.6	328.4		34.0	378.0		69.8	352.3	
5/30/2018	399.50	0.21	28.6	328.4		29.5	382.5		69.4	352.7	
6/28/2018	398.90	0.00	27.8	329.2		24.1	387.9		68.9	353.2	
7/25/2018	388.60	0.00	27.3	329.7		26.3	385.7		68.5	353.6	
8/24/2018	378.60	0.00	27.8	329.2		33.4	378.6		68.1	354.0	
9/27/2018	381.40	0.00	28.7	328.3		36.0	376.0		67.8	354.3	
10/18/2018	385.20	1.45	29.1	327.9		35.7	376.3		67.7	354.4	
11/28/2018	389.10	1.32	29.7	327.3		38.1	373.9		67.4	354.7	
12/20/2018	394.20	2.12	29.7	327.3		33.3	378.7		67.3	354.8	
2/21/2019	396.00	8.26	27.90	329.1		23.50	388.5		66.50	355.6	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-61			P-62			P-63		
Top of Well Elevation -->			357.01			412.03			422.08		
Bottom of Well Elevation -->			311.00			365.50			335.00		
Depth of Well			46.0			46.5			87.1		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88	27.40	329.6		54.70	357.3	Omiited	66.00	356.1	
4/25/2019	377.70	0.03	27.90	329.1		32.30	379.7				Blocked,NotRead
5/30/2019	395.30	0.92	28.50	328.5		30.20	381.8		65.10	357.0	
6/26/2019	388.40	0.01	28.10	328.9		28.80	383.2		64.80	357.3	
7/5/2019	385.50	0.00	32.90	324.1		29.80	382.2		64.70	357.4	
7/30/2019	385.20	0.00	28.30	328.7		33.50	378.5		64.20	357.9	
8/27/2019	387.90	0.00	28.60	328.4		31.40	380.6		64.40	357.7	
9/26/2019	380.00	0.00	28.80	328.2		35.30	376.7		64.10	358.0	
10/23/2019	378.90	0.00	29.20	327.8		36.90	375.1		64.00	358.1	
11/26/2019	383.80	2.60	29.80	327.2		38.20	373.8		71.20	350.9	Omitted
12/18/2019	389.20	4.63	29.90	327.1		35.20	376.8		63.80	358.3	
1/29/2020	388.20	0.15	29.10	327.9		32.10	379.9		63.60	358.5	
2/25/2020	384.70	0.33	28.90	328.1		33.30	378.7		63.40	358.7	
3/24/2020	391.70	3.91	28.90	328.1		32.40	379.6		63.30	358.8	
4/23/2020	399.40	4.05	28.50	328.5		26.30	385.7		63.00	359.1	
5/27/2020	388.50	0.40	27.70	329.3		28.10	383.9		70.50	351.6	Omitted
6/24/2020	388.00	0.01	27.80	329.2		29.60	382.4		62.50	359.6	
7/29/2020	358.70	0.00	27.90	329.1		30.30	381.7		62.00	360.1	
8/26/2020	379.30	0.00	28.30	328.7		33.80	378.2		62.10	360.0	
9/29/2020	381.30	0.00	28.90	328.1		36.00	376.0		61.90	360.2	
10/28/2020	376.50	0.00	29.60	327.4		38.20	373.8		62.20	359.9	
11/24/2020	380.70	0.25	30.00	327.0		38.50	373.5		62.00	360.1	
12/23/2020	384.10	1.40	30.20	326.8		37.50	374.5		61.80	360.3	
1/26/2021	386.2	2.42	31.4	325.61		34.7	377.33		61.7	360.38	
2/25/2021	385.4	0.07	29.3	327.71		32.6	379.43		61.6	360.48	
3/23/2021	394.8	1.35	29	328.01		30.7	381.33		61.5	360.58	
4/27/2021	384.1	0.04	28.7	328.31		32	380.03		61.2	360.88	
5/27/2021	383.5	0.04	28.6	328.41		33.3	378.73		61.1	360.98	
6/30/2021	385.4	0	29.2	327.81		34.7	377.33		61.1	360.98	
7/29/2021	381.7	0.03	29.3	327.71		37.4	374.63		61	361.08	
8/24/2021	383.4	0	33.3	323.71		37.9	374.13		60.9	361.18	
9/28/2021	381.3	0.06	29.8	327.21		36	376.03		60.9	361.18	
10/27/2021	382.7	0.71	30	327.01		38.8	373.23		60.8	361.28	
11/23/2021	381	0	30.3	326.71		38.9	373.13		60.8	361.28	
12/21/2021	386.3	6.1	30.5	326.51		37.8	374.23		60.8	361.28	
1/25/2022	382	0.05	30.1	326.91		36.8	375.23		60.7	361.38	
2/22/2022	382.3	0.36	30.2	326.81		39.1	372.93		61	361.08	
3/29/2022	390.6	1.33	30.2	326.81		36.6	375.43		60.3	361.78	
4/27/2022	393.2	0.02	29.6	327.41		31.7	380.33		60.5	361.58	
5/24/2022	391.4	0.05	28.8	328.21		29.4	382.63		60.4	361.68	
6/28/2022	392.7	0	28.4	328.61		28.4	383.63		60.2	361.88	
7/26/2022	386.1	0	28	329.01		28.5	383.53		59.8	362.28	
8/25/2022	382.2	0.02	28.2	328.81		33	379.03		59.7	362.38	
9/29/2022	392.7	0.36	28.4	328.61		28.4	383.63		60.2	361.88	
10/25/2022	390	0.32	29.4	327.61		34.6	377.43		71.3	350.78	Omitted
11/17/2022	391.4	2.12	29.1	327.91		31.1	380.93		59.6	362.48	
12/22/2022	386.4	2.28	29.2	327.81		34.9	377.13		59.6	362.48	
1/26/2023	391.6	7.39	32.70	324.31		31.50	380.53		59.50	362.58	
2/23/2023	389.9	3.88	28.68	328.33		29.91	382.12		59.34	362.74	
3/28/2023	390.8	5.62	28.40	328.61		28.10	383.93		59.20	362.88	
4/25/2023	390.8	0.16	28.00	329.01		27.50	384.53		59.00	363.08	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-61			P-62			P-63		
Top of Well Elevation -->			357.01			412.03			422.08		
Bottom of Well Elevation -->			311.00			365.50			335.00		
Depth of Well			46.0			46.5			87.1		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	27.81	329.20		27.10	384.93		58.84	363.24	
6/27/2023	388.80	0.14	28.50	328.51		22.70	389.33		58.70	363.38	
7/27/2023	384.40	0.00	27.90	329.11		30.90	381.13		58.60	363.48	
8/29/2023	382.80	2.22	28.50	328.51		33.50	378.53		58.70	363.38	
9/26/2023	377.90	0.00	29.04	327.97		36.06	375.97		58.50	363.58	
10/30/2023	385.30	0.26	29.60	327.41		36.10	375.93		56.30	365.78	
11/30/2023	382.90	0.70	32.70	324.31		37.20	374.83		58.60	363.48	
12/20/2023	388.50	1.10	29.95	327.06		36.34	375.69		58.50	363.58	
1/24/2024	391.90	2.23	29.40	327.61		30.20	381.83		58.40	363.68	
2/22/2024	388.60	7.64	28.80	328.21		29.50	382.53		57.80	364.28	
3/27/2024	390.90	2.54	28.44	328.57		28.71	383.32		58.22	363.86	
4/23/2024	391.60	1.62	28.30	328.71		27.10	384.93		58.10	363.98	
5/1/2024	389.10	0.00	28.10	328.91		27.50	384.53		58.10	363.98	
5/23/2024	389.20	0.16	28.20	328.81		29.40	382.63		58.10	363.98	
5/30/2024	392.80	#N/A	28.20	328.81		28.60	383.43		57.90	364.18	
6/20/2024	392.90	0.00	28.00	329.01		26.40	385.63		64.50	357.58	
7/24/2024	386.40	0.00	28.10	328.91		30.20	381.83		64.20	357.88	
8/27/2024	384.10	0.00	28.60	328.41		33.60	378.43		63.90	358.18	
9/24/2024	380.50	0.03	28.90	328.11		33.90	378.13		63.70	358.38	
10/29/2024	387.40	0.00	29.40	327.61		34.10	377.93		63.50	358.58	
11/21/2024	384.50	0.09	29.50	327.51		35.25	376.78		63.37	358.71	
12/17/2024	386.30	0.01	29.60	327.41		34.40	377.63		63.20	358.88	
1/28/2025	385.70	1.01	29.10	327.91		35.60	376.43		63.00	359.08	
2/26/2025	386.00	3.18	29.90	327.11		34.20	377.83		62.90	359.18	
3/20/2025	383.60	2.29	28.80	328.21		34.10	377.93		62.80	359.28	
4/14/2025	383.40	#N/A	29.90	327.11		35.30	376.73		62.60	359.48	
4/23/2025	385.20	0.35	29.90	327.11		35.10	376.93		62.60	359.48	
5/28/2025	384.50	0.08	29.90	327.11		34.70	377.33		62.40	359.68	
7/7/2025	386.00	0.20	29.90	327.11		35.50	376.53		62.20	359.88	
7/23/2025	387.30	0.00	29.93	327.08		34.34	377.69		62.10	359.98	
8/20/2025	378.90	0.00	30.00	327.01		36.30	375.73		62.00	360.08	
9/24/2025	387.00	0.13	30.30	326.71		35.20	376.83		61.90	360.18	
10/22/2025	386.40	1.20	30.10	326.91		34.80	377.23		61.80	360.28	
11/19/2025	387.30	5.70	30.10	326.91		36.90	375.13		61.70	360.38	
12/16/2025	381.60	2.28	30.02	326.99		37.73	374.30		61.59	360.49	

Note:
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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-64			P-65			P-66		
Top of Well Elevation -->			388.00			374.72			359.31		
Bottom of Well Elevation -->			302.00			325.50			301.00		
Depth of Well			86.0			49.2			58.3		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90		46.7	341.3		31.6	343.1		23.5	335.8	
2/28/2007	380.90		48.5	339.5		33.2	341.5		25.2	334.1	
3/29/2007	397.00		43.9	344.1		32.1	342.6		21.6	337.7	
4/27/2007	405.60		40.0	348.0		29.0	345.7		18.5	340.8	
5/24/2007	404.40		39.7	348.3		27.4	347.3		18.0	341.3	
6/28/2007	396.90		41.6	346.4		27.0	347.7		19.6	339.7	
7/31/2007	392.60		34.5	353.5		27.1	347.6		20.9	338.4	
8/29/2007	388.60		45.0	343.0		28.6	346.1		22.2	337.1	
9/2/2007	387.40		45.3	342.7		28.8	345.9		22.4	336.9	
9/26/2007	387.90		45.6	342.4		29.6	345.1		22.7	336.6	
10/25/2007	382.00		47.4	340.6		30.8	343.9		24.2	335.1	
11/27/2007	380.30		48.7	339.3		32.5	342.2		25.3	334.0	
12/27/2007	381.40		48.5	339.5		33.5	341.2		25.3	334.0	
1/31/2008	381.20		49.2	338.8		34.5	340.2		25.8	333.5	
2/28/2008	393.10		44.9	343.1		32.8	341.9		22.4	336.9	
3/27/2008	387.90		45.8	342.2		32.3	342.4		22.9	336.4	
4/28/2008	404.70		40.1	347.9		29.1	345.6		18.4	340.9	
5/28/2008	404.00		39.9	348.1		27.1	347.6		18.0	341.3	
6/25/2008	400.20		40.5	347.5		26.3	348.4		18.6	340.7	
7/29/2008	398.70		41.3	346.7		26.2	348.5		19.2	340.1	
7/30/2008	398.70	0.00	41.3	346.7		26.1	348.6		19.5	339.9	
8/29/2008	395.00	0.00	43.0	345.0		26.9	347.8		20.7	338.6	
9/25/2008	391.70	0.00	44.0	344.0		28.1	346.6		21.7	337.6	
10/28/2008	384.05	0.00	47.2	340.8		29.9	344.8		24.2	335.1	
11/26/2008	391.10	1.94	46.0	342.0		31.0	343.7		23.5	335.8	
12/31/2008	397.90	3.20	42.7	345.3		29.2	345.5		20.7	338.6	
1/29/2009	393.40	0.34	43.8	344.2		29.4	345.3		21.4	337.9	
2/25/2009	398.60	3.91	42.3	345.7		28.8	345.9		20.2	339.1	
3/31/2009	393.40	0.16	43.4	344.6		28.4	346.3		20.9	338.4	
4/28/2009	400.70	0.10	41.4	346.6		27.8	346.9		19.6	339.7	
5/18/2009	400.80	0.00	41.1	346.9		27.3	347.4		19.3	340.0	
5/27/2009	400.10	0.00	41.2	346.8		27.3	347.4		19.5	339.8	
6/29/2009	403.00	0.15	40.1	347.9		26.2	348.5		18.6	340.7	
7/28/2009	396.53	0.00	42.1	345.9		26.9	347.8		20.1	339.2	
8/25/2009	396.60	0.00	42.4	345.6		27.5	347.2		20.4	338.9	
9/30/2009	393.10	0.00	44.0	344.0		28.6	346.1		21.7	337.6	
10/28/2009	401.60	0.42	41.2	346.8		27.6	347.1		19.5	339.8	
11/30/2009	402.50	0.00	40.5	347.5		26.2	348.5		18.9	340.4	
12/29/2009	399.90	2.80	41.3	346.7		26.3	348.4		19.3	340.0	
1/26/2010	401.10	6.75	41.0	347.0		26.7	348.0		19.3	340.0	
2/23/2010	402.50	2.66	40.5	347.5		25.5	349.2		18.7	340.6	
3/30/2010	400.00	1.25	41.1	346.9		24.9	349.8		19.2	340.1	
4/4/2010	399.60		41.4	346.6		25.1	349.6		19.4	339.9	
4/27/2010	403.80	1.32	40.2	347.8		25.0	349.7		18.6	340.7	
5/26/2010	403.60	0.03	40.1	347.9		24.8	349.9		18.5	340.8	
6/29/2010	397.70	0.00	41.9	346.1		25.7	349.0		19.9	339.4	
7/27/2010	396.30	0.00	42.7	345.3		26.5	348.2		20.6	338.7	
8/26/2010	390.70	0.00	44.7	343.3		27.6	347.1		22.0	337.3	
9/28/2010	390.30	0.00	45.5	342.5		29.1	345.6		22.7	336.6	
10/26/2010	403.20	1.56	41.6	346.4		28.1	346.6		19.8	339.5	
11/30/2010	397.10	1.34	42.5	345.5		27.6	347.1		20.4	338.9	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-64			P-65			P-66		
Top of Well Elevation -->			388.00			374.72			359.31		
Bottom of Well Elevation -->			302.00			325.50			301.00		
Depth of Well			86.0			49.2			58.3		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03	41.4	346.6		27.1	347.6		19.5	339.8	
1/27/2011	393.80	1.10	43.2	344.8		25.7	349.0		20.8	338.5	
2/23/2011	391.70	1.17	44.5	343.5		27.0	347.7		21.9	337.4	
3/29/2011	403.00	3.10	41.0	347.0		26.2	348.5		19.4	339.9	
4/27/2011	401.20	0.33	41.3	346.7		25.9	348.8		19.5	339.9	
5/26/2011	399.50	0.48	41.9	346.1		26.5	348.3		19.9	339.4	
6/28/2011	391.00	0.02	43.6	344.4		27.8	346.9		22.0	337.3	
7/26/2011	384.00	0.00	47.3	340.7		30.0	344.7		24.3	335.0	
8/24/2011	382.80	0.00	47.9	340.1		31.5	343.2		24.9	334.4	
9/27/2011	381.80	0.08	48.6	339.4		32.8	341.9		25.4	333.9	
10/26/2011	383.90	0.98	47.9	340.1		33.0	341.7		24.8	334.5	
11/22/2011	389.80	1.46	46.1	341.9		32.7	342.0		23.5	335.8	
12/28/2011	382.30	0.35	47.9	340.1		33.2	341.5		24.8	334.5	
1/25/2012	387.50	1.17	47.8	340.2		34.1	340.6		25.0	334.3	
2/28/2012	381.10	0.79	49.2	338.8		34.6	340.1		25.9	333.4	
3/27/2012	387.70	1.61	47.4	340.6		34.7	340.0		24.9	334.4	
4/23/2012	392.30	1.51	45.4	342.6		33.4	341.4		23.0	336.3	
5/25/2012	388.30	0.06	46.3	341.7		32.9	341.8		23.2	336.1	
6/13/2012	385.10	0.06	47.1	340.9		33.3	341.4		24.1	335.2	
6/26/2012	386.90	0.00	46.7	341.3		33.4	341.3		25.4	333.9	
7/24/2012	378.00	0.10	49.4	338.6		34.6	340.1		25.9	333.4	
8/8/2012	382.90	0.10	48.3	339.7		34.6	340.1		25.5	333.8	
8/29/2012	382.70	0.00	48.8	339.2		34.8	339.9		25.7	333.6	
8/29/2012	382.70	0.00	48.7	339.3		34.8	339.9		25.7	333.6	
9/25/2012	381.90	0.00	49.4	338.6		35.0	339.7		26.1	333.2	
10/24/2012	384.40	0.08	48.4	339.6		35.0	339.7		25.5	333.8	
11/27/2012	389.60	0.86	46.3	341.7		33.7	341.0		23.7	335.6	
12/18/2012	394.70	1.96	44.4	343.6		32.7	342.0		22.2	337.1	
1/23/2013	393.00	1.53	44.0	344.0		31.3	343.4		21.5	337.8	
2/26/2013	391.50	0.49	44.6	343.4		31.2	343.5		21.9	337.4	
3/26/2013	394.40	1.00	44.7	343.3		31.7	343.0		22.2	337.1	
4/25/2013	391.00	0.01	44.9	343.1		31.3	343.4		22.3	337.0	
5/22/2013	392.00	0.00	44.5	343.5		30.9	343.8		22.0	337.3	
6/25/2013	380.60	0.00	47.9	340.1		32.4	342.3		24.5	334.8	
7/23/2013	380.20	0.00	49.0	339.0		33.6	341.1		25.7	333.6	
8/21/2013	379.60	0.00	49.1	338.9		34.2	340.5		25.7	333.6	
9/25/2013	382.20	0.00	48.8	339.2		34.5	340.2		25.7	333.6	
10/29/2013	382.00	0.00	49.4	338.6		35.4	339.3		26.2	333.1	
11/26/2013	390.10	0.44	46.9	341.1		34.6	340.1		24.4	334.9	
12/17/2013	394.70	1.10	44.5	343.5		32.9	341.8		22.3	337.0	
1/28/2014	392.30	0.00	44.4	343.6		31.8	342.9		21.9	337.4	
2/26/2014	389.90	0.72	45.2	342.8		31.5	343.2		22.5	336.8	
3/26/2014	387.20		46.0	342.0		31.7	343.0		23.2	336.1	
3/28/2014	387.20	1.78	46.2	341.8		31.9	342.8		23.3	336.0	
4/23/2014	393.00	0.34	44.8	343.2		32.3	342.4		22.4	336.9	
5/28/2014	387.50	0.00	46.2	341.8		31.8	342.9		23.3	336.0	
6/25/2014	388.70	0.00	46.0	342.0		32.2	342.5		23.3	336.0	
7/29/2014	382.80	0.00	47.9	340.1		33.1	341.6		24.8	334.5	
8/28/2014	386.80	0.04	47.3	340.7		33.5	341.2		24.5	334.8	
9/24/2014	387.90	0.00	46.4	341.6		32.8	341.9		23.6	335.7	
10/29/2014	383.90	0.00	47.8	340.2		33.6	341.1		24.8	334.5	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-64			P-65			P-66		
Top of Well Elevation -->			388.00			374.72			359.31		
Bottom of Well Elevation -->			302.00			325.50			301.00		
Depth of Well			86.0			49.2			58.3		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35	46.5	341.5		33.0	341.7		23.7	335.6	
12/22/2014	399.80	4.75	42.6	345.4		31.1	343.6		20.7	338.6	
1/28/2015	396.90	1.28	43.0	345.0		30.0	344.7		20.8	338.5	
2/24/2015	392.70	0.34	44.2	343.8		29.9	344.8		21.7	337.6	
3/31/2015	388.90	0.67	44.8	343.2		29.3	345.4		22.1	337.2	
4/23/2015	390.30	0.20	45.2	342.8		29.9	344.8		22.5	336.8	
5/28/2015	400.30	1.87	41.9	346.1		28.5	346.2		19.9	339.4	
6/24/2015	400.70	0.00	41.5	346.5		27.9	346.8		19.7	339.6	
7/30/2015	400.20	0.00	41.6	346.4		27.4	347.3		19.8	339.5	
8/25/2015	384.00	0.00	45.9	342.1		28.5	346.2		22.8	336.5	
9/23/2015	388.60	2.17	45.8	342.2		30.4	344.3		23.2	336.1	
10/29/2015	387.60	0.16	46.3	341.7		31.3	343.4		23.6	335.7	
11/25/2015	386.90	0.15	46.5	341.5		31.7	343.0		23.8	335.5	
12/23/2015	395.90	1.55	44.8	343.2		31.7	343.0		22.4	336.9	
1/26/2016	401.20	2.86	41.8	346.2		29.4	345.4		20.8	338.5	
2/24/2016	393.60	0.39	44.0	344.0		29.5	345.2		21.6	337.7	
3/29/2016	397.10	1.55	42.7	345.3		28.9	345.8		20.9	338.5	
4/29/2016	391.60	0.04	44.3	343.7		26.2	348.5		22.1	337.2	
5/24/2016	401.60	0.13	42.0	346.0		28.7	346.0		20.3	339.0	
6/29/2016	392.50	0.00	44.1	343.9		28.7	346.0		21.6	337.7	
7/26/2016	377.70	0.00	48.5	339.5		31.1	343.6		25.1	334.2	
8/24/2016	388.10	0.00	46.7	341.3		32.4	342.3		24.0	335.3	
9/29/2016	388.20	0.00	46.3	341.7		32.5	342.2		23.6	335.7	
10/26/2016	392.10	0.96	46.4	341.6		32.7	342.0		23.2	336.1	
11/22/2016	395.70	1.42	43.9	344.1		31.5	343.2		21.7	337.6	
12/28/2016	400.70	4.11	40.9	347.1		30.0	344.7		20.0	339.3	
1/26/2017	402.40	6.70	41.0	347.0		28.3	346.4		19.5	339.8	
2/28/2017	389.60	4.01	44.9	343.1		29.3	345.4		22.2	337.1	
3/29/2017	391.80	0.14	44.9	343.1		30.2	344.5		22.4	336.9	
4/26/2017	387.00	0.04	46.1	341.9		30.7	344.0		23.2	336.1	
5/23/2017	399.40	0.30	42.7	345.3		29.8	344.9		20.8	338.5	
6/21/2017	392.60	0.00	44.2	343.8		29.6	345.1		21.8	337.5	
7/26/2017	384.60	0.00	46.9	341.1		31.1	343.6		23.9	335.4	
8/30/2017	383.00	0.00	47.9	340.1		32.6	342.1		24.8	334.5	
9/27/2017	382.00	0.00	48.7	339.3		33.9	340.8		25.6	333.7	
10/27/2017	375.00	0.00	50.0	338.0		34.8	339.9		26.5	332.8	
11/30/2017	382.80	0.14	48.6	339.4		35.0	339.7		25.7	333.6	
12/21/2017	380.50	0.00	49.2	338.8		35.1	339.6		26.0	333.3	
1/24/2018	397.80	1.43	44.0	344.0		33.4	341.3		22.2	337.1	
2/21/2018	382.40	0.17	47.3	340.7		33.2	341.5		24.2	335.1	
3/29/2018	392.10	0.00	45.2	342.8		32.8	341.9		22.7	336.6	
4/25/2018	388.00	0.05	46.8	341.2		34.0	340.7		24.1	335.2	
5/30/2018	399.50	0.21	43.1	344.9		32.3	342.4		21.3	338.0	
6/28/2018	398.90	0.00	42.3	345.7		30.6	344.1		20.4	338.9	
7/25/2018	388.60	0.00	45.2	342.8		30.9	343.8		22.4	336.9	
8/24/2018	378.60	0.00	49.0	339.0		33.4	341.3		25.5	333.8	
9/27/2018	381.40	0.00	48.8	339.2		34.6	340.1		25.7	333.6	
10/18/2018	385.20	1.45	47.9	340.1		34.6	340.1		25.0	334.3	
11/28/2018	389.10	1.32	49.4	338.6		35.2	339.5		26.3	333.0	
12/20/2018	394.20	2.12	45.1	342.9		33.8	340.9		22.8	336.5	
2/21/2019	396.00	8.26	44.20	343.8		31.80	342.9		20.70	338.6	

Note:

1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-64			P-65			P-66		
Top of Well Elevation -->			388.00			374.72			359.31		
Bottom of Well Elevation -->			302.00			325.50			301.00		
Depth of Well			86.0			49.2			58.3		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88	46.50	341.5		31.80	342.9		24.40	334.9	
4/25/2019	377.70	0.03	48.60	339.4		33.00	341.7		25.00	334.3	
5/30/2019	395.30	0.92	44.30	343.7		32.30	342.4		22.10	337.2	
6/26/2019	388.40	0.01	45.60	342.4		31.90	342.8		22.80	336.5	
7/5/2019	385.50	0.00	46.50	341.5		32.10	342.6		23.40	335.9	
7/30/2019	385.20	0.00	47.70	340.3		33.60	341.1		24.60	334.7	
8/27/2019	387.90	0.00	46.20	341.8		34.10	340.6		23.40	335.9	
9/26/2019	380.00	0.00	48.60	339.4		34.40	340.3		25.50	333.8	
10/23/2019	378.90	0.00	49.70	338.3		34.90	339.8		26.20	333.1	
11/26/2019	383.80	2.60	48.80	339.2		35.40	339.3		25.70	333.6	
12/18/2019	389.20	4.63	49.70	338.3		42.50	332.2	Omitted	23.90	335.4	
1/29/2020	388.20	0.15	46.20	341.8		33.30	341.4		23.40	335.9	
2/25/2020	384.70	0.33	47.30	340.7		33.90	340.8		24.30	335.0	
3/24/2020	391.70	3.91	45.60	342.4		33.30	341.4		50.70	308.6	Omitted
4/23/2020	399.40	4.05	76.50	311.5	Omitted	31.60	343.1		20.40	338.9	
5/27/2020	388.50	0.40	45.60	342.4		31.90	342.8		22.80	336.5	
6/24/2020	388.00	0.01	45.90	342.1		32.60	342.1		23.10	336.2	
7/29/2020	358.70	0.00	46.70	341.3		32.60	342.1		23.70	335.6	
8/26/2020	379.30	0.00	49.00	339.0		33.90	340.8		25.60	333.7	
9/29/2020	381.30	0.00	49.00	339.0		35.80	338.9		25.70	333.6	
10/28/2020	376.50	0.00	50.30	337.7		35.80	338.9		26.80	332.5	
11/24/2020	380.70	0.25	49.80	338.2		36.00	338.7		26.40	332.9	
12/23/2020	384.10	1.40	48.50	339.5		35.60	339.1		25.50	333.8	
1/26/2021	386.2	2.42	47.5	340.5		34.6	340.12		25.2	334.11	
2/25/2021	385.4	0.07	47.1	340.9		33.8	340.92		24.1	335.21	
3/23/2021	394.8	1.35	44.6	343.4		33.2	341.52		22.3	337.01	
4/27/2021	384.1	0.04	47.3	340.7		33.8	340.92		24.1	335.21	
5/27/2021	383.5	0.04	47.6	340.4		34.1	340.62		24.4	334.91	
6/30/2021	385.4	0	47.7	340.3		34.8	339.92		24.7	334.61	
7/29/2021	381.7	0.03	47.2	340.8		35.7	339.02		25.8	333.51	
8/24/2021	383.4	0	48.8	339.2		35.9	338.82		25.8	333.51	
9/28/2021	381.3	0.06	48.6	339.4		35.2	339.52		25.4	333.91	
10/27/2021	382.7	0.71	49.3	338.7		36.2	338.52		26.2	333.11	
11/23/2021	381	0	49.8	338.2		36.3	338.42		26.6	332.71	
12/21/2021	386.3	6.1	48	340		35.9	338.82		25.2	334.11	
1/25/2022	382	0.05	48.7	339.3		35.5	339.22		25.4	333.91	
2/22/2022	382.3	0.36	49.4	338.6		36.4	338.32		26.2	333.11	
3/29/2022	390.6	1.33	46.9	341.1		35.5	339.22		24.4	334.91	
4/27/2022	393.2	0.02	45.1	342.9		33.7	341.02		22.7	336.61	
5/24/2022	391.4	0.05	45.1	342.9		34.5	340.22		22.8	336.51	
6/28/2022	392.7	0	44.8	343.2		32.3	342.42		22.7	336.61	
7/26/2022	386.1	0	46.6	341.4		32.6	342.12		23.6	335.71	
8/25/2022	382.2	0.02	48.1	339.9		23.8	350.92	Omitted	24.9	334.41	
9/29/2022	392.7	0.36	44.8	343.2		32.3	342.42		22.7	336.61	
10/25/2022	390	0.32	46.5	341.5		31.5	343.22		24.2	335.11	
11/17/2022	391.4	2.12	45.5	342.5		33.3	341.42		23	336.31	
12/22/2022	386.4	2.28	47.6	340.4		34.6	340.12		26.5	332.81	
1/26/2023	391.6	7.39	46.20	341.80		33.40	341.32		23.00	336.31	
2/23/2023	389.9	3.88	45.67	342.33		32.74	341.98		22.93	336.38	
3/28/2023	390.8	5.62	45.00	343.00		32.00	342.72		22.40	336.91	
4/25/2023	390.8	0.16	45.10	342.90		31.50	343.22		22.30	337.01	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-64			P-65			P-66		
Top of Well Elevation -->			388.00			374.72			359.31		
Bottom of Well Elevation -->			302.00			325.50			301.00		
Depth of Well			86.0			49.2			58.3		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	44.90	343.10		31.23	343.49		22.30	337.01	
6/27/2023	388.80	0.14	45.40	342.60		30.90	343.82		22.90	336.41	
7/27/2023	384.40	0.00	47.20	340.80		32.30	342.42		24.10	335.21	
8/29/2023	382.80	2.22	49.10	338.90		33.40	341.32		25.00	334.31	
9/26/2023	377.90	0.00	49.69	338.31		34.48	340.24		26.08	333.23	
10/30/2023	385.30	0.26	48.10	339.90		34.90	339.82		27.70	331.61	
11/30/2023	382.90	0.70	49.40	338.60		35.20	339.52		25.80	333.51	
12/20/2023	388.50	1.10	47.66	340.34		34.93	339.79		24.82	334.49	
1/24/2024	391.90	2.23	45.50	342.50		33.00	341.72		22.80	336.51	
2/22/2024	388.60	7.64	45.90	342.10		32.70	342.02		22.90	336.41	
3/27/2024	390.90	2.54	45.44	342.56		32.30	342.42		22.69	336.62	
4/23/2024	391.60	1.62	45.00	343.00		31.60	343.12		22.30	337.01	
5/1/2024	389.10	0.00	45.70	342.30		31.50	343.22		22.80	336.51	
5/23/2024	389.20	0.16	46.20	341.80		32.00	342.72		23.40	335.91	
5/30/2024	392.80	#N/A	45.10	342.90		31.70	343.02		22.60	336.71	
6/20/2024	392.90	0.00	44.70	343.30		31.00	343.72		22.10	337.21	
7/24/2024	386.40	0.00	46.90	341.10		32.20	342.52		23.90	335.41	
8/27/2024	384.10	0.00	48.30	339.70		33.50	341.22		25.10	334.21	
9/24/2024	380.50	0.03	48.90	339.10		33.80	340.92		35.50	323.81	Omitted
10/29/2024	387.40	0.00	47.60	340.40		34.10	340.62		24.70	334.61	
11/21/2024	384.50	0.09	48.20	339.80		34.26	340.46		25.12	334.19	
12/17/2024	386.30	0.01	47.90	340.10		34.40	340.32		24.90	334.41	
1/28/2025	385.70	1.01	48.50	339.50		34.90	339.82		25.50	333.81	
2/26/2025	386.00	3.18	47.90	340.10		34.60	340.12		24.90	334.41	
3/20/2025	383.60	2.29	48.40	339.60		34.60	340.12		25.20	334.11	
4/14/2025	383.40	#N/A	48.70	339.30		35.00	339.72		25.50	333.81	
4/23/2025	385.20	0.35	48.20	339.80		34.70	340.02		25.20	334.11	
5/28/2025	384.50	0.08	48.40	339.60		34.80	339.92		25.30	334.01	
7/7/2025	386.00	0.20	48.40	339.60		35.10	339.62		25.40	333.91	
7/23/2025	387.30	0.00	47.72	340.28		34.73	339.99		24.84	334.47	
8/20/2025	378.90	0.00	50.00	338.00		35.40	339.32		26.70	332.61	
9/24/2025	387.00	0.13	48.20	339.80		35.50	339.22		25.30	334.01	
10/22/2025	386.40	1.20	47.70	340.30		34.70	340.02		24.80	334.51	
11/19/2025	387.30	5.70	48.00	340.00		35.00	339.72		25.10	334.21	
12/16/2025	381.60	2.28	49.41	338.59		35.44	339.28		26.05	333.26	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-67			VBW/OW-1			VBW/OW-2		
Top of Well Elevation -->			355.04			468.16			442.91		
Bottom of Well Elevation -->			282.50			433.46			407.91		
Depth of Well			72.5			34.7			35.0		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90		24.7	330.3		35.5	432.7		35.0	407.9	
2/28/2007	380.90		26.1	328.9		34.4	433.8		34.2	408.7	
3/29/2007	397.00		24.3	330.7		34.6	433.6		34.4	408.5	442.9
4/27/2007	405.60		21.6	333.4		34.6	433.6		34.4	408.5	
5/24/2007	404.40		21.0	334.0		35.2	433.0		34.5	408.4	
6/28/2007	396.90		21.6	333.4		34.6	433.6		34.5	408.4	
7/31/2007	392.60		22.8	332.2		35.4	432.8		34.5	408.4	
8/29/2007	388.60		23.7	331.3		34.5	433.7		34.4	408.5	
9/2/2007	387.40		23.9	331.1		34.5	433.7		34.4	408.5	
9/26/2007	387.90		24.6	330.4		34.6	433.6		34.4	408.5	
10/25/2007	382.00		25.5	329.5		35.4	432.8		35.4	407.5	
11/27/2007	380.30		26.3	328.7		34.5	433.7		34.4	408.5	
12/27/2007	381.40		26.3	328.7		34.8	433.4		34.4	408.5	
1/31/2008	381.20		27.0	328.0		34.4	433.8		34.3	408.6	Dry
2/28/2008	393.10		24.6	330.4		33.4	434.8		34.4	408.5	Dry
3/27/2008	387.90		24.6	330.4	Dry	33.2	435.0		34.4	408.5	Dry
4/28/2008	404.70		21.5	333.5	Dry	31.2	437.0		33.6	409.3	
5/28/2008	404.00		21.5	333.5	Dry	34.0	434.2		33.8	409.1	
6/25/2008	400.20		20.8	334.2	Dry	34.6	433.6	Dry	34.7	408.2	Dry
7/29/2008	398.70		21.6	333.4	Dry	34.5	433.7	Dry	34.4	408.5	Dry
7/30/2008	398.70	0.00	21.6	333.4	Dry	34.5	433.7	Dry	34.5	408.4	Dry
8/29/2008	395.00	0.00	22.6	332.4	Dry	34.5	433.7	Dry	34.4	408.5	Dry
9/25/2008	391.70	0.00	23.4	331.6		34.7	433.5	Dry	34.8	408.1	Dry
10/28/2008	384.05	0.00	24.6	330.4	Dry	34.5	433.7	Dry	34.4	408.5	Dry
11/26/2008	391.10	1.94	24.5	330.5	Dry	34.7	433.5	Dry	34.6	408.3	Dry
12/31/2008	397.90	3.20	23.2	331.8	Dry	34.5	433.7	Dry	34.4	408.5	Dry
1/29/2009	393.40	0.34	23.2	331.8		34.5	433.7	Dry	34.4	408.5	Dry
2/25/2009	398.60	3.91	22.6	332.4	Dry	34.8	433.4	Dry	34.4	408.5	Dry
3/31/2009	393.40	0.16	22.6	332.4		34.5	433.7	Dry	34.4	408.5	Dry
4/28/2009	400.70	0.10	22.2	332.8		34.6	433.6	Dry	34.5	408.4	Dry
5/18/2009	400.80	0.00	21.8	333.2		34.5	433.7	Dry	34.4	408.5	Dry
5/27/2009	400.10	0.00	21.6	333.4		34.5	433.7		34.4	408.6	
6/29/2009	403.00	0.15	21.6	333.4		34.5	433.7	Dry	34.3	408.6	Dry
7/28/2009	396.53	0.00	21.8	333.2		34.5	433.7	Dry	34.4	408.5	Dry
8/25/2009	396.60	0.00	22.6	332.4		34.5	433.7	Dry	34.4	408.5	Dry
9/30/2009	393.10	0.00	23.7	331.3		34.5	433.7	Dry	34.3	408.6	Dry
10/28/2009	401.60	0.42	22.3	332.7		34.5	433.7	Dry	34.4	408.5	Dry
11/30/2009	402.50	0.00	21.4	333.6		34.5	433.7	Dry	34.4	408.5	Dry
12/29/2009	399.90	2.80	21.5	333.5		34.5	433.7	Dry	34.4	408.5	Dry
1/26/2010	401.10	6.75	21.8	333.2		33.1	435.1		34.3	408.6	Dry
2/23/2010	402.50	2.66	21.4	333.6		34.2	434.0		34.4	408.5	Dry
3/30/2010	400.00	1.25	21.5	333.5	Dry	34.5	433.7	Dry	34.4	408.5	Dry
4/4/2010	399.60		21.6	333.4	Dry	34.6	433.6	Dry	34.2	408.7	Dry
4/27/2010	403.80	1.32	20.5	334.5		34.6	433.6	Dry	34.4	408.5	Dry
5/26/2010	403.60	0.03	21.3	333.7		34.6	433.6	Dry	34.4	408.5	Dry
6/29/2010	397.70	0.00	22.0	333.0		34.5	433.7	Dry	34.2	408.7	Dry
7/27/2010	396.30	0.00	22.6	332.4		34.5	433.7	Dry	34.3	408.6	Dry
8/26/2010	390.70	0.00	23.6	331.4		34.6	433.6	Dry	34.5	408.4	Dry
9/28/2010	390.30	0.00	24.6	330.4	Dry	34.5	433.7	Dry	34.4	408.5	Dry
10/26/2010	403.20	1.56	22.8	332.2		34.6	433.6	Dry	34.3	408.6	Dry
11/30/2010	397.10	1.34	22.4	332.6		34.5	433.7		34.3	408.6	Dry

Note:
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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-67			VBW/OW-1			VBW/OW-2		
Top of Well Elevation -->			355.04			468.16			442.91		
Bottom of Well Elevation -->			282.50			433.46			407.91		
Depth of Well			72.5			34.7			35.0		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03	22.3	332.7		23.3	444.9	Dry	34.4	408.5	Dry
1/27/2011	393.80	1.10	22.4	332.6		34.0	434.2	Dry	34.3	408.6	
2/23/2011	391.70	1.17	23.9	331.1	Dry	34.5	433.7	Dry	34.4	408.5	Dry
3/29/2011	403.00	3.10	22.0	333.0		34.4	433.8	Dry	34.3	408.6	Dry
4/27/2011	401.20	0.33	22.1	332.9		34.5	433.7	Dry	34.4	408.5	Dry
5/26/2011	399.50	0.48	22.4	332.7		34.5	433.7	Dry	34.4	408.5	Dry
6/28/2011	391.00	0.02	23.8	331.2		34.6	433.6	Dry	34.5	408.4	Dry
7/26/2011	384.00	0.00	25.8	329.2		34.6	433.6	Dry	34.4	408.5	Dry
8/24/2011	382.80	0.00	26.5	328.5		34.5	433.7	Dry	34.9	408.0	Dry
9/27/2011	381.80	0.08	26.6	328.4		34.5	433.7	Dry	34.4	408.5	Dry
10/26/2011	383.90	0.98	26.2	328.8		34.5	433.7	Dry	34.4	408.5	Dry
11/22/2011	389.80	1.46	25.5	329.5		32.9	435.3		34.2	408.7	
12/28/2011	382.30	0.35	25.9	329.1		34.5	433.7		34.4	408.5	
1/25/2012	387.50	1.17	26.8	328.2		34.5	433.7		34.3	408.6	
2/28/2012	381.10	0.79	26.9	328.1		34.5	433.7		34.3	408.6	
3/27/2012	387.70	1.61	26.2	328.8		35.1	433.1		35.3	407.6	Erroneous
4/23/2012	392.30	1.51	25.3	329.8		34.8	433.4		34.4	408.5	
5/25/2012	388.30	0.06	25.3	329.7		35.5	432.7	Erroneous	35.8	407.1	Erroneous
6/13/2012	385.10	0.06	25.3	329.7		34.5	433.7		34.3	408.6	
6/26/2012	386.90	0.00	23.9	331.1		34.5	433.7		34.4	408.5	
7/24/2012	378.00	0.10	26.8	328.2		34.5	433.7		34.4	408.5	
8/8/2012	382.90	0.10	26.7	328.3		34.4	433.8		34.3	408.6	
8/29/2012	382.70	0.00	27.1	327.9		34.5	433.7		34.3	408.6	
8/29/2012	382.70	0.00	27.1	327.9		34.5	433.7		34.3	408.6	
9/25/2012	381.90	0.00	27.2	327.8		34.6	433.6		34.4	408.5	
10/24/2012	384.40	0.08	27.0	328.0		34.5	433.7		34.4	408.5	
11/27/2012	389.60	0.86	25.6	329.4		34.4	433.8		34.3	408.6	
12/18/2012	394.70	1.96	24.4	330.6		34.4	433.8		34.3	408.6	
1/23/2013	393.00	1.53	23.6	331.4		35.7	432.5	Erroneous	35.8	407.1	Erroneous
2/26/2013	391.50	0.49	23.9	331.1		34.5	433.7		34.2	408.7	
3/26/2013	394.40	1.00	24.6	330.4		34.4	433.8		35.3	407.6	
4/25/2013	391.00	0.01	24.2	330.8		34.8	433.4		34.3	408.6	
5/22/2013	392.00	0.00	24.0	331.0		34.5	433.7		34.4	408.5	
6/25/2013	380.60	0.00	25.6	329.4		34.5	433.7		34.4	408.5	
7/23/2013	380.20	0.00	26.6	328.4		34.5	433.7		34.4	408.5	
8/21/2013	379.60	0.00	26.7	328.3		34.5	433.7	Dry	34.4	408.5	Dry
9/25/2013	382.20	0.00	26.7	328.3		34.5	433.7	Dry	34.6	408.3	Dry
10/29/2013	382.00	0.00	27.4	327.6		34.5	433.7	Dry	34.6	408.3	Dry
11/26/2013	390.10	0.44	26.4	328.6		34.5	433.7	Dry	34.3	408.6	Dry
12/17/2013	394.70	1.10	25.1	329.9		34.6	433.6	Dry	34.3	408.6	Dry
1/28/2014	392.30	0.00	24.4	330.6		34.4	433.8	Dry	34.3	408.6	Dry
2/26/2014	389.90	0.72	24.4	330.6		34.5	433.7	Dry	34.3	408.6	Dry
3/26/2014	387.20		24.7	330.3		34.5	433.7	Dry	34.4	408.5	Dry
3/28/2014	387.20	1.78	24.7	330.3		34.5	433.7	Dry	34.4	408.5	Dry
4/23/2014	393.00	0.34	25.0	330.0		34.5	433.7	Dry	34.3	408.6	Dry
5/28/2014	387.50	0.00	24.6	330.4		34.5	433.7	Dry	34.4	408.5	Dry
6/25/2014	388.70	0.00	25.2	329.8		34.5	433.7	Dry	34.3	408.6	Dry
7/29/2014	382.80	0.00	25.8	329.2		34.5	433.7	Dry	34.3	408.6	Dry
8/28/2014	386.80	0.04	25.8	329.2		34.4	433.8		34.3	408.6	Dry
9/24/2014	387.90	0.00	25.8	329.2		34.5	433.7	Dry	34.3	408.6	Dry
10/29/2014	383.90	0.00	26.4	328.6	Dry	34.8	433.4	Dry	34.4	408.5	Dry

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TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-67			VBW/OW-1			VBW/OW-2		
Top of Well Elevation -->			355.04			468.16			442.91		
Bottom of Well Elevation -->			282.50			433.46			407.91		
Depth of Well			72.5			34.7			35.0		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35	25.5	329.5		34.5	433.7	Dry	34.3	408.6	Dry
12/22/2014	399.80	4.75	23.4	331.6		34.5	433.7	Dry	34.3	408.6	Dry
1/28/2015	396.90	1.28	23.2	331.8	Dry	34.5	433.7	Dry	34.3	408.6	Dry
2/24/2015	392.70	0.34	23.5	331.5	Dry	34.4	433.8	Dry	34.2	408.7	Dry
3/31/2015	388.90	0.67	23.9	331.1	Dry	34.5	433.7	Dry	34.3	408.6	Dry
4/23/2015	390.30	0.20	24.0	331.0		34.5	433.7	Dry	34.3	408.6	Dry
5/28/2015	400.30	1.87	22.7	332.3		34.5	433.7	Dry	34.4	408.5	Dry
6/24/2015	400.70	0.00	22.5	332.5	Wet	35.0	433.2	Dry	34.8	408.1	Dry
7/30/2015	400.20	0.00	22.4	332.6	Wet	34.4	433.8	Dry	35.3	407.6	Dry
8/25/2015	384.00	0.00	22.5	332.5		34.4	433.8	Dry	34.6	408.3	Dry
9/23/2015	388.60	2.17	25.2	329.8	Wet	34.5	433.7	Dry	34.4	408.5	Dry
10/29/2015	387.60	0.16	25.2	329.8		34.5	433.7	Dry	34.4	408.5	Dry
11/25/2015	386.90	0.15	25.3	329.7		34.6	433.6	Dry	34.4	408.5	Dry
12/23/2015	395.90	1.55	24.7	330.3		33.8	434.4	Dry	33.4	409.5	Dry
1/26/2016	401.20	2.86	22.8	332.2		33.8	434.4	Dry	33.4	409.5	Dry
2/24/2016	393.60	0.39	22.8	332.2	Dry	33.8	434.4	Dry	33.4	409.5	Dry
3/29/2016	397.10	1.55	22.9	332.1	Wet	34.5	433.7		34.5	408.4	
4/29/2016	391.60	0.04	23.5	331.5		34.5	433.7		34.5	408.4	
5/24/2016	401.60	0.13	23.1	331.9		34.5	433.7		34.5	408.4	
6/29/2016	392.50	0.00	23.5	331.5		34.5	433.7		34.5	408.4	
7/26/2016	377.70	0.00	25.5	329.5		34.5	433.7		34.5	408.4	
8/24/2016	388.10	0.00	26.0	329.0				Abandoned			Abandoned
9/29/2016	388.20	0.00	25.5	329.5				Abandoned			Abandoned
10/26/2016	392.10	0.96	25.3	329.7				Abandoned			Abandoned
11/22/2016	395.70	1.42	24.2	330.8				Abandoned			Abandoned
12/28/2016	400.70	4.11	23.0	332.0				Abandoned			Abandoned
1/26/2017	402.40	6.70	22.0	333.0				Abandoned			Abandoned
2/28/2017	389.60	4.01	22.8	332.2				Abandoned			Abandoned
3/29/2017	391.80	0.14	24.4	330.6				Abandoned			Abandoned
4/26/2017	387.00	0.04	24.8	330.2				Abandoned			Abandoned
5/23/2017	399.40	0.30	23.5	331.5				Abandoned			Abandoned
6/21/2017	392.60	0.00	23.3	331.7				Abandoned			Abandoned
7/26/2017	384.60	0.00	23.7	331.3	Dry			Abandoned			Abandoned
8/30/2017	383.00	0.00	23.7	331.3	Dry			Abandoned			Abandoned
9/27/2017	382.00	0.00	23.4	331.6				Abandoned			Abandoned
10/27/2017	375.00	0.00	23.5	331.5				Abandoned			Abandoned
11/30/2017	382.80	0.14	23.2	331.8				Abandoned			Abandoned
12/21/2017	380.50	0.00	23.6	331.4				Abandoned			Abandoned
1/24/2018	397.80	1.43	23.5	331.5				Abandoned			Abandoned
2/21/2018	382.40	0.17	24.5	330.5				Abandoned			Abandoned
3/29/2018	392.10	0.00	28.1	326.9				Abandoned			Abandoned
4/25/2018	388.00	0.05	24.6	330.4				Abandoned			Abandoned
5/30/2018	399.50	0.21	23.8	331.2				Abandoned			Abandoned
6/28/2018	398.90	0.00	23.0	332.0				Abandoned			Abandoned
7/25/2018	388.60	0.00	22.9	332.1				Abandoned			Abandoned
8/24/2018	378.60	0.00	22.9	332.1				Abandoned			Abandoned
9/27/2018	381.40	0.00	26.9	328.1				Abandoned			Abandoned
10/18/2018	385.20	1.45	26.8	328.2				Abandoned			Abandoned
11/28/2018	389.10	1.32	27.4	327.6				Abandoned			Abandoned
12/20/2018	394.20	2.12	25.2	329.8				Abandoned			Abandoned
2/21/2019	396.00	8.26	23.00	332.0				Abandoned			Abandoned

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JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-67			VBW/OW-1			VBW/OW-2		
Top of Well Elevation -->			355.04			468.16			442.91		
Bottom of Well Elevation -->			282.50			433.46			407.91		
Depth of Well			72.5			34.7			35.0		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88	23.00	332.0				Abandoned			Abandoned
4/25/2019	377.70	0.03	23.00	332.0	Dry			Abandoned			Abandoned
5/30/2019	395.30	0.92	23.00	332.0	Dry			Abandoned			Abandoned
6/26/2019	388.40	0.01	23.00	332.0	Dry			Abandoned			Abandoned
7/5/2019	385.50	0.00	23.30	331.7				Abandoned			Abandoned
7/30/2019	385.20	0.00	23.40	331.6				Abandoned			Abandoned
8/27/2019	387.90	0.00	23.40	331.6				Abandoned			Abandoned
9/26/2019	380.00	0.00	23.30	331.7				Abandoned			Abandoned
10/23/2019	378.90	0.00	24.20	330.8				Abandoned			Abandoned
11/26/2019	383.80	2.60	24.30	330.7				Abandoned			Abandoned
12/18/2019	389.20	4.63	24.30	330.7				Abandoned			Abandoned
1/29/2020	388.20	0.15	25.30	329.7				Abandoned			Abandoned
2/25/2020	384.70	0.33	26.00	329.0				Abandoned			Abandoned
3/24/2020	391.70	3.91	71.80	283.2	Omitted			Abandoned			Abandoned
4/23/2020	399.40	4.05	23.30	331.7				Abandoned			Abandoned
5/27/2020	388.50	0.40	24.70	330.3				Abandoned			Abandoned
6/24/2020	388.00	0.01	25.10	329.9				Abandoned			Abandoned
7/29/2020	358.70	0.00	25.50	329.5				Abandoned			Abandoned
8/26/2020	379.30	0.00	26.90	328.1				Abandoned			Abandoned
9/29/2020	381.30	0.00	27.30	327.7				Abandoned			Abandoned
10/28/2020	376.50	0.00	28.40	326.6				Abandoned			Abandoned
11/24/2020	380.70	0.25	28.00	327.0				Abandoned			Abandoned
12/23/2020	384.10	1.40	27.30	327.7				Abandoned			Abandoned
1/26/2021	386.2	2.42	26.7	328.34				Abandoned			Abandoned
2/25/2021	385.4	0.07	25.9	329.14				Abandoned			Abandoned
3/23/2021	394.8	1.35	24.8	330.24				Abandoned			Abandoned
4/27/2021	384.1	0.04	25.9	329.14				Abandoned			Abandoned
5/27/2021	383.5	0.04	26.1	328.94				Abandoned			Abandoned
6/30/2021	385.4	0	25.8	329.24				Abandoned			Abandoned
7/29/2021	381.7	0.03	27.4	327.64				Abandoned			Abandoned
8/24/2021	383.4	0	27.5	327.54				Abandoned			Abandoned
9/28/2021	381.3	0.06	27	328.04				Abandoned			Abandoned
10/27/2021	382.7	0.71	27.3	327.74				Abandoned			Abandoned
11/23/2021	381	0	28	327.04				Abandoned			Abandoned
12/21/2021	386.3	6.1	27.1	327.94				Abandoned			Abandoned
1/25/2022	382	0.05	27.3	327.74				Abandoned			Abandoned
2/22/2022	382.3	0.36	27.7	327.34				Abandoned			Abandoned
3/29/2022	390.6	1.33	26.5	328.54				Abandoned			Abandoned
4/27/2022	393.2	0.02	25.1	329.94				Abandoned			Abandoned
5/24/2022	391.4	0.05	24.7	330.34				Abandoned			Abandoned
6/28/2022	392.7	0	24.8	330.24				Abandoned			Abandoned
7/26/2022	386.1	0	25.5	329.54				Abandoned			Abandoned
8/25/2022	382.2	0.02	26.5	328.54				Abandoned			Abandoned
9/29/2022	392.7	0.36	24.8	330.24				Abandoned			Abandoned
10/25/2022	390	0.32	26.3	328.74				Abandoned			Abandoned
11/17/2022	391.4	2.12	25.2	329.84				Abandoned			Abandoned
12/22/2022	386.4	2.28	25.3	329.74				Abandoned			Abandoned
1/26/2023	391.6	7.39	25.00	330.04				Abandoned			Abandoned
2/23/2023	389.9	3.88	25.04	330.00				Abandoned			Abandoned
3/28/2023	390.8	5.62	24.40	330.64				Abandoned			Abandoned
4/25/2023	390.8	0.16	24.50	330.54				Abandoned			Abandoned

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-67			VBW/OW-1			VBW/OW-2		
Top of Well Elevation -->			355.04			468.16			442.91		
Bottom of Well Elevation -->			282.50			433.46			407.91		
Depth of Well			72.5			34.7			35.0		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	24.45	330.59				Abandoned			Abandoned
6/27/2023	388.80	0.14	24.70	330.34				Abandoned			Abandoned
7/27/2023	384.40	0.00	25.80	329.24				Abandoned			Abandoned
8/29/2023	382.80	2.22	26.60	328.44				Abandoned			Abandoned
9/26/2023	377.90	0.00	27.48	327.56				Abandoned			Abandoned
10/30/2023	385.30	0.26	27.50	327.54				Abandoned			Abandoned
11/30/2023	382.90	0.70	27.40	327.64				Abandoned			Abandoned
12/20/2023	388.50	1.10	26.82	328.22				Abandoned			Abandoned
1/24/2024	391.90	2.23	25.10	329.94				Abandoned			Abandoned
2/22/2024	388.60	7.64	24.90	330.14				Abandoned			Abandoned
3/27/2024	390.90	2.54	24.80	330.24				Abandoned			Abandoned
4/23/2024	391.60	1.62	24.50	330.54				Abandoned			Abandoned
5/1/2024	389.10	0.00	24.80	330.24				Abandoned			Abandoned
5/23/2024	389.20	0.16	25.30	329.74				Abandoned			Abandoned
5/30/2024	392.80	#N/A	24.90	330.14				Abandoned			Abandoned
6/20/2024	392.90	0.00	24.40	330.64				Abandoned			Abandoned
7/24/2024	386.40	0.00	25.80	329.24				Abandoned			Abandoned
8/27/2024	384.10	0.00	26.80	328.24				Abandoned			Abandoned
9/24/2024	380.50	0.03	27.10	327.94				Abandoned			Abandoned
10/29/2024	387.40	0.00	26.60	328.44				Abandoned			Abandoned
11/21/2024	384.50	0.09	29.90	325.14				Abandoned			Abandoned
12/17/2024	386.30	0.01	26.80	328.24				Abandoned			Abandoned
1/28/2025	385.70	1.01	27.30	327.74				Abandoned			Abandoned
2/26/2025	386.00	3.18	26.80	328.24				Abandoned			Abandoned
3/20/2025	383.60	2.29	26.90	328.14				Abandoned			Abandoned
4/14/2025	383.40	#N/A	27.20	327.84				Abandoned			Abandoned
4/23/2025	385.20	0.35	27.00	328.04				Abandoned			Abandoned
5/28/2025	384.50	0.08	27.10	327.94				Abandoned			Abandoned
7/7/2025	386.00	0.20	27.30	327.74				Abandoned			Abandoned
7/23/2025	387.30	0.00	26.84	328.20				Abandoned			Abandoned
8/20/2025	378.90	0.00	27.90	327.14				Abandoned			Abandoned
9/24/2025	387.00	0.13	27.20	327.84				Abandoned			Abandoned
10/22/2025	386.40	1.20	26.60	328.44				Abandoned			Abandoned
11/19/2025	387.30	5.70	27.00	328.04				Abandoned			Abandoned
12/16/2025	381.60	2.28	27.51	327.53				Abandoned			Abandoned

Note:
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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			VBW/OW-3			P-101A (VW4)			P-101B (VW2)		
Top of Well Elevation -->			418.87			419.88			419.88		
Bottom of Well Elevation -->			386.27			261.88			287.68		
Depth of Well			32.6								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90		25.3	393.6							
2/28/2007	380.90		27.3	391.6							
3/29/2007	397.00		26.3	392.6							
4/27/2007	405.60		21.0	397.9							
5/24/2007	404.40		18.5	400.4							
6/28/2007	396.90		19.5	399.4							
7/31/2007	392.60		21.9	397.0							
8/29/2007	388.60		23.3	395.6							
9/2/2007	387.40		21.9	397.0							
9/26/2007	387.90		23.1	395.8							
10/25/2007	382.00		26.1	392.8							
11/27/2007	380.30		26.6	392.3							
12/27/2007	381.40		29.1	389.8							
1/31/2008	381.20		25.2	393.7							
2/28/2008	393.10		22.3	396.6							
3/27/2008	387.90		19.1	399.8							
4/28/2008	404.70		17.6	401.3							
5/28/2008	404.00		17.1	401.8							
6/25/2008	400.20		17.6	401.3							
7/29/2008	398.70		19.1	399.8							
7/30/2008	398.70	0.00	19.1	399.8							
8/29/2008	395.00	0.00	21.3	397.6							
9/25/2008	391.70	0.00	23.5	395.4							
10/28/2008	384.05	0.00	27.0	391.9	Dry						
11/26/2008	391.10	1.94	26.8	392.1							
12/31/2008	397.90	3.20	24.6	394.3							
1/29/2009	393.40	0.34	25.6	393.3							
2/25/2009	398.60	3.91	25.1	393.8							
3/31/2009	393.40	0.16	24.6	394.3							
4/28/2009	400.70	0.10	24.2	394.7							
5/18/2009	400.80	0.00	22.3	396.6							
5/27/2009	400.10	0.00	22.4	396.5							
6/29/2009	403.00	0.15	19.6	399.3							
7/28/2009	396.53	0.00	22.3	396.6							
8/25/2009	396.60	0.00	23.8	395.1							
9/30/2009	393.10	0.00	25.5	393.4							
10/28/2009	401.60	0.42	23.5	395.4							
11/30/2009	402.50	0.00	19.8	399.1							
12/29/2009	399.90	2.80	20.5	398.4							
1/26/2010	401.10	6.75	19.7	399.2							
2/23/2010	402.50	2.66	18.7	400.2							
3/30/2010	400.00	1.25	19.4	399.5							
4/4/2010	399.60		19.6	399.3							
4/27/2010	403.80	1.32	19.2	399.7							
5/26/2010	403.60	0.03	19.0	399.9							
6/29/2010	397.70	0.00	20.6	398.3							
7/27/2010	396.30	0.00	21.6	397.3							
8/26/2010	390.70	0.00	22.8	396.1							
9/28/2010	390.30	0.00	22.4	396.5							
10/26/2010	403.20	1.56	22.9	396.0							
11/30/2010	397.10	1.34	21.7	397.2							

Note:
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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			VBW/OW-3			P-101A (VW4)			P-101B (VW2)		
Top of Well Elevation -->			418.87			419.88			419.88		
Bottom of Well Elevation -->			386.27			261.88			287.68		
Depth of Well			32.6								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03	18.2	400.7							
1/27/2011	393.80	1.10	19.4	399.5							
2/23/2011	391.70	1.17	22.9	396.0							
3/29/2011	403.00	3.10	20.2	398.7							
4/27/2011	401.20	0.33	20.2	398.7							
5/26/2011	399.50	0.48	20.8	398.1							
6/28/2011	391.00	0.02	23.0	395.9							
7/26/2011	384.00	0.00	27.1	391.8							
8/24/2011	382.80	0.00	28.5	390.4							
9/27/2011	381.80	0.08	29.7	389.2							
10/26/2011	383.90	0.98	29.8	389.1							
11/22/2011	389.80	1.46	34.1	384.8	Erroneous						
12/28/2011	382.30	0.35	29.2	389.7							
1/25/2012	387.50	1.17	32.0	386.9							
2/28/2012	381.10	0.79	32.3	386.6							
3/27/2012	387.70	1.61	32.2	386.7							
4/23/2012	392.30	1.51	31.4	387.5							
5/25/2012	388.30	0.06	27.4	391.5							
6/13/2012	385.10	0.06	28.9	390.0							
6/26/2012	386.90	0.00	28.7	390.2							
7/24/2012	378.00	0.10	29.4	389.5							
8/8/2012	382.90	0.10	30.7	388.2							
8/29/2012	382.70	0.00	28.4	390.5							
8/29/2012	382.70	0.00	28.4	390.5							
9/25/2012	381.90	0.00	26.6	392.3							
10/24/2012	384.40	0.08	30.3	388.6							
11/27/2012	389.60	0.86	29.0	389.9							
12/18/2012	394.70	1.96	29.0	389.9							
1/23/2013	393.00	1.53	25.8	393.1							
2/26/2013	391.50	0.49	26.9	392.0							
3/26/2013	394.40	1.00	27.7	391.2							
4/25/2013	391.00	0.01	26.9	392.0							
5/22/2013	392.00	0.00	26.1	392.8							
6/25/2013	380.60	0.00	27.2	391.7							
7/23/2013	380.20	0.00	27.6	391.3							
8/21/2013	379.60	0.00	28.3	390.6							
9/25/2013	382.20	0.00	27.9	391.0							
10/29/2013	382.00	0.00	29.9	389.0							
11/26/2013	390.10	0.44	30.0	388.9							
12/17/2013	394.70	1.10	29.4	389.5							
1/28/2014	392.30	0.00	25.6	393.3							
2/26/2014	389.90	0.72	26.3	392.6							
3/26/2014	387.20		26.8	392.1	Dry						
3/28/2014	387.20	1.78	26.8	392.1	Dry						
4/23/2014	393.00	0.34	27.0	391.9							
5/28/2014	387.50	0.00	25.8	393.1							
6/25/2014	388.70	0.00	26.2	392.7							
7/29/2014	382.80	0.00	26.5	392.4							
8/28/2014	386.80	0.04	27.6	391.3							
9/24/2014	387.90	0.00	27.3	391.6							
10/29/2014	383.90	0.00	28.3	390.6							

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2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			VBW/OW-3			P-101A (VW4)			P-101B (VW2)		
Top of Well Elevation -->			418.87			419.88			419.88		
Bottom of Well Elevation -->			386.27			261.88			287.68		
Depth of Well			32.6								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35	26.3	392.6							
12/22/2014	399.80	4.75	26.7	392.2							
1/28/2015	396.90	1.28	24.4	394.5							
2/24/2015	392.70	0.34	24.7	394.2							
3/31/2015	388.90	0.67	22.0	396.9							
4/23/2015	390.30	0.20	26.4	392.5							
5/28/2015	400.30	1.87	24.4	394.5							
6/24/2015	400.70	0.00	23.3	395.6							
7/30/2015	400.20	0.00	21.5	397.4							
8/25/2015	384.00	0.00	25.0	393.9							
9/23/2015	388.60	2.17	29.7	389.2							
10/29/2015	387.60	0.16	32.4	386.5	Dry						
11/25/2015	386.90	0.15	31.9	387.0							
12/23/2015	395.90	1.55	31.7	387.2	OW-1,2 and 3 are read by VB wire						
1/26/2016	401.20	2.86	24.1	394.7							
2/24/2016	393.60	0.39	23.9	395.0							
3/29/2016	397.10	1.55	24.7	394.2							
4/29/2016	391.60	0.04	24.7	394.2							
5/24/2016	401.60	0.13	25.2	393.7							
6/29/2016	392.50	0.00	24.0	394.9							
7/26/2016	377.70	0.00	29.0	389.9							
8/24/2016	388.10	0.00			Not Read, Construction						
9/29/2016	388.20	0.00			Not Read, Construction						
10/26/2016	392.10	0.96			Not Read, Construction						
11/22/2016	395.70	1.42			Not Read, Construction						
12/28/2016	400.70	4.11			Not Read, Construction						
1/26/2017	402.40	6.70			Not Read, Construction						
2/28/2017	389.60	4.01			Not Read, Construction						
3/29/2017	391.80	0.14			Not Read, Construction						
4/26/2017	387.00	0.04			Not Read, Construction						
5/23/2017	399.40	0.30			Not Read, Construction						
6/21/2017	392.60	0.00			Not Read, Construction						
7/26/2017	384.60	0.00			Not Read, Construction						
8/30/2017	383.00	0.00			Not Read, Construction						
9/27/2017	382.00	0.00			Not Read, Construction						
10/27/2017	375.00	0.00			Not Read, Construction						
11/30/2017	382.80	0.14			Not Read, Construction						
12/21/2017	380.50	0.00			Not Read, Construction						
1/24/2018	397.80	1.43			Not Read, Construction						
2/21/2018	382.40	0.17			Not Read, Construction						
3/29/2018	392.10	0.00			Not Read, Construction						
4/25/2018	388.00	0.05			Not Read, Construction						
5/30/2018	399.50	0.21			Not Read, Construction						
6/28/2018	398.90	0.00	28.5	390.4							
7/25/2018	388.60	0.00	28.5	390.4							
8/24/2018	378.60	0.00	28.5	390.4							
9/27/2018	381.40	0.00	28.5	390.4							
10/18/2018	385.20	1.45	28.5	390.4							
11/28/2018	389.10	1.32	28.5	390.4							
12/20/2018	394.20	2.12	28.5	390.4							
2/21/2019	396.00	8.26	21.30	397.6							

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TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			VBW/OW-3			P-101A (VW4)			P-101B (VW2)		
Top of Well Elevation -->			418.87			419.88			419.88		
Bottom of Well Elevation -->			386.27			261.88			287.68		
Depth of Well			32.6								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88	26.01	392.9							
4/25/2019	377.70	0.03	29.20	389.7							
5/30/2019	395.30	0.92	29.50	389.4							
6/26/2019	388.40	0.01	29.40	389.5							
7/5/2019	385.50	0.00	29.50	389.4							
7/30/2019	385.20	0.00	29.50	389.4							
8/27/2019	387.90	0.00	29.50	389.4							
9/26/2019	380.00	0.00	29.50	389.4							
10/23/2019	378.90	0.00	29.50	389.4							
11/26/2019	383.80	2.60	29.50	389.4							
12/18/2019	389.20	4.63	29.50	389.4							
1/29/2020	388.20	0.15	29.50	389.4							
2/25/2020	384.70	0.33	29.50	389.4							
3/24/2020	391.70	3.91	29.50	389.4							
4/23/2020	399.40	4.05	26.70	392.2							
5/27/2020	388.50	0.40	27.80	391.1							
6/24/2020	388.00	0.01	29.50	389.4							
7/29/2020	358.70	0.00	29.50	389.4							
8/26/2020	379.30	0.00	29.50	389.4							
9/29/2020	381.30	0.00	29.50	389.4							
10/28/2020	376.50	0.00	29.50	389.4							
11/24/2020	380.70	0.25	29.50	389.4							
12/23/2020	384.10	1.40	29.50	389.4							
1/26/2021	386.2	2.42	29.5	389.37							
2/25/2021	385.4	0.07	29.5	389.37							
3/23/2021	394.8	1.35	29.5	389.37							
4/27/2021	384.1	0.04	29.5	389.37							
5/27/2021	383.5	0.04	29.5	389.37							
6/30/2021	385.4	0	29.5	389.37							
7/29/2021	381.7	0.03	29.5	389.37							
8/24/2021	383.4	0	29.5	389.37							
9/28/2021	381.3	0.06	29.5	389.37							
10/27/2021	382.7	0.71	29.5	389.37							
11/23/2021	381	0	29.5	389.37							
12/21/2021	386.3	6.1	29.9	388.97							
1/25/2022	382	0.05	29.5	389.37	Temp 23.4						
2/22/2022	382.3	0.36	29.5	389.37	Temp 23.4						
3/29/2022	390.6	1.33	29.5	389.37	Temp 23.3						
4/27/2022	393.2	0.02	29.5	389.37	Temp 23.2						
5/24/2022	391.4	0.05	29.5	389.37	Temp 23.1						
6/28/2022	392.7	0	29.5	389.37	Temp 23.15						
7/26/2022	386.1	0	28.8	390.07	Temp 22.9						
8/25/2022	382.2	0.02	29.4	389.47	Temp 25.3						
9/29/2022	392.7	0.36	29.5	389.37	Temp 23.2						
10/25/2022	390	0.32	29.5	389.37	Temp 23.2						
11/17/2022	391.4	2.12	29.42	389.45	Temp 23.0						
12/22/2022	386.4	2.28	29.5	389.37	Temp 23.5						
1/26/2023	391.6	7.39	29.50	389.37	Temp 23.5						
2/23/2023	389.9	3.88	28.52	390.35	Temp 23.5						
3/28/2023	390.8	5.62	24.34	394.53	Temp 23.4						
4/25/2023	390.8	0.16	23.20	395.67	Temp 23.2						

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			VBW/OW-3			P-101A (VW4)			P-101B (VW2)		
Top of Well Elevation -->			418.87			419.88			419.88		
Bottom of Well Elevation -->			386.27			261.88			287.68		
Depth of Well			32.6								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95	26.31	392.56	Temp 23.0						
6/27/2023	388.80	0.14	26.68	392.19	Temp 22.8						
7/27/2023	384.40	0.00	29.43	389.44	Temp 22.8						
8/29/2023	382.80	2.22	29.50	389.37	Temp 22.7						
9/26/2023	377.90	0.00	29.50	389.37	Temp 22.7						
10/30/2023	385.30	0.26	29.50	389.37	Temp 22.8						
11/30/2023	382.90	0.70	29.50	389.37	Temp 22.9						
12/20/2023	388.50	1.10	29.50	389.37	Temp 23.0	66.85	353.03		67.37	352.51	
1/24/2024	391.90	2.23	29.50	389.37	Temp 23.0	63.23	356.65		63.74	356.14	
2/22/2024	388.60	7.64	27.27	391.60	Temp 23.0	64.38	355.50		64.90	354.98	
3/27/2024	390.90	2.54	27.06	391.81	Temp 23.0	63.58	356.30		64.16	355.72	
4/23/2024	391.60	1.62	25.95	392.92	Temp 22.8	63.90	355.98		64.50	355.38	
5/1/2024	389.10	0.00	#N/A		No reading taken	64.70	355.18		65.24	354.64	
5/23/2024	389.20	0.16	27.76	391.11	Temp 22.7	64.80	355.08		65.50	354.38	
5/30/2024	392.80	#N/A	#N/A		No reading taken	#N/A		No reading taken	#N/A		No reading taken
6/20/2024	392.90	0.00	26.70	392.17	Temp 22.6	69.20	350.68		63.60	356.28	
7/24/2024	386.40	0.00	29.50	389.37	Temp 23.1	66.40	353.48		67.06	352.82	
8/27/2024	384.10	0.00	29.50	389.37	Temp 22.5	63.42	356.46		64.07	355.81	
9/24/2024	380.50	0.03	29.50	389.37	Temp 22.6	N/A		No reading taken	N/A		No reading taken
10/29/2024	387.40	0.00	29.50	389.37	Temp 22.7	66.30	353.58		67.25	352.63	
11/21/2024	384.50	0.09	29.50	389.37	Temp 22.9	N/A		No reading taken	N/A		No reading taken
12/17/2024	386.30	0.01	29.50	389.37	Temp 23.0	N/A		No reading taken	N/A		No reading taken
1/28/2025	385.70	1.01	29.50	389.37	Temp 23.1	66.92	352.96		68.15	351.73	
2/26/2025	386.00	3.18	29.50	389.37	Temp 23.0	66.67	353.21		67.97	351.91	
3/20/2025	383.60	2.29	29.50	389.37	Temp 23.0	67.78	352.10		69.10	350.78	
4/14/2025	383.40	#N/A	29.50	389.37	Temp 22.9	67.95	351.93		69.30	350.58	
4/23/2025	385.20	0.35	29.50	389.37	Temp 22.8	66.83	353.05		68.17	351.71	
5/28/2025	384.50	0.08	29.50	389.37	Temp 22.8	67.45	352.43		68.80	351.08	
7/7/2025	386.00	0.20	29.50	389.37	Temp 22.6	67.21	352.67		68.58	351.30	
7/23/2025	387.30	0.00	29.50	389.37	Temp 22.6	66.83	353.05		68.19	351.69	
8/20/2025	378.90	0.00	29.50	389.37	Temp 22.6	69.95	349.93		71.34	348.54	
9/24/2025	387.00	0.13	29.50	389.37	Temp 22.7	66.38	353.50		67.78	352.10	
10/22/2025	386.40	1.20	29.50	389.37	Temp 22.8	67.41	352.47		68.82	351.06	
11/19/2025	387.30	5.70	29.50	389.37	Temp 23.0	66.98	352.90		68.41	351.47	
12/16/2025	381.60	2.28	29.50	389.37	Temp 23.1	69.83	350.05		71.29	348.59	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-102A (VB4)			P-102B (VB2)		
Top of Well Elevation -->			390.30			390.30		
Bottom of Well Elevation -->			327.30			353.40		
Depth of Well								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/31/2007	376.90							
2/28/2007	380.90							
3/29/2007	397.00							
4/27/2007	405.60							
5/24/2007	404.40							
6/28/2007	396.90							
7/31/2007	392.60							
8/29/2007	388.60							
9/2/2007	387.40							
9/26/2007	387.90							
10/25/2007	382.00							
11/27/2007	380.30							
12/27/2007	381.40							
1/31/2008	381.20							
2/28/2008	393.10							
3/27/2008	387.90							
4/28/2008	404.70							
5/28/2008	404.00							
6/25/2008	400.20							
7/29/2008	398.70							
7/30/2008	398.70	0.00						
8/29/2008	395.00	0.00						
9/25/2008	391.70	0.00						
10/28/2008	384.05	0.00						
11/26/2008	391.10	1.94						
12/31/2008	397.90	3.20						
1/29/2009	393.40	0.34						
2/25/2009	398.60	3.91						
3/31/2009	393.40	0.16						
4/28/2009	400.70	0.10						
5/18/2009	400.80	0.00						
5/27/2009	400.10	0.00						
6/29/2009	403.00	0.15						
7/28/2009	396.53	0.00						
8/25/2009	396.60	0.00						
9/30/2009	393.10	0.00						
10/28/2009	401.60	0.42						
11/30/2009	402.50	0.00						
12/29/2009	399.90	2.80						
1/26/2010	401.10	6.75						
2/23/2010	402.50	2.66						
3/30/2010	400.00	1.25						
4/4/2010	399.60							
4/27/2010	403.80	1.32						
5/26/2010	403.60	0.03						
6/29/2010	397.70	0.00						
7/27/2010	396.30	0.00						
8/26/2010	390.70	0.00						
9/28/2010	390.30	0.00						
10/26/2010	403.20	1.56						
11/30/2010	397.10	1.34						

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-102A (VB4)			P-102B (VB2)		
Top of Well Elevation -->			390.30			390.30		
Bottom of Well Elevation -->			327.30			353.40		
Depth of Well								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
12/28/2010	401.40	9.03						
1/27/2011	393.80	1.10						
2/23/2011	391.70	1.17						
3/29/2011	403.00	3.10						
4/27/2011	401.20	0.33						
5/26/2011	399.50	0.48						
6/28/2011	391.00	0.02						
7/26/2011	384.00	0.00						
8/24/2011	382.80	0.00						
9/27/2011	381.80	0.08						
10/26/2011	383.90	0.98						
11/22/2011	389.80	1.46						
12/28/2011	382.30	0.35						
1/25/2012	387.50	1.17						
2/28/2012	381.10	0.79						
3/27/2012	387.70	1.61						
4/23/2012	392.30	1.51						
5/25/2012	388.30	0.06						
6/13/2012	385.10	0.06						
6/26/2012	386.90	0.00						
7/24/2012	378.00	0.10						
8/8/2012	382.90	0.10						
8/29/2012	382.70	0.00						
8/29/2012	382.70	0.00						
9/25/2012	381.90	0.00						
10/24/2012	384.40	0.08						
11/27/2012	389.60	0.86						
12/18/2012	394.70	1.96						
1/23/2013	393.00	1.53						
2/26/2013	391.50	0.49						
3/26/2013	394.40	1.00						
4/25/2013	391.00	0.01						
5/22/2013	392.00	0.00						
6/25/2013	380.60	0.00						
7/23/2013	380.20	0.00						
8/21/2013	379.60	0.00						
9/25/2013	382.20	0.00						
10/29/2013	382.00	0.00						
11/26/2013	390.10	0.44						
12/17/2013	394.70	1.10						
1/28/2014	392.30	0.00						
2/26/2014	389.90	0.72						
3/26/2014	387.20							
3/28/2014	387.20	1.78						
4/23/2014	393.00	0.34						
5/28/2014	387.50	0.00						
6/25/2014	388.70	0.00						
7/29/2014	382.80	0.00						
8/28/2014	386.80	0.04						
9/24/2014	387.90	0.00						
10/29/2014	383.90	0.00						

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-102A (VB4)			P-102B (VB2)		
Top of Well Elevation -->			390.30			390.30		
Bottom of Well Elevation -->			327.30			353.40		
Depth of Well								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
11/21/2014	388.30	0.35						
12/22/2014	399.80	4.75						
1/28/2015	396.90	1.28						
2/24/2015	392.70	0.34						
3/31/2015	388.90	0.67						
4/23/2015	390.30	0.20						
5/28/2015	400.30	1.87						
6/24/2015	400.70	0.00						
7/30/2015	400.20	0.00						
8/25/2015	384.00	0.00						
9/23/2015	388.60	2.17						
10/29/2015	387.60	0.16						
11/25/2015	386.90	0.15						
12/23/2015	395.90	1.55						
1/26/2016	401.20	2.86						
2/24/2016	393.60	0.39						
3/29/2016	397.10	1.55						
4/29/2016	391.60	0.04						
5/24/2016	401.60	0.13						
6/29/2016	392.50	0.00						
7/26/2016	377.70	0.00						
8/24/2016	388.10	0.00						
9/29/2016	388.20	0.00						
10/26/2016	392.10	0.96						
11/22/2016	395.70	1.42						
12/28/2016	400.70	4.11						
1/26/2017	402.40	6.70						
2/28/2017	389.60	4.01						
3/29/2017	391.80	0.14						
4/26/2017	387.00	0.04						
5/23/2017	399.40	0.30						
6/21/2017	392.60	0.00						
7/26/2017	384.60	0.00						
8/30/2017	383.00	0.00						
9/27/2017	382.00	0.00						
10/27/2017	375.00	0.00						
11/30/2017	382.80	0.14						
12/21/2017	380.50	0.00						
1/24/2018	397.80	1.43						
2/21/2018	382.40	0.17						
3/29/2018	392.10	0.00						
4/25/2018	388.00	0.05						
5/30/2018	399.50	0.21						
6/28/2018	398.90	0.00						
7/25/2018	388.60	0.00						
8/24/2018	378.60	0.00						
9/27/2018	381.40	0.00						
10/18/2018	385.20	1.45						
11/28/2018	389.10	1.32						
12/20/2018	394.20	2.12						
2/21/2019	396.00	8.26						

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-102A (VB4)			P-102B (VB2)		
Top of Well Elevation -->			390.30			390.30		
Bottom of Well Elevation -->			327.30			353.40		
Depth of Well								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/27/2019	376.00	1.88						
4/25/2019	377.70	0.03						
5/30/2019	395.30	0.92						
6/26/2019	388.40	0.01						
7/5/2019	385.50	0.00						
7/30/2019	385.20	0.00						
8/27/2019	387.90	0.00						
9/26/2019	380.00	0.00						
10/23/2019	378.90	0.00						
11/26/2019	383.80	2.60						
12/18/2019	389.20	4.63						
1/29/2020	388.20	0.15						
2/25/2020	384.70	0.33						
3/24/2020	391.70	3.91						
4/23/2020	399.40	4.05						
5/27/2020	388.50	0.40						
6/24/2020	388.00	0.01						
7/29/2020	358.70	0.00						
8/26/2020	379.30	0.00						
9/29/2020	381.30	0.00						
10/28/2020	376.50	0.00						
11/24/2020	380.70	0.25						
12/23/2020	384.10	1.40						
1/26/2021	386.2	2.42						
2/25/2021	385.4	0.07						
3/23/2021	394.8	1.35						
4/27/2021	384.1	0.04						
5/27/2021	383.5	0.04						
6/30/2021	385.4	0						
7/29/2021	381.7	0.03						
8/24/2021	383.4	0						
9/28/2021	381.3	0.06						
10/27/2021	382.7	0.71						
11/23/2021	381	0						
12/21/2021	386.3	6.1						
1/25/2022	382	0.05						
2/22/2022	382.3	0.36						
3/29/2022	390.6	1.33						
4/27/2022	393.2	0.02						
5/24/2022	391.4	0.05						
6/28/2022	392.7	0						
7/26/2022	386.1	0						
8/25/2022	382.2	0.02						
9/29/2022	392.7	0.36						
10/25/2022	390	0.32						
11/17/2022	391.4	2.12						
12/22/2022	386.4	2.28						
1/26/2023	391.6	7.39						
2/23/2023	389.9	3.88						
3/28/2023	390.8	5.62						
4/25/2023	390.8	0.16						

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 6
RATTLESNAKE CANYON DAM
PIEZOMETER WATER LEVEL MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Monitoring Well -->			P-102A (VB4)			P-102B (VB2)		
Top of Well Elevation -->			390.30			390.30		
Bottom of Well Elevation -->			327.30			353.40		
Depth of Well								
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/23/2023	391.3	0.95						
6/27/2023	388.80	0.14						
7/27/2023	384.40	0.00						
8/29/2023	382.80	2.22						
9/26/2023	377.90	0.00						
10/30/2023	385.30	0.26						
11/30/2023	382.90	0.70						
12/20/2023	388.50	1.10	31.70	358.60		44.00	346.30	
1/24/2024	391.90	2.23	28.61	361.69		40.12	350.18	
2/22/2024	388.60	7.64	27.88	362.42		40.31	349.99	
3/27/2024	390.90	2.54	27.77	362.53		40.04	350.26	
4/23/2024	391.60	1.62	25.80	364.50		40.30	350.00	
5/1/2024	389.10	0.00	25.90	364.40		39.95	350.35	
5/23/2024	389.20	0.16	27.98	362.32		40.70	349.60	
5/30/2024	392.80	#N/A	#N/A		No reading taken	#N/A		No reading taken
6/20/2024	392.90	0.00	26.90	363.40		39.20	351.10	
7/24/2024	386.40	0.00	28.88	361.42		41.40	348.90	
8/27/2024	384.10	0.00	30.22	360.08		42.76	347.54	
9/24/2024	380.50	0.03	30.47	359.83		43.23	347.07	
10/29/2024	387.40	0.00	30.87	359.43		42.39	347.91	
11/21/2024	384.50	0.09	30.82	359.48		42.66	347.64	
12/17/2024	386.30	0.01	30.87	359.43		42.53	347.77	
1/28/2025	385.70	1.01	31.30	359.00		42.99	347.31	
2/26/2025	386.00	3.18	31.18	359.12		42.72	347.58	
3/20/2025	383.60	2.29	31.29	359.01		43.15	347.15	
4/14/2025	383.40	#N/A	31.61	358.69		43.48	346.82	
4/23/2025	385.20	0.35	31.50	358.80		42.96	347.34	
5/28/2025	384.50	0.08	31.41	358.89		43.20	347.10	
7/7/2025	386.00	0.20	31.68	358.62		43.45	346.85	
7/23/2025	387.30	0.00	31.25	359.05		42.87	347.43	
8/20/2025	378.90	0.00	32.29	358.01		44.77	345.53	
9/24/2025	387.00	0.13	31.99	358.31		43.06	347.24	
10/22/2025	386.40	1.20	31.41	358.89		43.11	347.19	
11/19/2025	387.30	5.70	31.95	358.35		43.15	347.15	
12/16/2025	381.60	2.28	32.52	357.78		44.61	345.69	

Note:
1. Readings in red are classified as erroneous due to the unlikelihood of occurrence when compared to reservoir levels. These values are omitted.
2. Piezometer data based on NGVD 29 datum.

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
1/31/2007	376.90						0.05		0.79	
2/28/2007	380.90						0.06		0.85	
3/29/2007	397.00						0.06		0.51	
4/27/2007	405.60						0.08		0.89	
5/24/2007	404.40						0.08		1.11	
6/28/2007	396.90		21.13				0.11		1.06	
7/31/2007	392.60		19.02				0.11		0.10	
8/29/2007	388.60		17.96				0.08		0.97	
9/2/2007	387.40		17.17				0.12		0.97	
9/26/2007	387.90		4.36				0.08		0.97	
10/25/2007	382.00		4.70				0.08		0.99	
11/27/2007	380.30		4.20				0.06		0.74	
12/27/2007	381.40		4.16				0.05		0.71	
1/31/2008	381.20		0.75				0.06		0.67	
2/28/2008	393.10		2.39				0.06		0.66	
3/27/2008	387.90		4.24				0.06		0.74	
4/28/2008	404.70		6.66		11.73		0.09		0.86	
5/28/2008	404.00		17.12		8.01		0.10		1.14	
6/25/2008	400.20		15.85		12.10		0.10		0.99	
7/29/2008	398.70			Not Read		Not Read		Not Read		Not Read
7/30/2008	398.70	0.00	19.02		8.45		0.14		1.30	
8/29/2008	395.00	0.00	3.49		13.08		0.09		1.13	
9/25/2008	391.70	0.00	0.61		4.06		0.00		0.30	
10/28/2008	384.05	0.00	2.00		5.00		0.09		1.00	
11/26/2008	391.10	1.94	6.45		1.59		0.07		0.98	
12/31/2008	397.90	3.20	4.68		14.13		0.10		1.01	
1/29/2009	393.40	0.34	2.59		9.03		0.08		1.08	
2/25/2009	398.60	3.91	4.50		11.42		0.30		0.94	
3/31/2009	393.40	0.16	3.17		7.93		0.11		1.20	
4/28/2009	400.70	0.10	7.19		10.09		0.09		0.05	
5/18/2009	400.80	0.00	8.24		11.10		0.10		1.11	
5/27/2009	400.10	0.00	7.50		11.31		0.10		0.32	
6/29/2009	403.00	0.15	10.65		12.47		0.10		1.20	
7/28/2009	396.53	0.00	7.93		13.20		0.09		1.10	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
8/25/2009	396.60	0.00	5.39		10.46		0.08		1.19	
9/30/2009	393.10	0.00	3.60		9.60		0.07		1.00	
10/28/2009	401.60	0.42	6.00		9.20		0.10		1.06	
11/30/2009	402.50	0.00	13.63		8.69		0.16		1.30	
12/29/2009	399.90	2.80	11.10		15.37		0.10		1.06	
1/26/2010	401.10	6.75	12.68		12.68		0.09		1.22	
2/23/2010	402.50	2.66	15.85		12.68		0.09		1.16	
3/30/2010	400.00	1.25	12.68		12.92		0.10		1.27	
4/4/2010	399.60		14.47		11.32		0.11		1.19	
4/27/2010	403.80	1.32	5.28		12.94		0.13		1.35	
5/26/2010	403.60	0.03	17.70		11.78		0.11		1.29	
6/29/2010	397.70	0.00	14.27		11.10		0.11		1.06	
7/27/2010	396.30	0.00	8.72		15.85		0.08		1.16	
8/26/2010	390.70	0.00	5.86		7.13		0.08		1.16	
9/28/2010	390.30	0.00	2.64		5.28		0.08		0.99	
10/26/2010	403.20	1.56	3.57		7.50		0.09		1.06	
11/30/2010	397.10	1.34	11.10		3.96		0.09		1.16	
12/28/2010	401.40	9.03	15.32		2.64		0.10		0.99	
1/27/2011	393.80	1.10	11.60		4.02		0.16		1.36	
2/23/2011	391.70	1.17	6.74		2.48		0.31		1.06	
3/29/2011	403.00	3.10	17.44		2.11		0.10		1.15	
4/27/2011	401.20	0.33	13.00		1.66		0.13		1.16	
5/26/2011	399.50	0.48	12.13		1.66		0.11		1.26	
6/28/2011	391.00	0.02	6.18		1.39		0.07		1.08	
7/26/2011	384.00	0.00	6.34		0.12		0.05		0.93	
8/24/2011	382.80	0.00	1.32		0.08		0.04		0.44	
9/27/2011	381.80	0.08	1.30		0.00		0.06		0.74	
10/26/2011	383.90	0.98	1.06		0.00		0.02		0.79	
11/22/2011	389.80	1.46	1.55		0.00		0.02		0.81	
12/28/2011	382.30	0.35	1.24		0.10		0.03		0.79	
1/25/2012	387.50	1.17	1.11		0.00		0.02		0.74	
2/28/2012	381.10	0.79	0.95		0.00		0.02		0.69	
3/27/2012	387.70	1.61	0.94		0.00		0.02		0.71	
4/23/2012	392.30	1.51	1.18		0.00		0.02		0.76	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
5/25/2012	388.30	0.06	1.84		0.74		0.03		0.89	
6/13/2012	385.10	0.06	0.74		0.74		0.03		0.85	
6/26/2012	386.90	0.00	1.45		1.56		0.01		0.86	
7/24/2012	378.00	0.10	0.97		0.16		0.02		0.65	
8/8/2012	382.90	0.10	0.88		0.01		0.03		0.66	
8/29/2012	382.70	0.00	0.96		0.00		0.02		0.73	
9/25/2012	381.90	0.00	0.91		0.00		0.02		0.94	
10/24/2012	384.40	0.08	0.82		0.00		0.02		0.64	
11/27/2012	389.60	0.86	0.73		1.29		0.07		0.71	
12/18/2012	394.70	1.96	1.27		1.74		0.03		0.82	
1/23/2013	393.00	1.53	1.27		1.77		0.05		1.03	
2/26/2013	391.50	0.49	2.77		4.91		0.04		0.98	
3/26/2013	394.40	1.00	2.25		3.41		0.08		0.87	
4/25/2013	391.00	0.01	2.50		3.53		0.06		0.95	
5/22/2013	392.00	0.00	2.38		4.07		0.06		0.86	
6/25/2013	380.60	0.00	1.33		1.90		0.07		0.86	
7/23/2013	380.20	0.00	1.17		0.45		0.05		0.51	
8/21/2013	379.60	0.00	0.77		0.06		0.34		0.77	
9/25/2013	382.20	0.00	0.91		0.00		0.03		0.73	
10/29/2013	382.00	0.00	0.83		0.00		0.03		0.35	
11/26/2013	390.10	0.44	0.85		0.00		0.03		0.69	
12/17/2013	394.70	1.10	1.24		1.00		0.04		0.85	
1/28/2014	392.30	0.00	2.36		3.41		0.05		0.90	
2/26/2014	389.90	0.72	2.27		2.69		0.04		0.92	
3/26/2014	387.20		1.98		2.93		0.04		0.94	
3/28/2014	387.20	1.78	1.98		2.93		0.04		0.74	
4/23/2014	393.00	0.34	1.66		2.67		0.23		0.87	
5/28/2014	387.50	0.00	1.98		2.73		0.02		0.90	
6/25/2014	388.70	0.00	1.29		2.69		0.01		0.92	
7/29/2014	382.80	0.00	1.20		0.85		0.03		0.89	
8/28/2014	386.80	0.04	1.12		0.62		0.04		0.82	
9/24/2014	387.90	0.00	1.22		1.27		0.02		0.85	
10/29/2014	383.90	0.00	0.79		0.32		0.04		0.78	
11/21/2014	388.30	0.35	1.19		1.19		0.02		0.82	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
12/22/2014	399.80	4.75	1.48		1.31		0.04		0.81	
1/28/2015	396.90	1.28	2.71		5.31		0.05		1.06	
2/24/2015	392.70	0.34	3.33		4.36		0.06		1.10	
3/31/2015	388.90	0.67	2.79		5.55		0.04		1.10	
4/23/2015	390.30	0.20	2.54		3.80		0.03		1.11	
5/28/2015	400.30	1.87	3.28		4.62		0.04		1.09	
6/24/2015	400.70	0.00	3.09		4.31		0.16		1.06	
7/30/2015	400.20	0.00	3.78		4.95		0.09		1.19	
8/25/2015	384.00	0.00	3.50		7.77		0.02		0.90	
9/23/2015	388.60	2.17	1.95		3.67		0.04		1.00	
10/29/2015	387.60	0.16	1.60		2.22		0.04		0.95	
11/25/2015	386.90	0.15	1.43		1.78		0.03		0.97	
12/23/2015	395.90	1.55	1.80		2.54		0.08		0.95	
1/26/2016	401.20	2.86	3.87		9.27		0.04		1.06	
2/24/2016	393.60	0.39	3.01		6.58		0.05		1.16	
3/29/2016	397.10	1.55	3.60		6.34		0.05		1.15	
4/29/2016	391.60	0.04	3.17		5.26		0.06		1.08	
5/24/2016	401.60	0.13	4.04		5.47		0.10		1.22	
6/29/2016	392.50	0.00	3.61		5.61		0.07		1.13	
7/26/2016	377.70	0.00	1.69		1.51		0.06		1.10	
8/24/2016	388.10	0.00	0.72		0.00		0.06		1.22	
9/29/2016	388.20	0.00	0.58		0.00		0.03		0.89	
10/26/2016	392.10	0.96	1.53		0.00		0.05		1.03	
11/22/2016	395.70	1.42	2.12		0.00		0.17		0.97	
12/28/2016	400.70	4.11	6.18		0.32		0.06		1.66	
1/26/2017	402.40	6.70	5.23		7.29		0.08		1.24	
2/28/2017	389.60	4.01	2.38		3.01		0.10		1.16	
3/29/2017	391.80	0.14	4.28		3.17		0.04		0.95	
4/26/2017	387.00	0.04	1.74		3.72		0.04		0.98	
5/23/2017	399.40	0.30	2.36		4.47		0.06		0.98	
6/21/2017	392.60	0.00	2.85		5.39		0.04		1.18	
7/26/2017	384.60	0.00	1.64		2.85		0.08		1.00	
8/30/2017	383.00	0.00	1.05		0.63		0.06		0.94	
9/27/2017	382.00	0.00	0.84		0.00		0.04		0.65	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
10/27/2017	375.00	0.00	0.73		0.00		0.05		0.78	
11/30/2017	382.80	0.14	0.69		0.00		0.05		0.79	
12/21/2017	380.50	0.00	0.69		0.00		0.02		0.77	
1/24/2018	397.80	1.43	0.84		0.00		0.06		0.71	
2/21/2018	382.40	0.17	1.53		0.00		0.09		0.92	
3/29/2018	392.10	0.00	1.59		0.50		0.03		0.83	
4/25/2018	388.00	0.05	0.97		0.00		0.07		0.86	
5/30/2018	399.50	0.21	1.02		1.52		0.04		0.89	
6/28/2018	398.90	0.00	1.74		3.49		0.12		1.19	
7/25/2018	388.60	0.00	0.82		3.82		0.06		1.16	
8/24/2018	378.60	0.00	0.17		0.21		0.07		0.79	
9/27/2018	381.40	0.00	0.05		0.00		0.06		0.85	
10/18/2018	385.20	1.45	0.05		0.00		0.03		0.87	
11/28/2018	389.10	1.32	0.04		0.00		0.03		0.71	
12/20/2018	394.20	2.12	0.07		0.00		0.05		0.68	
1/30/2019	394.90	4.31	0.04		4.83		0.06		0.82	
2/21/2019	396.00	8.26	2.22		6.34		0.08		1.90	
3/27/2019	376.00	1.88	1.00		4.12		0.11		0.95	
4/25/2019	377.70	0.03	0.74		1.06		0.07		0.85	
5/30/2019	395.30	0.92	0.10		2.46		0.07		0.82	
6/26/2019	388.40	0.01	0.06		3.06		0.04		1.00	
7/5/2019	385.50	0.00	0.10		2.80		0.04		1.00	
7/30/2019	385.20	0.00	0.03		0.32		0.02		0.74	
8/27/2019	387.90	0.00	0.08		0.92		0.04		0.87	
9/26/2019	380.00	0.00	0.06		0.00		0.03		0.88	
10/23/2019	378.90	0.00	0.04		0.00		0.03		0.89	
11/26/2019	383.80	2.60	0.04		0.00		0.03		0.77	
12/18/2019	389.20	4.63	0.04		0.00		0.03		0.59	
1/29/2020	388.20	0.15	1.90		1.66		0.00		0.42	
2/25/2020	384.70	0.33	1.43		1.22		0.00		1.19	
3/24/2020	391.70	3.91	1.90		2.85		0.04		0.85	
4/23/2020	399.40	4.05	2.27		3.59		0.09		1.32	
5/27/2020	388.50	0.40	1.90		4.18		0.00		1.27	
6/24/2020	388.00	0.01	1.90		2.85		0.00		0.79	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
7/29/2020	358.70	0.00	1.77		1.98		0.00		1.16	
8/26/2020	379.30	0.00	1.90		0.30		0.00		1.27	
9/29/2020	381.30	0.00	0.99		0.11		0.02		0.95	
10/28/2020	376.50	0.00	1.15		0.00		0.00		0.87	
11/24/2020	380.70	0.25	0.90		0.00		0.01		0.90	
12/23/2020	384.10	1.40	0.93		0.00		0.00		0.68	
1/26/2021	386.20	2.42	1.03		0.24		0.00		0.76	
2/25/2021	385.40	0.07	0.99		0.32		0.00		0.78	
3/23/2021	394.80	1.35	1.30		1.90		0.00		1.01	
4/27/2021	384.10	0.04	1.14		0.76		0.00		0.68	
5/27/2021	383.50	0.04	1.15		0.52		0.00		0.77	
6/30/2021	385.40	0.00	1.35		0.34		0.00		1.08	
7/29/2021	381.70	0.03	1.32		0.00		0.00		1.05	
8/24/2021	383.40	0.00	1.11		0.00		0.00		0.85	
9/28/2021	381.30	0.06	1.03		0.05		0.00		0.82	
10/27/2021	382.70	0.71	1.43		0.00		0.00		0.63	
11/23/2021	381.00	0.00	1.19		0.00		0.00		0.95	
12/21/2021	386.30	6.10	1.12		0.00		0.00		0.97	
1/25/2022	382.00	0.05	1.03		0.00		0.00		0.82	
2/22/2022	382.30	0.36	0.71		0.00		0.00		0.79	
3/29/2022	390.60	1.33	0.91		0.00		0.01		0.81	
4/27/2022	393.20	0.02	1.16		0.64		0.00		0.54	
5/24/2022	391.40	0.05	1.61		1.98		0.00		0.85	
6/28/2022	392.70	0.00	1.49		1.55		0.02		0.91	
7/26/2022	386.10	0.00	1.72		0.87		0.00		1.00	
8/25/2022	382.20	0.02	1.11		0.22		0.00		1.08	
9/29/2022	392.70	0.36	1.47		1.55		0.02		0.91	
10/25/2022	390.00	0.32	1.03		0.00		0.01		0.87	
11/17/2022	391.40	2.12	1.03		1.19		0.00		0.95	
12/22/2022	386.40	2.28	2.22		0.00		0.00		0.95	
1/26/2023	391.60	7.39	1.51		3.01		0.00		1.03	
2/23/2023	389.90	3.88	1.52		2.41		0.00		0.94	
3/28/2023	390.80	5.62	2.45		3.91		0.00		0.86	
4/25/2023	390.80	0.16	1.66		3.57		0.03		1.00	
5/23/2023	391.30	0.95	2.11		2.91		0.06		1.08	
6/27/2023	388.80	0.14	1.77		3.12		0.00		0.81	
7/27/2023	384.40	0.00	1.48		1.37		0.00		0.95	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-1 South		FP-1 North		FP-2		FP-3	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
8/29/2023	382.80	2.22	0.72		0.52		0.01		1.03	
9/26/2023	377.90	0.00	0.92		0.00		0.00		0.95	
10/30/2023	385.30	0.26	0.52		0.02		0.00		0.85	
11/30/2023	382.90	0.70	0.63		0.00		0.00		0.82	
12/20/2023	388.50	1.10	0.67		0.00		0.00		0.92	
1/24/2024	391.90	2.23	0.74		2.11		0.00		0.87	
2/22/2024	388.60	7.64	1.14		3.57		0.00		1.03	
3/27/2024	390.90	2.54	1.08		2.38		0.00		0.79	
4/23/2024	391.60	1.62	0.92		1.76		0.00		1.08	
5/1/2024	389.10	0	0.62		1.40		0.00		0.87	
5/23/2024	389.20	0.16	0.77		2.19		0.00		0.43	
5/30/2024	392.80	#N/A	#N/A	Not Read	#N/A	Not Read	0.00		1.20	
6/20/2024	392.90	0	1.59		3.01		0.00		1.06	
7/24/2024	386.40	0	1.53		1.02		0.00		1.05	
8/27/2024	384.10	0	1.37		0.13		0.00		1.06	
9/24/2024	380.50	0.03	1.00		0.09		0.00		0.74	
10/29/2024	387.40	0	0.02		0.00		0.00		0.92	
11/21/2024	384.50	0.09	0.99		0.00		0.00		0.55	
12/17/2024	386.30	0.01	1.07		0.00		0.00		0.90	
1/28/2025	385.70	1.01	0.53		2.59		0.00		0.74	
2/26/2025	386.00	3.18	0.00		1.16		0.00		0.85	
3/20/2025	383.60	2.29	1.85		0.00		0.00		1.37	
4/14/2025	383.40	#N/A	0.84		0.00		0.00		0.92	
4/23/2025	385.20	0.35	1.13		0.00		0.00		0.89	
5/28/2025	384.50	0.08	1.03		0.00		0.00		0.80	
7/7/2025	386.00	0.2	1.00		0.00		0.00		0.85	
7/23/2025	387.30	0	0.88		0.00		0.00		0.89	
8/20/2025	378.90	0	0.97		0.00		0.00		0.95	
9/24/2025	387.00	0.13	1.14		0.00		0.00		0.87	
10/22/2025	386.40	1.2	1.24		0.00		0.00		0.92	
11/19/2025	387.30	5.7	1.06		0.00		0.00		0.82	
12/16/2025	381.60	2.28	0.92		0.00		0.00		0.89	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
1/31/2007	376.90		0.48		0.00	0.00	dry	0.00	dry	0.00	dry
2/28/2007	380.90		0.42		0.00	0.00	dry	0.00	dry	0.00	dry
3/29/2007	397.00		0.69		0.00	0.00	dry	0.00	dry	0.00	dry
4/27/2007	405.60		0.48		0.25	0.95		0.00	dry	0.00	dry
5/24/2007	404.40		0.62		1.35	5.10		0.26		0.00	dry
6/28/2007	396.90		0.66		0.74	2.80		0.00	dry	0.00	dry
7/31/2007	392.60		0.61		0.25	0.96		0.00	dry	0.00	dry
8/29/2007	388.60		0.55		0.00	0.00	dry	0.00	dry	0.00	dry
9/2/2007	387.40		0.53		0.00	0.00	dry	0.00	dry	0.00	dry
9/26/2007	387.90		0.50		0.00	0.00	dry	0.00	dry	0.00	dry
10/25/2007	382.00		0.53		0.00	0.00	dry	0.00	dry	0.00	dry
11/27/2007	380.30		0.45		0.00	0.00	dry	0.00	dry	0.00	dry
12/27/2007	381.40		0.37		0.00	0.00	dry	0.00	dry	0.00	dry
1/31/2008	381.20		0.35		0.00	0.00	dry	0.00	dry	0.00	dry
2/28/2008	393.10		0.33		0.00	0.00	dry	0.00	dry	0.00	dry
3/27/2008	387.90		0.38		0.00	0.00	dry	0.00	dry	0.00	dry
4/28/2008	404.70		0.48		0.95	3.60		0.00	dry	0.00	dry
5/28/2008	404.00		0.63		1.35	5.10		0.13		0.00	dry
6/25/2008	400.20		0.66		1.06	4.00		0.00	dry	0.00	dry
7/29/2008	398.70			Not Read			Not Read				
7/30/2008	398.70	0.00	0.98		1.09	4.14		0.00	dry	0.00	dry
8/29/2008	395.00	0.00	0.63		0.61	2.30		0.00	dry	0.00	dry
9/25/2008	391.70	0.00	0.19		0.10	0.38		0.00	dry	0.00	dry
10/28/2008	384.05	0.00	0.53		0.00	0.00		0.00	dry	0.00	dry
11/26/2008	391.10	1.94	0.51		0.00	0.00		0.00	dry	0.00	dry
12/31/2008	397.90	3.20	0.59		0.26	0.98		0.00	dry	0.00	dry
1/29/2009	393.40	0.34	0.63		0.29	1.10		0.00	dry	0.00	dry
2/25/2009	398.60	3.91	0.59		0.46	1.73		0.00	dry	0.00	dry
3/31/2009	393.40	0.16	0.67		0.37	1.40		0.00	dry	0.00	dry
4/28/2009	400.70	0.10	0.32		0.36	1.35		0.00	dry	0.00	dry
5/18/2009	400.80	0.00	0.69		0.95	3.60		0.00	dry	0.00	dry
5/27/2009	400.10	0.00	0.73		0.97	3.66		0.00	dry	0.00	dry
6/29/2009	403.00	0.15	0.80		1.59	6.00		0.00	dry	0.00	dry
7/28/2009	396.53	0.00	0.79		1.05	3.99		0.00	dry	0.00	dry

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
8/25/2009	396.60	0.00	0.69		0.62	2.36		0.00	dry	0.00	dry
9/30/2009	393.10	0.00	0.75		0.25	0.95		0.00	dry	0.00	dry
10/28/2009	401.60	0.42	0.71		0.85	3.21		0.00	dry	0.00	dry
11/30/2009	402.50	0.00	0.87		1.45	5.50		0.00	dry	0.00	dry
12/29/2009	399.90	2.80	0.85		1.19	4.50		0.00	dry	0.00	dry
1/26/2010	401.10	6.75	0.84		1.33	5.04		0.00	dry	0.00	dry
2/23/2010	402.50	2.66	0.85		1.59	6.00		0.00	dry	0.00	dry
3/30/2010	400.00	1.25	0.88		1.32	5.00		0.00	dry	0.00	dry
4/4/2010	399.60		0.79		1.29	4.90		0.00	dry	0.00	dry
4/27/2010	403.80	1.32	0.92		1.72	6.50		0.00	dry	0.00	dry
5/26/2010	403.60	0.03	0.90		1.80	6.80		0.00	dry	0.00	dry
6/29/2010	397.70	0.00	0.90		1.37	5.20		0.00	dry	0.00	dry
7/27/2010	396.30	0.00	0.79		0.79	3.00		0.00	dry	0.00	dry
8/26/2010	390.70	0.00	0.74		0.42	1.60		0.00	dry	0.00	dry
9/28/2010	390.30	0.00	0.66		0.06	0.21		0.00	dry	0.00	dry
10/26/2010	403.20	1.56	0.71		0.79	3.00		0.00	dry	0.00	dry
11/30/2010	397.10	1.34	0.79		0.92	3.50		0.00	dry	0.00	dry
12/28/2010	401.40	9.03	0.79		1.71	6.48		0.00	dry	0.00	dry
1/27/2011	393.80	1.10	0.83		1.00	3.80		0.00	dry	0.00	dry
2/23/2011	391.70	1.17	0.74		0.36	1.36		0.00	dry	0.00	dry
3/29/2011	403.00	3.10	0.79		1.32	5.00		0.00	dry	0.00	dry
4/27/2011	401.20	0.33	0.79		1.14	4.30		0.00	dry	0.00	dry
5/26/2011	399.50	0.48	0.86		1.06	4.00		0.00	dry	0.00	dry
6/28/2011	391.00	0.02	0.76		0.30	1.12		0.00	dry	0.00	dry
7/26/2011	384.00	0.00	0.97		0.00	0.00	dry	0.00	dry	0.00	dry
8/24/2011	382.80	0.00	0.27		0.00	0.00	dry	0.00	dry	0.00	dry
9/27/2011	381.80	0.08	0.46		0.00	0.00	dry	0.00	dry	0.00	dry
10/26/2011	383.90	0.98	0.52		0.00	0.00	dry	0.00	dry	0.00	dry
11/22/2011	389.80	1.46	0.50		0.00	0.00	dry	0.00	dry	0.00	dry
12/28/2011	382.30	0.35	0.45		0.00	0.00	dry	0.00	dry	0.00	dry
1/25/2012	387.50	1.17	0.45		0.00	0.00	dry	0.00	dry	0.00	dry
2/28/2012	381.10	0.79	0.37		0.00	0.00	dry	0.00	dry	0.00	dry
3/27/2012	387.70	1.61	0.37		0.00	0.00	dry	0.00	dry	0.00	dry
4/23/2012	392.30	1.51	0.39		0.00	0.00	dry	0.00	dry	0.00	dry

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
5/25/2012	388.30	0.06	0.46		0.00	0.00	dry	0.00	dry	0.00	dry
6/13/2012	385.10	0.06	0.48		0.00	0.00	dry	0.00	dry	0.00	dry
6/26/2012	386.90	0.00	0.61		0.00	0.00	dry	0.00	dry	0.00	dry
7/24/2012	378.00	0.10	0.40		0.00	0.00	dry	0.00	dry	0.00	dry
8/8/2012	382.90	0.10	0.34		0.00	0.00	dry	0.00	dry	0.00	dry
8/29/2012	382.70	0.00	0.40		0.00	0.00	dry	0.00	dry	0.00	dry
9/25/2012	381.90	0.00	0.35		0.00	0.00	dry	0.00	dry	0.00	dry
10/24/2012	384.40	0.08	0.32		0.00	0.00	dry	0.00	dry	0.00	dry
11/27/2012	389.60	0.86	0.38		0.00	0.00	dry	0.00	dry	0.00	dry
12/18/2012	394.70	1.96	0.40		0.00	0.00	dry	0.00	dry	0.00	dry
1/23/2013	393.00	1.53	0.55		0.02	0.08		0.00	dry	0.00	dry
2/26/2013	391.50	0.49	0.55		0.00	0.00		0.00	dry	0.00	dry
3/26/2013	394.40	1.00	0.49		0.00	0.01		0.00	dry	0.00	dry
4/25/2013	391.00	0.01	0.50		0.00	0.00	dry	0.00	dry	0.00	dry
5/22/2013	392.00	0.00	0.55		0.00	0.00	dry	0.00	dry	0.00	dry
6/25/2013	380.60	0.00	0.46		0.00	0.00	dry	0.00	dry	0.00	dry
7/23/2013	380.20	0.00	0.43		0.00	0.00	dry	0.00	dry	0.00	dry
8/21/2013	379.60	0.00	0.45		0.00	0.00	dry	0.00	dry	0.00	dry
9/25/2013	382.20	0.00	0.37		0.00	0.00	dry	0.00	dry	0.00	dry
10/29/2013	382.00	0.00	0.33		0.00	0.00	dry	0.00	dry	0.00	dry
11/26/2013	390.10	0.44	0.33		0.00	0.00	dry	0.00	dry	0.00	dry
12/17/2013	394.70	1.10	0.41		0.00	0.00	dry	0.00	dry	0.00	dry
1/28/2014	392.30	0.00	0.48		0.00	0.00	dry	0.00	dry	0.00	dry
2/26/2014	389.90	0.72	0.48		0.00	0.00	dry	0.00	dry	0.00	dry
3/26/2014	387.20		0.48		0.00	0.00	dry	0.00	dry	0.00	dry
3/28/2014	387.20	1.78	0.42		0.00	0.00	dry	0.00	dry	0.00	dry
4/23/2014	393.00	0.34	0.45		0.00	0.00	dry	0.00	dry	0.00	dry
5/28/2014	387.50	0.00	0.49		0.00	0.00	dry	0.00	dry	0.00	dry
6/25/2014	388.70	0.00	0.48		0.00	0.00	dry	0.00	dry	0.00	dry
7/29/2014	382.80	0.00	0.45		0.00	0.00	dry	0.00	dry	0.00	dry
8/28/2014	386.80	0.04	0.40		0.00	0.00	dry	0.00	dry	0.00	dry
9/24/2014	387.90	0.00	0.41		0.00	0.00	dry	0.00	dry	0.00	dry
10/29/2014	383.90	0.00	0.36		0.00	0.00	dry	0.00	dry	0.00	dry
11/21/2014	388.30	0.35	0.43		0.00	0.00	dry	0.00	dry	0.00	dry

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
12/22/2014	399.80	4.75	0.41		0.00	0.00	dry	0.00	dry	0.00	dry
1/28/2015	396.90	1.28	0.55		0.30	1.14		0.00	dry	0.00	dry
2/24/2015	392.70	0.34	0.50		0.10	0.36		0.00	dry	0.00	dry
3/31/2015	388.90	0.67	0.58		0.04	0.14		0.00	dry	0.00	dry
4/23/2015	390.30	0.20	0.61		0.00	0.00	dry	0.00	dry	0.00	dry
5/28/2015	400.30	1.87	0.60		0.55	2.10		0.00	dry	0.00	dry
6/24/2015	400.70	0.00	0.69		0.63	2.40		0.00	dry	0.00	dry
7/30/2015	400.20	0.00	0.69		0.87	3.30		0.00	dry	0.00	dry
8/25/2015	384.00	0.00	0.71		0.01	0.02		0.00	dry	0.00	dry
9/23/2015	388.60	2.17	0.55		0.00	0.00		0.00	dry	0.00	dry
10/29/2015	387.60	0.16	0.58		0.00	0.00		0.00	dry	0.00	dry
11/25/2015	386.90	0.15	0.52		0.00	0.00		0.00		0.00	dry
12/23/2015	395.90	1.55	0.50		0.04	0.16		0.01		0.00	dry
1/26/2016	401.20	2.86	0.62		0.63	2.38		0.00	dry	0.00	dry
2/24/2016	393.60	0.39	0.62		0.24	0.90		0.00	dry	0.00	dry
3/29/2016	397.10	1.55	0.71		0.36	1.38		0.08		0.00	dry
4/29/2016	391.60	0.04	0.81		0.16	0.60		0.00		0.00	dry
5/24/2016	401.60	0.13	0.55		0.46	1.74		0.00		0.00	dry
6/29/2016	392.50	0.00	0.69		0.25	0.96		0.00		0.00	dry
7/26/2016	377.70	0.00	0.64		0.00	0.00		0.00		0.00	dry
8/24/2016	388.10	0.00	0.59		0.00	0.00		0.00		0.00	dry
9/29/2016	388.20	0.00	0.55		0.00	0.00		0.00		0.00	dry
10/26/2016	392.10	0.96	0.53		0.00	0.00		0.00		0.00	dry
11/22/2016	395.70	1.42	0.78		0.09	0.33		0.00		0.00	dry
12/28/2016	400.70	4.11	0.63		0.55	2.10		0.00		0.00	dry
1/26/2017	402.40	6.70	0.56		1.25	4.74		0.00		0.00	dry
2/28/2017	389.60	4.01	0.66		0.13	0.48		0.00		0.00	dry
3/29/2017	391.80	0.14	0.55		0.00	0.00		0.00		0.00	dry
4/26/2017	387.00	0.04	0.53		0.00	0.00		0.00		0.00	dry
5/23/2017	399.40	0.30	0.59		0.60	2.26		0.00		0.00	dry
6/21/2017	392.60	0.00	0.62		0.12	0.46		0.00		0.00	dry
7/26/2017	384.60	0.00	0.58		0.00	0.00		0.00		0.00	dry
8/30/2017	383.00	0.00	0.48		0.00	0.00		0.00		0.00	dry
9/27/2017	382.00	0.00	0.44		0.00	0.00		0.00		0.00	dry

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
10/27/2017	375.00	0.00	0.40		0.00	0.00		0.00		0.00	dry
11/30/2017	382.80	0.14	0.37		0.01	0.04		0.00		0.00	dry
12/21/2017	380.50	0.00	0.36		0.00	0.00		0.00		0.00	dry
1/24/2018	397.80	1.43	0.34		0.00	0.00		0.00		0.00	dry
2/21/2018	382.40	0.17	0.51		0.00	0.00		0.00		0.00	dry
3/29/2018	392.10	0.00	0.42		0.00	0.00		0.00		0.00	dry
4/25/2018	388.00	0.05	0.44		0.00	0.00		0.00		0.00	dry
5/30/2018	399.50	0.21	0.48		0.00	0.00		0.00		0.00	dry
6/28/2018	398.90	0.00	0.48		0.40	1.50		0.00		0.00	dry
7/25/2018	388.60	0.00	0.60		0.00	0.00		0.00		0.00	dry
8/24/2018	378.60	0.00	0.44		0.00	0.00		0.00		0.00	dry
9/27/2018	381.40	0.00	0.48		0.00	0.00		0.00		0.00	dry
10/18/2018	385.20	1.45	0.37		0.00	0.00		0.00		0.00	dry
11/28/2018	389.10	1.32	0.37		0.00	0.00		0.00		0.00	dry
12/20/2018	394.20	2.12	0.35		0.00	0.00		0.00		0.00	dry
1/30/2019	394.90	4.31	0.45		0.00	0.00		0.00		0.00	dry
2/21/2019	396.00	8.26	0.87		0.26	1.00		0.00		0.00	dry
3/27/2019	376.00	1.88	0.55		0.00	0.00		0.00		0.00	dry
4/25/2019	377.70	0.03	0.45		0.00	0.00		0.00		0.00	dry
5/30/2019	395.30	0.92	0.54		0.00	0.00		0.00		0.00	dry
6/26/2019	388.40	0.01	0.57		0.00	0.00		0.00		0.00	dry
7/5/2019	385.50	0.00	0.48		0.00	0.00		0.00		0.00	dry
7/30/2019	385.20	0.00	0.55		0.00	0.00		0.00		0.00	dry
8/27/2019	387.90	0.00	0.47		0.00	0.00		0.00		0.00	dry
9/26/2019	380.00	0.00	0.36		0.00	0.00		0.00		0.00	dry
10/23/2019	378.90	0.00	0.39		0.00	0.00		0.00		0.00	dry
11/26/2019	383.80	2.60	0.34		0.00	0.00		0.00		0.00	dry
12/18/2019	389.20	4.63	0.33		0.00	0.00		0.00		0.00	dry
1/29/2020	388.20	0.15	1.27		0.00	0.00		0.00		0.00	dry
2/25/2020	384.70	0.33	0.55		0.00	0.00		0.00		0.00	
3/24/2020	391.70	3.91	0.42		0.00	0.00		0.00		0.00	
4/23/2020	399.40	4.05	0.58		0.17	0.66		0.00		0.00	
5/27/2020	388.50	0.40	0.63		0.00	0.00 L/min		0.00		0.00	
6/24/2020	388.00	0.01	0.61		0.00	0.00 L/min		0.00		0.00	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
7/29/2020	358.70	0.00	0.67		0.00	0.00 L/min		0.00		0.00	
8/26/2020	379.30	0.00	0.75		0.00	0.00 L/min		0.00		0.00	
9/29/2020	381.30	0.00	0.43		0.00	0.00 L/min		0.00		0.00	
10/28/2020	376.50	0.00	0.40		0.00	0.00 L/min		0.00		0.00	
11/24/2020	380.70	0.25	0.40		0.00	0.00 L/min		0.00		0.00	
12/23/2020	384.10	1.40	0.28		0.00	0.00		0.00		0.00	
1/26/2021	386.20	2.42	0.35		0.00	0.00		0.00		0.00	
2/25/2021	385.40	0.07	0.39		0.00	0.00		0.00		0.00	
3/23/2021	394.80	1.35	0.48		0.00	0.00		0.00		0.00	
4/27/2021	384.10	0.04	0.35		0.00	0.00		0.00		0.00	
5/27/2021	383.50	0.04	0.40		0.00	0.00		0.00		0.00	
6/30/2021	385.40	0.00	0.24		0.00	0.00		0.00		0.00	
7/29/2021	381.70	0.03	0.23		0.00	0.00		0.00		0.00	
8/24/2021	383.40	0.00	0.40		0.00	0.00		0.00		0.00	
9/28/2021	381.30	0.06	0.38		0.00	0.00		0.00		0.00	
10/27/2021	382.70	0.71	0.51		0.00	0.00		0.00		0.00	
11/23/2021	381.00	0.00	0.44		0.00	0.00		0.00		0.00	
12/21/2021	386.30	6.10	0.40		0.00	0.00		0.00		0.00	
1/25/2022	382.00	0.05	0.34		0.00	0		0.00		0.00	
2/22/2022	382.30	0.36	0.32		0.00	0		0.00		0.00	
3/29/2022	390.60	1.33	0.31		0.00	0		0.00		0.00	
4/27/2022	393.20	0.02	0.30		0.00	0		0.00		0.00	
5/24/2022	391.40	0.05	0.43		0.00	0		0.00		0.00	
6/28/2022	392.70	0.00	0.51		0.00	0		0.00		0.00	
7/26/2022	386.10	0.00	0.48		0.00	0		0.00		0.00	
8/25/2022	382.20	0.02	0.51		0.00	0.00		0.00		0.00	
9/29/2022	392.70	0.36	0.51		0.00	0.00		0.00		0.00	
10/25/2022	390.00	0.32	0.40		0.00	0.00		0.00		0.00	
11/17/2022	391.40	2.12	0.41		0.00	0.00		0.00		0.00	
12/22/2022	386.40	2.28	0.40		0.00	0.00		0.00		0.00	
1/26/2023	391.60	7.39	0.44		0.00	0.00		0.00		0.00	
2/23/2023	389.90	3.88	0.51		0.00	0.00		0.00		0.00	
3/28/2023	390.80	5.62	0.44		0.00	0.00		0.00		0.00	
4/25/2023	390.80	0.16	0.48		0.00	0.00		0.00		0.00	
5/23/2023	391.30	0.95	0.55		0.00	0.00		0.00		0.00	
6/27/2023	388.80	0.14	0.58		0.00	0.00		0.00		0.00	
7/27/2023	384.40	0.00	0.50		0.00	0.00		0.00		0.00	

TABLE 7
RATTLESNAKE CANYON DAM
SEEPAGE FLOW RATE MEASUREMENTS
JANUARY 2007 THROUGH DECEMBER 2025

Flow Point ID -->			FP-4		FP-5			FP-8		FP-11	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (gpm)	Comment	Reading (gpm)	0.2641721	Comment	Reading (gpm)	Comment	Reading (gpm)	Comment
8/29/2023	382.80	2.22	0.44		0.00	0.00		0.00		0.00	
9/26/2023	377.90	0.00	0.35		0.00	0.00		0.00		0.00	
10/30/2023	385.30	0.26	0.50		0.00	0.00		0.00		0.00	
11/30/2023	382.90	0.70	0.37		0.00	0.00		0.00		0.00	
12/20/2023	388.50	1.10	0.51		0.00	0.00		0.00		0.00	
1/24/2024	391.90	2.23	0.45		0.00	0.00		0.00		0.00	
2/22/2024	388.60	7.64	0.46		0.00			0.00		0.00	
3/27/2024	390.90	2.54	0.54		0.00			0.00		0.00	
4/23/2024	391.60	1.62	0.46		0.00			0.00		0.00	
5/1/2024	389.10	0	0.49		0.00			0.00		0.00	
5/23/2024	389.20	0.16	0.27		0.00			0.00		0.00	
5/30/2024	392.80	#N/A	0.51		0.00			0.00		0.00	
6/20/2024	392.90	0	0.55		0.00			0.00		0.00	
7/24/2024	386.40	0	0.52		0.00			0.00		0.00	
8/27/2024	384.10	0	0.53		0.00			0.00		0.00	
9/24/2024	380.50	0.03	0.42		0.00			0.00		0.00	
10/29/2024	387.40	0	0.44		0.00			0.00		0.00	
11/21/2024	384.50	0.09	0.92		0.00			0.00		0.00	
12/17/2024	386.30	0.01	0.42		0.00			0.00		0.00	
1/28/2025	385.70	1.01	0.37		0.00			0.00		0.00	
2/26/2025	386.00	3.18	0.40		0.00			0.00		0.00	
3/20/2025	383.60	2.29	0.58		0.00			0.00		0.00	
4/14/2025	383.40	#N/A	0.52		0.00			0.00		0.00	
4/23/2025	385.20	0.35	0.41		0.00			0.00		0.00	
5/28/2025	384.50	0.08	0.41		0.00			0.00		0.00	
7/7/2025	386.00	0.2	0.37		0.00			0.00		0.00	
7/23/2025	387.30	0	0.41		0.00			0.00		0.00	
8/20/2025	378.90	0	0.48		0.00			0.00		0.00	
9/24/2025	387.00	0.13	0.42		0.00			0.00		0.00	
10/22/2025	386.40	1.2	0.40		0.00			0.00		0.00	
11/19/2025	387.30	5.7	0.32		0.00			0.00		0.00	
12/16/2025	381.60	2.28	0.25		0.00			0.00		0.00	

TABLE 8
RATTLESNAKE CANYON DAM
HORIZONTAL MOVEMENT OF SURVEY MONUMENTS
1985 THROUGH 2025

Monument ID		Reservoir	Temp.	A		B		B-1		C		D		E		E-1		Comment
Approx. Station		Elevation		2+14.8		2+74.7		2+77.7		5+74.6		8+74.6		11+74.7		11+75.1		
Year	Date	(feet)	(°C)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	
1985	10/19/1985			-0.090	-1.080					0.010	0.120	0.000	0.000	-0.010	-0.100			Initial Reading for A,C,D & E
1986																		Data was not found
1987	8/19/1987			-0.100	-1.200					0.020	0.240	0.000	0.000	-0.010	-0.120			
1990	10/5/1990			-0.050	-0.600			0.000	0.000	0.060	0.720	0.020	0.240	0.000	0.000			Initial Reading for B-1
1991	6/12/1991			-0.020	-0.240			0.000	0.000	0.080	0.960	0.050	0.600	0.010	0.120			
1992																		Data was not found
1993																		Data was not found
1994	5/11/1994			-0.040	-0.480			0.020	0.240	0.080	0.960	0.060	0.720	0.020	0.240			BM-2 was destroyed
1995																		Data was not found
1996	5/2/1996			-0.050	-0.600			0.000	0.000	0.040	0.480	0.050	0.600	0.020	0.240			
1997	5/28/1997			-0.050	-0.600			0.000	0.000	0.050	0.600	0.050	0.600	0.020	0.240			
1998	5/1/1998			-0.060	-0.720			-0.020	-0.240	0.050	0.600	0.050	0.600	0.020	0.240			
1999	4/28/1999			-0.065	-0.780			0.010	0.120	0.070	0.840	0.050	0.600					Monument E was caved over
2000	6/28/2000			-0.065	-0.780			0.005	0.060	0.065	0.780	0.050	0.600	0.080	0.960			Monument E was reestablished
2001	5/3/2001			-0.070	-0.840	0.060	0.720	0.020	0.240	0.080	0.960	0.050	0.600	0.085	1.020	0.000	0.000	Initial Reading for Band E-1
2002	5/20/2002			-0.075	-0.900	0.070	0.840	0.020	0.240	0.085	1.020	0.060	0.720	0.090	1.080	-0.005	-0.060	
2003	5/22/2003			-0.070	-0.840	0.085	1.020	0.030	0.360	0.090	1.080	0.055	0.660	0.100	1.200	0.000	0.000	
2004	5/18/2004			-0.070	-0.840	0.085	1.020	0.030	0.360	0.095	1.140	0.060	0.720	0.100	1.200	0.000	0.000	
2005	5/31/2005			-0.070	-0.840	0.080	0.960	0.030	0.360	0.095	1.140	0.060	0.720	0.105	1.260	0.000	0.000	
2006	5/31/2006			-0.065	-0.780	0.085	1.020	0.040	0.480	0.095	1.140	0.060	0.720	0.100	1.200	0.000	0.000	
2007	5/16/2007			-0.065	-0.780	0.090	1.080	0.040	0.480	0.090	1.080	0.065	0.780	0.100	1.200	0.000	0.000	
2008	5/23/2008	404.0		-0.065	-0.780	0.095	1.140	0.045	0.540	0.100	1.200	0.065	0.780	0.115	1.380	0.000	0.000	
2009	6/10/2009			-0.075	-0.900	0.115	1.380	0.060	0.720	0.110	1.320	0.070	0.840	0.120	1.440	0.000	0.000	
2010	5/19/2010	403.6		-0.065	-0.780	0.105	1.260	0.055	0.660	0.100	1.200	0.075	0.900	0.105	1.260	0.000	0.000	
2011	5/18/2011	399.5		-0.065	-0.780	0.115	1.380	0.065	0.780	0.100	1.200	0.075	0.900	0.110	1.320	0.015	0.180	
2012	5/18/2012	392.0		-0.070	-0.840	0.115	1.380	0.065	0.780	0.095	1.140	0.075	0.900	0.095	1.140	0.010	0.120	
2013	6/6/2013			-0.075	-0.900	0.120	1.440	0.070	0.840	0.095	1.140	0.075	0.900	0.115	1.380	0.005	0.060	
2014	4/21/2014	393.0		-0.075	-0.900	0.120	1.440	0.080	0.960	0.110	1.320	0.090	1.080	0.125	1.500	0.010	0.120	
2015	6/4/2015			-0.080	-0.960	0.120	1.440	0.080	0.960	0.110	1.320	0.085	1.020	0.115	1.380	0.010	0.120	
2016	7/25/2016	377.7		-0.085	-1.020	0.125	1.500	0.080	0.960	0.110	1.320	0.085	1.020	0.115	1.380	0.010	0.120	BM-4 was destroyed
2017																		No survey was done in 2017
2018	5/31/2018	399.5		-0.087	-1.044	0.125	1.500	0.075	0.900	0.105	1.260	0.075	0.900	0.100	1.200	0.000	0.000	
2019	5/31/2019	395.3		-0.085	-1.020	0.125	1.500	0.080	0.960	0.105	1.260	0.075	0.900	0.095	1.140	0.000	0.000	
2020	7/18/2020			-0.080	-0.960	0.120	1.440	0.080	0.960	0.110	1.320	0.080	0.960	0.090	1.080	0.000	0.000	
2021																		No survey was done in 2021
2022	4/26/2022	393.2		-0.075	-0.900	0.140	1.680	0.080	0.960	0.130	1.560	0.070	0.840	0.110	1.320	0.000	0.000	Survey for 2021 Review Period
2022	10/27/2022	388.6	18.9	-0.075	-0.900	0.125	1.500	0.075	0.900	0.100	1.200	0.060	0.720	0.085	1.020	0.000	0.000	Survey for 2022 Review Period
2023	12/15/2023	382.9	21.7	-0.075	-0.900	0.115	1.380	0.070	0.840	0.095	1.140	0.050	0.600	0.080	0.960	0.000	0.000	BM-3 re-established
2024	6/7/2024	392.9	18.3	-0.093	-1.116	0.123	1.476	0.081	0.972	0.089	1.068	0.060	0.720	0.116	1.392	-0.010	-0.120	
2025	10/8/2025	386.5	16.7	-0.078	-0.936	0.112	1.342	0.069	0.828	0.094	1.128	0.063	0.756	0.103	1.236	0.003	0.036	

Note: Reservoir elevation data in red are taken from dates within one week of the listed date.

TABLE 9
RATTLESNAKE CANYON DAM
CUMULATIVE HORIZONTAL DISPLACEMENT OF SURVEY MONUMENTS
1985 THROUGH 2025

Monument ID		Reservoir	Temp.	A		B		B-1		C		D		E		E-1		Comment
Approx . Station		Elevation		2+14.8		2+74.7		2+77.7		5+74.6		8+74.6		11+74.7		11+75.1		
Year	Date	(feet)	(°C)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	(feet)	(inches)	
1985	10/19/1985			0.000	0.000					0.000	0.000	0.000	0.000	0.000	0.000			Initial Reading for A, C, D & E
1986																		Data was not found
1987	8/19/1987			-0.010	-0.120					0.010	0.120	0.000	0.000	0.000	0.000			
1988																		Data was not found
1989																		Data was not found
1990	10/5/1990			0.040	0.480			0.000	0.000	0.050	0.600	0.020	0.240	0.010	0.120			Initial Reading for B-1
1991	6/12/1991			0.070	0.840			0.000	0.000	0.070	0.840	0.050	0.600	0.020	0.240			
1992																		Data was not found
1993																		Data was not found
1994	5/11/1994			0.050	0.600			0.020	0.240	0.070	0.840	0.060	0.720	0.030	0.360			BM-2 was destroyed
1995														0.000	0.000			Data was not found
1996	5/2/1996			0.040	0.480			0.000	0.000	0.030	0.360	0.050	0.600	0.030	0.360			
1997	5/28/1997			0.040	0.480			0.000	0.000	0.040	0.480	0.050	0.600	0.030	0.360			
1998	5/1/1998			0.030	0.360			-0.020	-0.240	0.040	0.480	0.050	0.600	0.030	0.360			
1999	4/28/1999			0.025	0.300			0.010	0.120	0.060	0.720	0.050	0.600					Monument E was paved over
2000	6/28/2000			0.025	0.300			0.005	0.060	0.055	0.660	0.050	0.600	0.030	0.360			Monument E was reestablished
2001	5/3/2001			0.020	0.240	0.000	0.000	0.020	0.240	0.070	0.840	0.050	0.600	0.035	0.420	0.000	0.000	Initial Reading for Band E-1
2002	5/20/2002			0.015	0.180	0.010	0.120	0.020	0.240	0.075	0.900	0.060	0.720	0.040	0.480	-0.005	-0.060	
2003	5/22/2003			0.020	0.240	0.025	0.300	0.030	0.360	0.080	0.960	0.055	0.660	0.050	0.600	0.000	0.000	
2004	5/18/2004			0.020	0.240	0.025	0.300	0.030	0.360	0.085	1.020	0.060	0.720	0.050	0.600	0.000	0.000	
2005	5/31/2005			0.020	0.240	0.020	0.240	0.030	0.360	0.085	1.020	0.060	0.720	0.055	0.660	0.000	0.000	
2006	5/31/2006			0.025	0.300	0.025	0.300	0.040	0.480	0.085	1.020	0.060	0.720	0.050	0.600	0.000	0.000	
2007	5/16/2007			0.025	0.300	0.030	0.360	0.040	0.480	0.080	0.960	0.065	0.780	0.050	0.600	0.000	0.000	
2008	5/23/2008	404.0		0.025	0.300	0.035	0.420	0.045	0.540	0.090	1.080	0.065	0.780	0.065	0.780	0.000	0.000	
2009	6/10/2009	#N/A		0.015	0.180	0.055	0.660	0.060	0.720	0.100	1.200	0.070	0.840	0.070	0.840	0.000	0.000	
2010	5/19/2010	403.6		0.025	0.300	0.045	0.540	0.055	0.660	0.090	1.080	0.075	0.900	0.055	0.660	0.000	0.000	
2011	5/18/2011	399.5		0.025	0.300	0.055	0.660	0.065	0.780	0.090	1.080	0.075	0.900	0.060	0.720	0.015	0.180	
2012	5/18/2012	392.0		0.020	0.240	0.055	0.660	0.065	0.780	0.085	1.020	0.075	0.900	0.045	0.540	0.010	0.120	
2013	6/6/2013	#N/A		0.015	0.180	0.060	0.720	0.070	0.840	0.085	1.020	0.075	0.900	0.065	0.780	0.005	0.060	
2014	4/21/2014	393.0		0.015	0.180	0.060	0.720	0.080	0.960	0.100	1.200	0.090	0.080	0.075	0.900	0.010	0.120	
2015	6/4/2015	#N/A		0.010	0.120	0.060	0.720	0.080	0.960	0.100	1.200	0.085	0.020	0.065	0.780	0.010	0.120	
2016	7/25/2016	377.7		0.005	0.060	0.065	0.780	0.080	0.960	0.100	1.200	0.085	0.020	0.065	0.780	0.010	0.120	BM-4 was destroyed
2017		#N/A																No survey was done in 2017
2018	5/31/2018	399.5		0.003	0.036	0.065	0.780	0.075	0.900	0.095	1.140	0.075	0.900	0.110	1.320	0.000	0.000	
2019	5/31/2019	395.3		0.005	0.060	0.065	0.780	0.080	0.960	0.095	1.140	0.075	0.900	0.105	1.260	0.000	0.000	
2020	7/18/2020	#N/A		0.010	0.120	0.060	0.720	0.080	0.960	0.100	1.200	0.080	0.960	0.100	1.200	0.000	0.000	
2021		#N/A																No survey was done in 2021
2022	4/26/2022	393.2		0.015	0.180	0.080	0.960	0.080	0.960	0.120	1.440	0.070	0.840	0.120	1.440	0.000	0.000	Survey for 2021 Review Period
2022	10/27/2022	388.6	18.9	0.015	0.180	0.065	0.780	0.075	0.900	0.090	1.080	0.060	0.720	0.095	1.140	0.000	0.000	Survey for 2021 Review Period
2023	12/15/2023	382.9	21.7	0.015	0.180	0.055	0.660	0.070	0.840	0.085	1.020	0.050	0.600	0.090	1.080	0.000	0.000	BM-3 re-established
2024	6/7/2024	392.9	18.3	-0.003	-0.036	0.063	0.756	0.081	0.972	0.079	0.948	0.060	0.720	0.126	1.512	-0.010	-0.120	
2025	10/9/2025	386.5	16.7	0.012	0.144	0.052	0.622	0.069	0.828	0.084	1.008	0.063	0.756	0.113	1.356	0.003	0.036	

Note: Reservoir elevation data in red are taken from dates within one week of the listed date.

TABLE 10
RATTLESNAKE CANYON DAM
ELEVATIONS OF SURVEY MONUMENTS
1985 THROUGH 2025

Monument ID		Reservoir	Temp.	A	B	B-1	C	D	E	E-1	Comment
Approx. Station		Elevation		2+14.8	2+74.7	2+77.7	5+74.6	8+74.6	11+74.7	11+75.1	
Year	Date	(feet)	(°C)	(feet)	(feet)	(feet)	(feet)	{feet)	{feet)	(feet}	
1985	10/19/1985			419.320			417.980	418.280	418.530		Initial Reading for AC.D & E
1986											Data were not found
1987	8/19/1987			419.280			417.970	418.260	418.560		
1988											Data was not found
1989											Data was not found
1990	10/5/1990			419.200		417.980	417.930	418.250	418.530		Initial Reading for B-1
1991	6/12/1991			419.190		417.980	417.910	418.210	418.530		
1992											Data was not found
1993											Data was not found
1994	5/11/1994			419.180		417.950	417.910	418.220	418.530		BM-2 was destroyed
1995											Data was not found
1996	5/2/1996			419.180		417.940	417.900	418.220	418.530		
1997	5/28/1997			419.180		417.940	417.910	418.230	418.530		
1998	5/1/1998			419.180		417.930	417.900	418.220	418.530		
1999	4/28/1999			419.180		417.925	417.905	418.230			Monument E was paved over
2000	6/28/2000			419.180		417.920	417.900	418.225	418.065		Monument E was reestablished
2001	5/3/2001			419.185	418.015	417.925	417.915	418.250	418.090	418.745	Initial Reading for Band E-1
2002	5/21/2002			419.185	418.005	417.915	417.915	418.245	418.090	418.745	
2003	5/22/2003			419.105	418.000	417.915	417.910	418.245	418.090	418.750	
2004	5/18/2004			419.185	418.000	417.915	417.910	418.250	418.100	418.750	
2005	5/31/2005			419.180	417.995	417.905	417.915	418.245	418.095	418.750	
2006	5/31/2006			419.185	417.990	417.900	417.920	418.250	418.095	418.755	
2007	5/16/2007			419.182	417.987	417.898	417.921	418.254	418.106	418.759	
2008	5/23/2008	404.0		419.185	417.985	417.900	417.925	418.260	418.115	418.770	
2009	6/10/2009			419.180	417.980	417.895	417.925	418.260	418.100	418.760	
2010	5/19/2010	403.6		419.180	417.980	417.890	417.920	418.255	418.100	418.755	
2011	5/18/2011	399.5		419.180	417.975	417.885	417.925	418.260	418.110	418.760	
2012	5/24/2012	392.0		419.175	417.970	417.880	417.930	418.265	418.115	418.765	
2013	6/6/2013			419.170	417.970	417.880	417.935	418.270	418.120	418.775	
2014	4/21/2014	393.0		419.170	417.970	417.885	417.940	418.275	418.125	418.780	
2015	6/4/2015			419.165	417.975	417.890	417.945	418.280	418.135	418.790	
2016	7/25/2016	377.7		419.160	417.975	417.890	417.950	418.290	418.145	418.800	BM-4 was destroyed
2017											No survey was done in 2017
2018	5/31/2018	399.5		419.160	417.980	417.890	417.950	418.290	418.160	418.815	
2019	5/31/2019	395.3		419.160	417.970	417.885	417.950	418.295	418.165	418.815	
2020	7/18/2020			419.159	417.966	417.878	417.940	418.277	418.152	418.810	
2021											No survey was done in 2021
2022	4/26/2022	393.2		419.158	417.959	417.871	417.93	418.273	418.151	418.806	Survey for 2021 Review Period
2022	10/27/2022	388.6	18.9	419.149	417.941	417.853	417.909	418.251	418.127	418.782	Survey for 2022 Review Period
2023	12/15/2023	382.9	21.7	419.159	417.944	417.858	417.909	418.249	418.127	418.782	BM-3 re-established
2024	6/7/2024	392.9	18.3	419.158	417.945	417.857	417.907	418.250	418.129	418.783	
2025	10/9/2025	386.5	16.7	419.157	417.945	417.857	417.908	418.250	418.13	418.784	

Note:
1. Vertical data is referenced in NGVD 29 datum.
2. Reservoir elevation data in red are taken from dates within one week of the listed date.

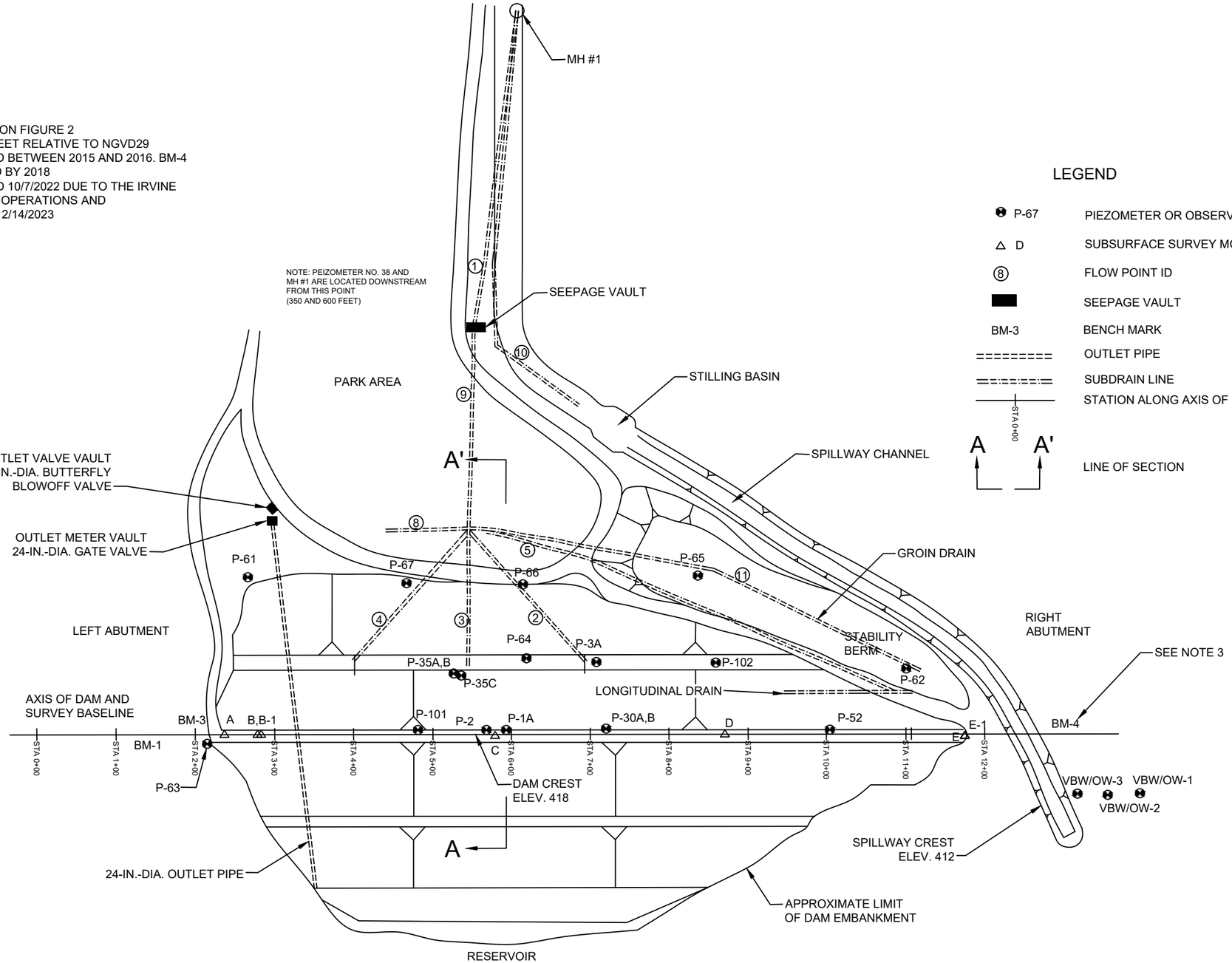
TABLE 11
RATTLESNAKE CANYON DAM
CUMULATIVE VERTICAL MOVEMENT OF SURVEY MONUMENTS
1985 THROUGH 2025

Monument ID		Reservoir	Temp.	A		B		B-1		C		D		E		E-1		Comment
Approx. Station		Elevation		2+14.8		2+74.7		2+77.7		5+74.6		8+74.6		11+74.7		11+75.1		
Year	Date	(feet)	(°C)	(feet)	(inches)	(feet)	(inches)	(feet)	(Inches)	(feet)	(inches)	(feet)	(Inches)	(feet)	(inches}	(feet)	(Inches)	
1985	10/19/1985			0.000	0.000					0.000	0.000	0.000	0.000	0.000	0.000			Initial Reading for A,C,D & E
1986																		Data was not found
1987	8/19/1987			0.040	0.480					0.010	0.120	0.020	0.240	-0.030	-0.360			
1988																		Data was not found
1989																		Data was not found
1990	10/5/1990			0.120	1.440			0.000	0.000	0.050	0.600	0.030	0.360	0.000	0.000			Initial Reading for B-1
1991	6/12/1991			0.130	1.560			0.000	0.000	0.070	0.840	0.070	0.840	0.000	0.000			
1992																		Data was not found
1993																		Data was not found
1994	5/11/1994			0.140	1.680			0.030	0.360	0.070	0.840	0.060	0.720	0.000	0.000			BM-2 was destroyed
1995																		Data was not found
1996	5/2/1996			0.140	1.680			0.040	0.480	0.080	0.960	0.060	0.720	0.000	0.000			
1997	5/28/1997			0.140	1.680			0.040	0.480	0.070	0.840	0.050	0.600	0.000	0.000			
1998	5/1/1998			0.140	1.680			0.050	0.600	0.080	0.960	0.060	0.720	0.000	0.000			
1999	4/28/1999			0.140	1.680			0.055	0.660	0.075	0.900	0.050	0.600					Monument E was paved over
2000	6/28/2000			0.140	1.680			0.060	0.720	0.080	0.960	0.055	0.660	0.000	0.000			Monument E was reestablished
2001	5/3/2001			0.135	1.620	0.000	0.000	0.055	0.660	0.065	0.780	0.030	0.360	-0.025	-0.300	0.000	0.000	Initial Reading for Band E-1
2002	5/21/2002			0.135	1.620	0.010	0.120	0.065	0.780	0.065	0.780	0.035	0.420	-0.025	-0.300	0.000	0.000	
2003	5/22/2003			0.215	2.580	0.015	0.180	0.065	0.780	0.070	0.840	0.035	0.420	-0.025	-0.300	-0.005	-0.060	
2004	5/18/2004			0.135	1.620	0.015	0.180	0.065	0.780	0.070	0.840	0.030	0.360	-0.035	-0.420	-0.005	-0.060	
2005	5/31/2005			0.140	1.680	0.020	0.240	0.075	0.900	0.065	0.780	0.035	0.420	-0.030	-0.360	-0.005	-0.060	
2006	5/31/2006			0.135	1.620	0.025	0.300	0.080	0.960	0.060	0.720	0.030	0.360	-0.030	-0.360	-0.010	-0.120	
2007	5/16/2007			0.138	1.656	0.028	0.336	0.082	0.984	0.059	0.708	0.026	0.312	-0.041	-0.492	-0.014	-0.168	
2008	5/23/2008	404.0		0.135	1.620	0.030	0.360	0.080	0.960	0.055	0.660	0.020	0.240	-0.050	-0.600	-0.025	-0.300	
2009	6/10/2009	#N/A		0.140	1.680	0.035	0.420	0.085	1.020	0.055	0.660	0.020	0.240	-0.035	-0.420	-0.015	-0.180	
2010	5/19/2010	403.6		0.140	1.680	0.035	0.420	0.090	1.080	0.060	0.720	0.025	0.300	-0.035	-0.420	-0.010	-0.120	
2011	5/18/2011	399.5		0.140	1.680	0.040	0.480	0.095	1.140	0.055	0.660	0.020	0.240	-0.045	-0.540	-0.015	-0.180	
2012	5/24/2012	392.0		0.145	1.740	0.045	0.540	0.100	1.200	0.050	0.600	0.015	0.180	-0.050	-0.600	-0.020	-0.240	
2013	6/6/2013	#N/A		0.150	1.800	0.045	0.540	0.100	1.200	0.045	0.540	0.010	0.120	-0.055	-0.660	-0.030	-0.360	
2014	4/21/2014	393.0		0.150	1.800	0.045	0.540	0.095	1.140	0.040	0.480	0.005	0.060	-0.060	-0.720	-0.035	-0.420	
2015	6/4/2015	#N/A		0.155	1.860	0.040	0.480	0.093	1.116	0.038	0.456	0.000	0.000	-0.070	-0.840	-0.045	-0.540	
2016	7/25/2016	377.7		0.160	1.920	0.040	0.480	0.090	1.080	0.030	0.360	-0.010	-0.120	-0.080	-0.960	-0.055	-0.660	BM-4 was destroyed
2017		#N/A																No survey was done in 2017
2018	5/31/2018	399.5		0.160	1.920	0.035	0.420	0.090	1.080	0.030	0.360	-0.010	-0.120	-0.095	-1.140	-0.070	-0.840	
2019	5/31/2019	395.3		0.160	1.920	0.045	0.540	0.095	1.140	0.030	0.360	-0.015	-0.180	-0.100	-1.200	-0.070	-0.840	
2020	7/18/2020	#N/A		0.161	1.932	0.049	0.588	0.102	1.224	0.040	0.480	0.003	0.036	-0.087	-1.044	-0.065	-0.780	
2021		#N/A																No survey was done in 2021
2022	4/26/2022	393.2		0.162	1.944	0.056	0.672	0.109	1.308	0.050	0.600	0.007	0.084	-0.086	-1.032	-0.061	-0.732	Survey for 2021 Review Period
2022	10/27/2022	388.6	18.9	0.171	2.052	0.074	0.888	0.127	1.524	0.071	0.852	0.029	0.348	-0.062	-0.744	-0.037	-0.444	Survey for 2022 Review Period
2023	12/15/2023	382.9	21.7	0.161	1.932	0.071	0.852	0.122	1.464	0.071	0.852	0.031	0.372	-0.062	-0.744	-0.037	-0.444	BM-3 re-established
2024	6/7/2024	392.9	18.3	0.162	1.944	0.070	0.840	0.123	1.476	0.073	0.876	0.030	0.360	-0.064	-0.768	-0.038	-0.456	
2025	10/9/2025	386.5	16.7	0.163	1.956	0.070	0.840	0.123	1.476	0.072	0.864	0.030	0.360	-0.065	-0.780	-0.039	-0.468	

Note:
1. Vertical data is referenced in NGVD 29 datum.
2. Reservoir elevation data in red are taken from dates within one week of the listed date.

Figures

NOTES:
1. SECTION A-A' SHOWN ON FIGURE 2
2. ELEVATIONS ARE IN FEET RELATIVE TO NGVD29
3. BM-4 WAS DESTROYED BETWEEN 2015 AND 2016. BM-4 WAS RE-ESTABLISHED BY 2018
4. BM-3 WAS DESTROYED 10/7/2022 DUE TO THE IRVINE COMPANY'S GRADING OPERATIONS AND RE-ESTABLISHED ON 12/14/2023



LEGEND

P-67	PIEZOMETER OR OBSERVATION WELL
D	SUBSURFACE SURVEY MONUMENT
⑧	FLOW POINT ID
	SEEPAGE VAULT
BM-3	BENCH MARK
	OUTLET PIPE
	SUBDRAIN LINE
STA 0+00	STATION ALONG AXIS OF DAM
A A'	LINE OF SECTION

NOT TO SCALE

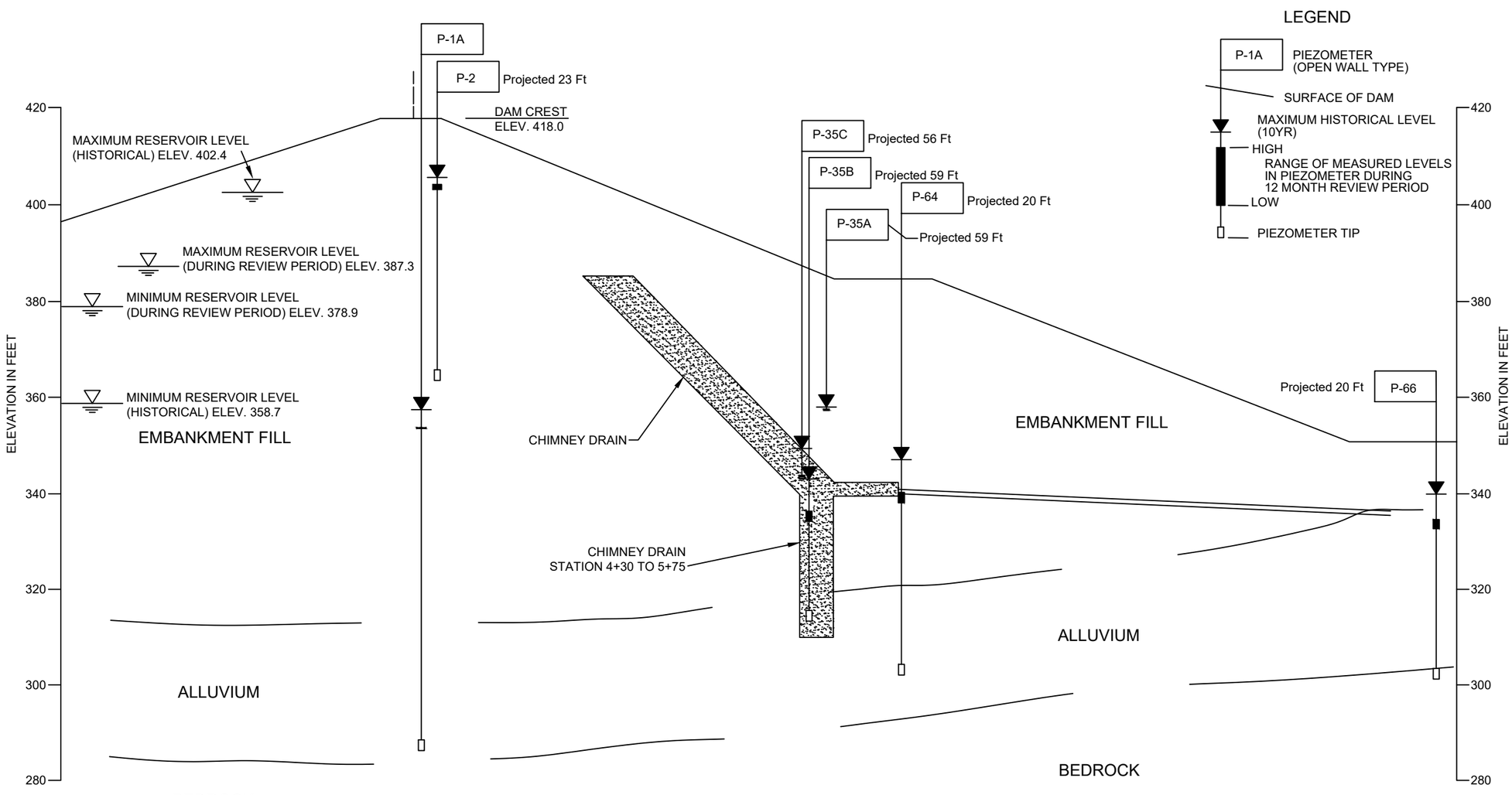
Annual Surveillance Report from Jan. 2025 to Dec. 2025
Rattlesnake Canyon Dam and Reservoir
Irvine, CA

Irvine Ranch Water District
Irvine, CA

GEI Consultants

SITE AND INSTRUMENTATION PLAN

Project 2305575 | May 2026 | Fig. 1



SECTION A-A' (STATION 5+94)
(MAXIMUM SECTION)

NOTES:
(1) LOCATION OF SECTION A-A' IA SHOWN ON FIGURE 1
(2) ELEVATIONS ARE IN FEET RELATIVE TO NGVD29

NOT TO SCALE

Annual Surveillance Report from Jan. 2025o Dec. 2025 Rattlesnake Canyon Dam and Reservoir Irvine, CA	GEI Consultants	SECTION A-A'
Irvine Ranch Water District Irvine, CA	Project 2305575	May 2026 Fig. 2

Figure 3
RATTLESNAKE CANYON DAM
2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-35A, P-35B, P-35C, P-67, P-101A, AND P-101B
JANUARY 2024 THROUGH DECEMBER 2025

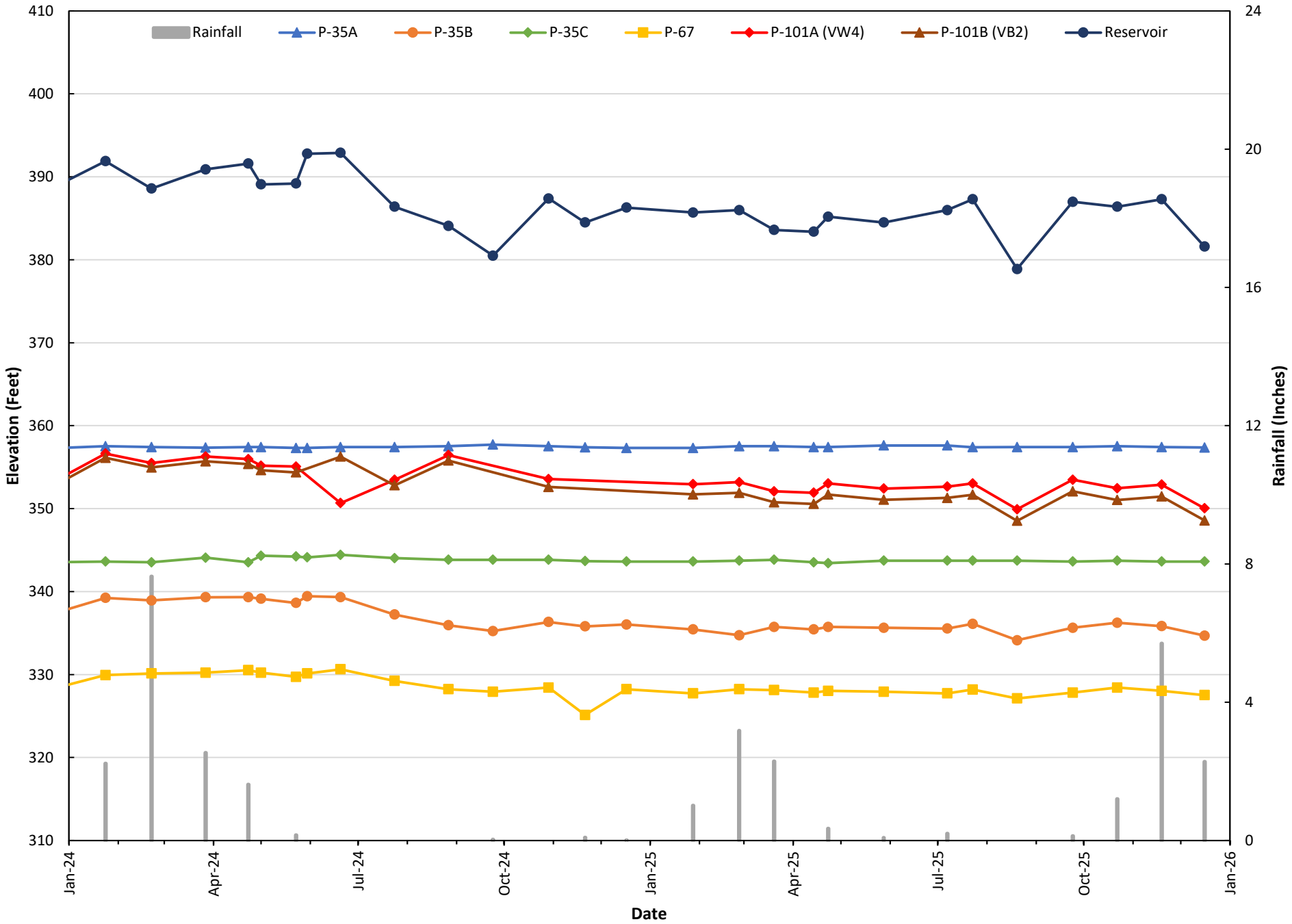


Figure 4
RATTLESNAKE CANYON DAM
2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-1A, P-2, P-64, AND P-66
JANUARY 2024 THROUGH DECEMBER 2025

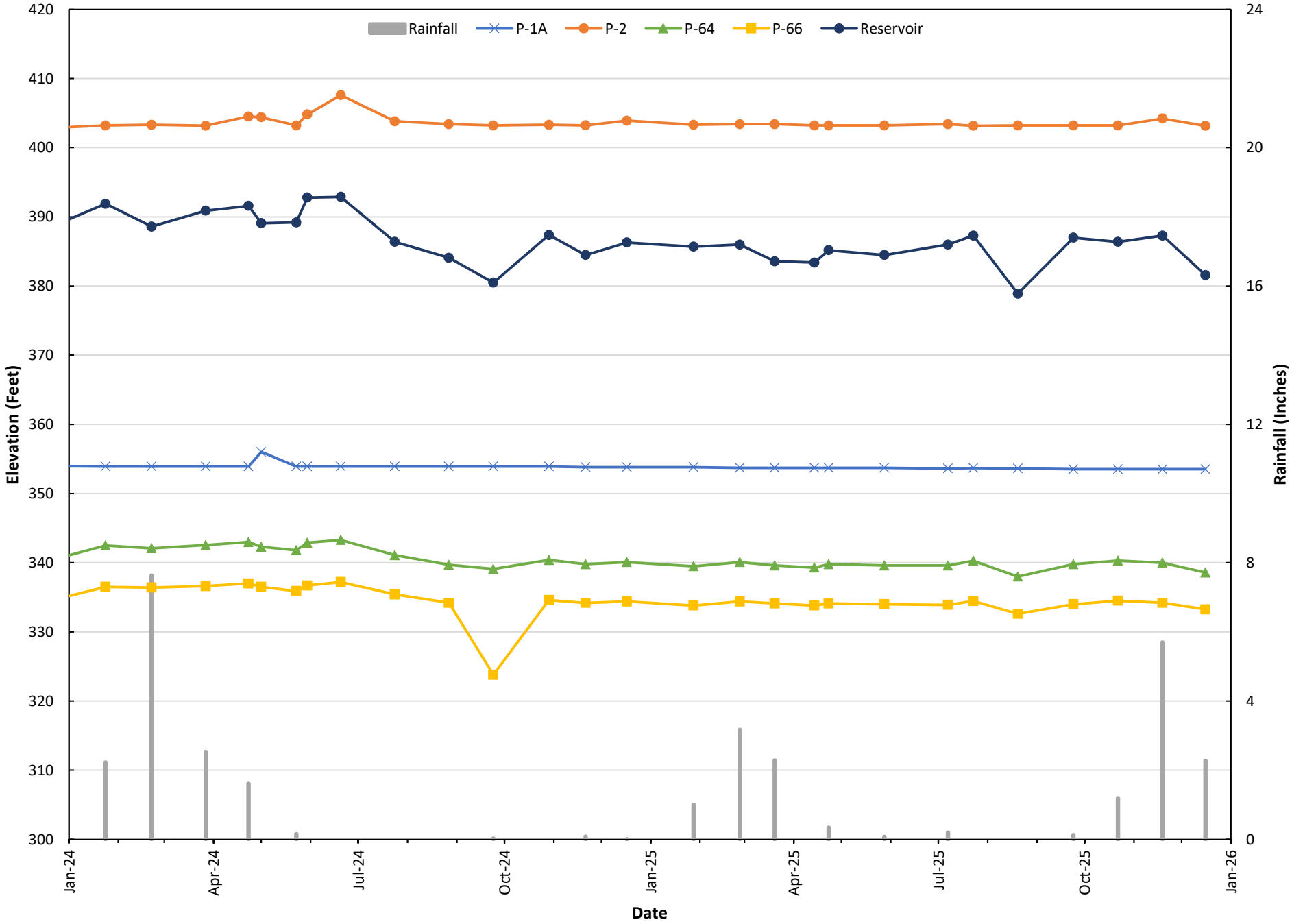


Figure 5
RATTLESNAKE CANYON DAM
2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-3A AND P-30B
JANUARY 2024 THROUGH DECEMBER 2025

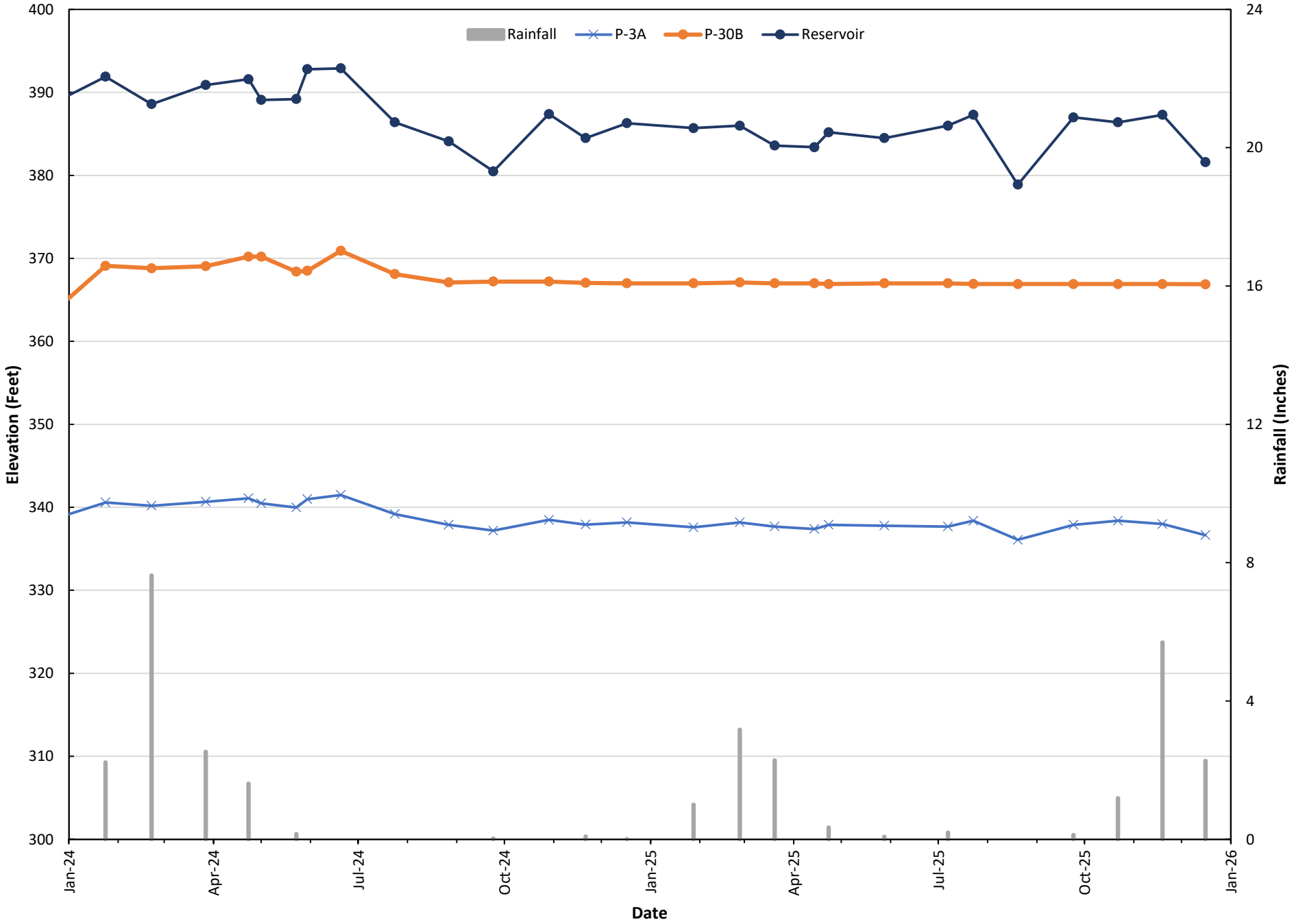


Figure 6
RATTLESNAKE CANYON DAM
2-YR OBSERVATION WELL AND RESERVOIR WATER SURFACE ELEVATIONS
OBSERVATION WELLS VBW/OW-1, VBW/OW-2, AND VBW/OW-3
JANUARY 2024 THROUGH DECEMBER 2025

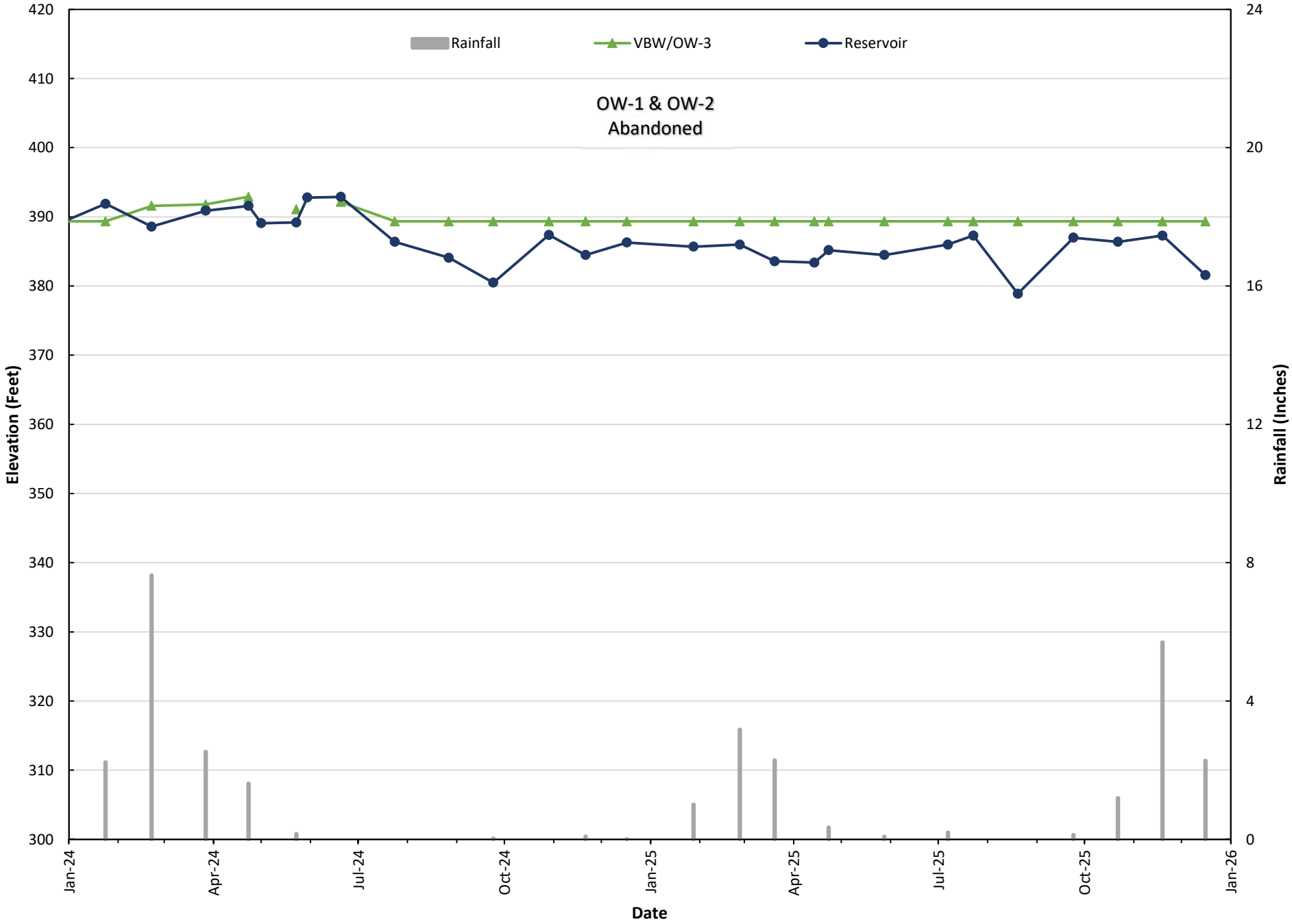


Figure 7
RATTLESNAKE CANYON DAM
2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-52, P-61, P-62, P-63, P-65, P-102A, AND P-102B
JANUARY 2024 THROUGH DECEMBER 2025

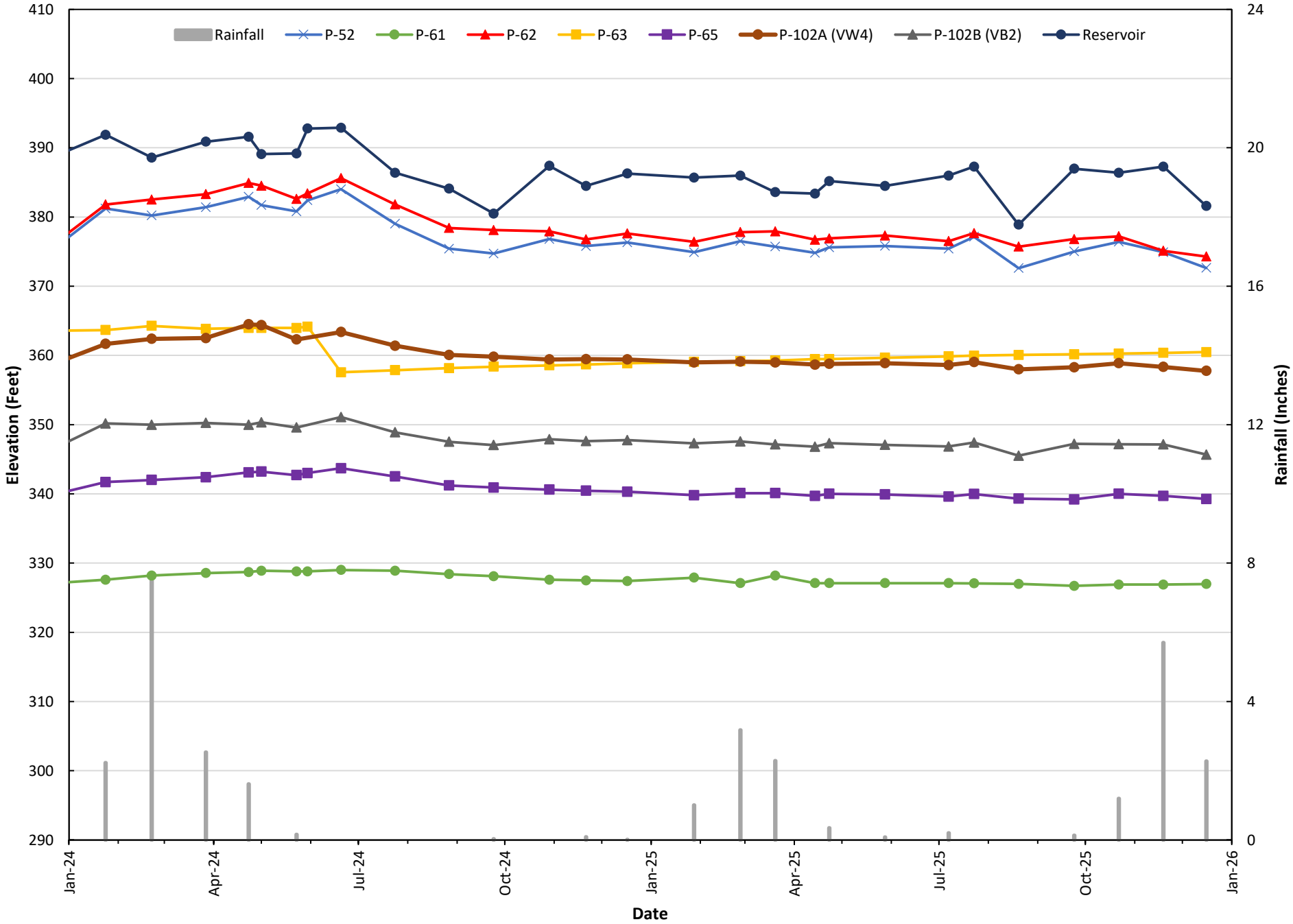


Figure 8
RATTLESNAKE CANYON DAM
HISTORICAL OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-35A, P-35B, P-35C, P-67, P-101A, AND P-101B
JANUARY 2015 THROUGH DECEMBER 2025

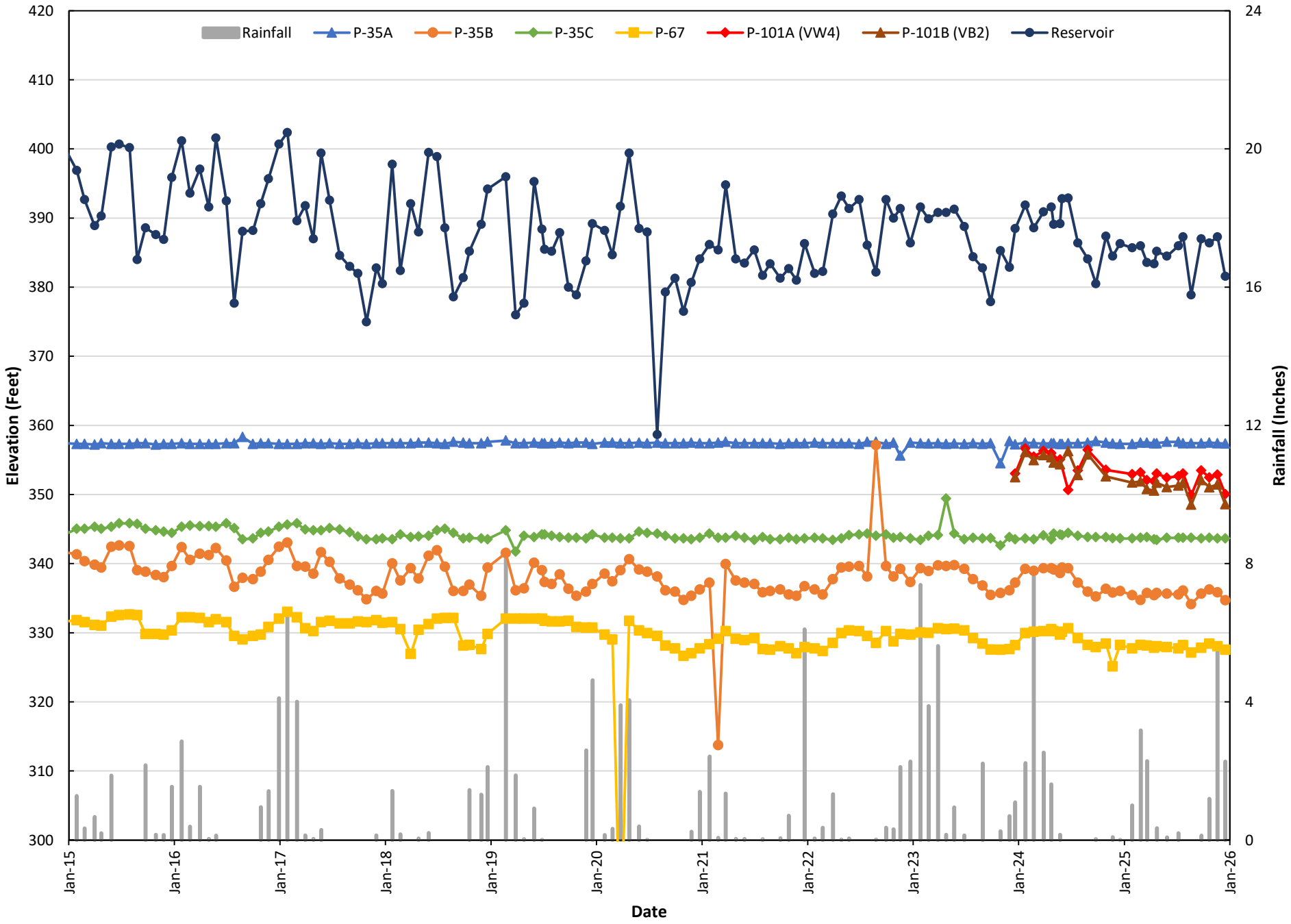


Figure 9

RATTLESNAKE CANYON DAM

HISTORICAL OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS

OPEN WELL PIEZOMETERS P-1A, P-2, P-64, AND P-66

JANUARY 2015 THROUGH DECEMBER 2025

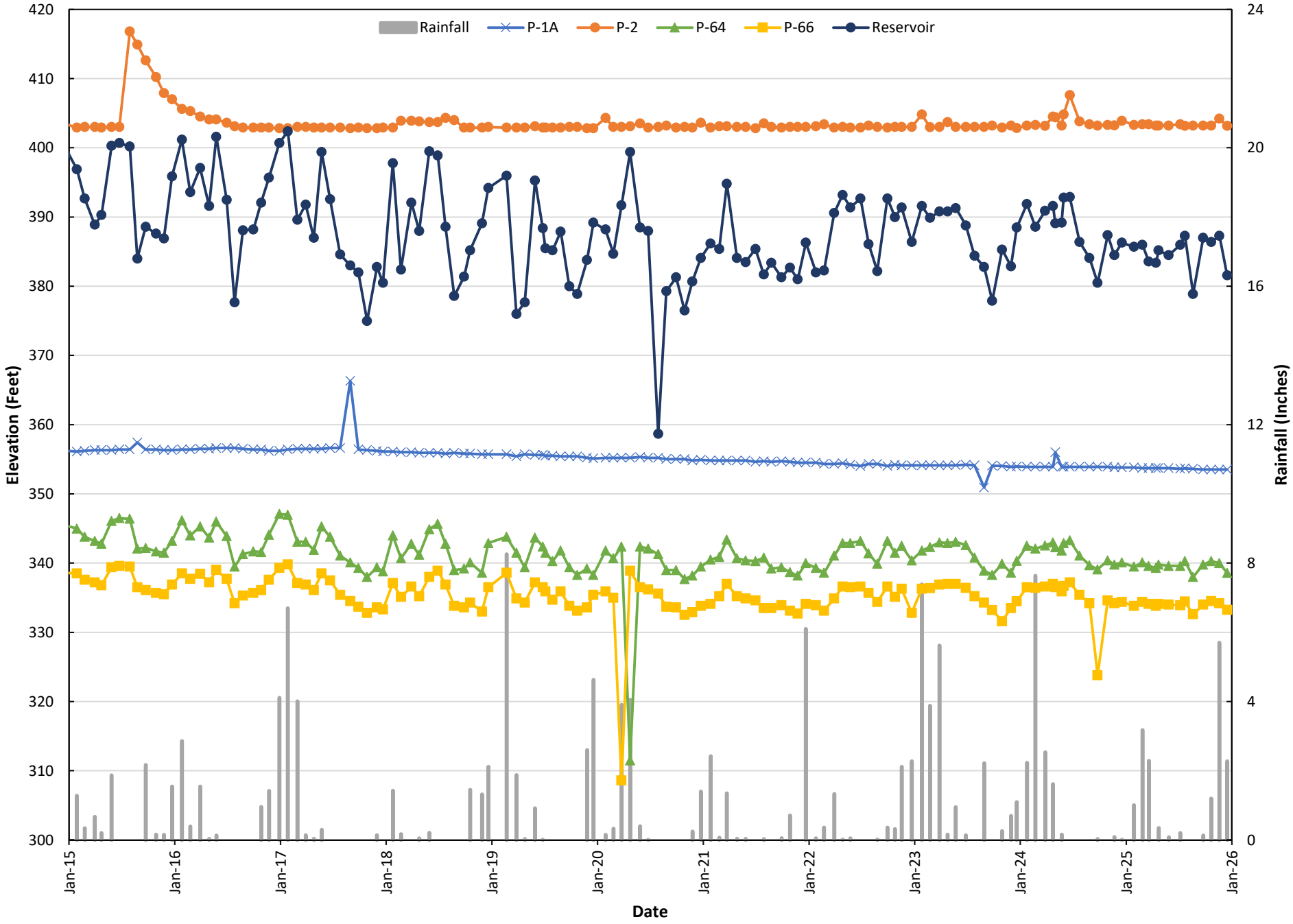


Figure 10
RATTLESNAKE CANYON DAM
HISTORICAL OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-3A AND P-30B
JANUARY 2015 THROUGH DECEMBER 2025

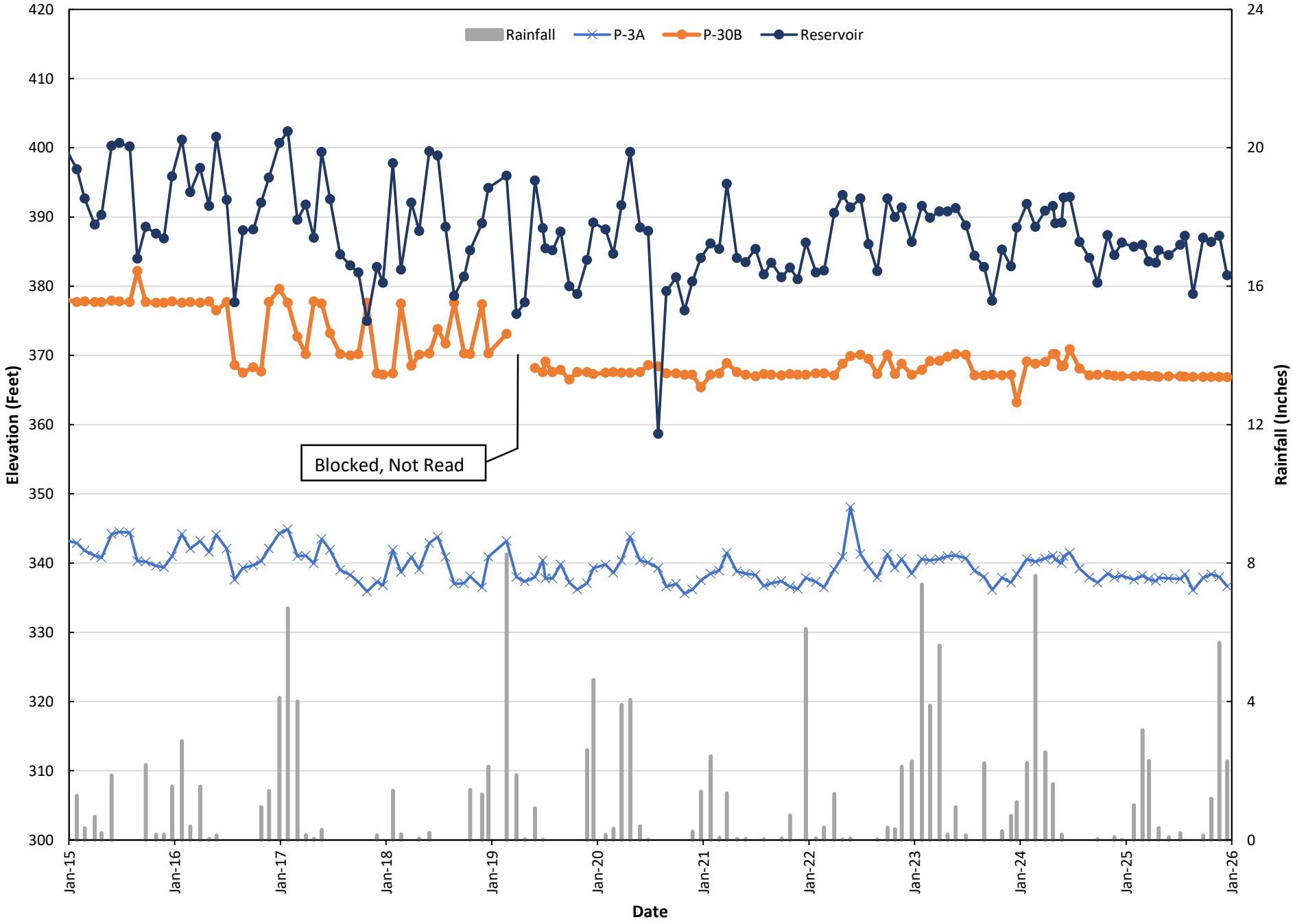


Figure 11
RATTLESNAKE CANYON DAM
HISTORICAL OBSERVATION WELL AND RESERVOIR WATER SURFACE ELEVATIONS
OBSERVATION WELLS VBW/OW-1, VBW/OW-2, AND VBW/OW-3
JANUARY 2015 THROUGH DECEMBER 2025

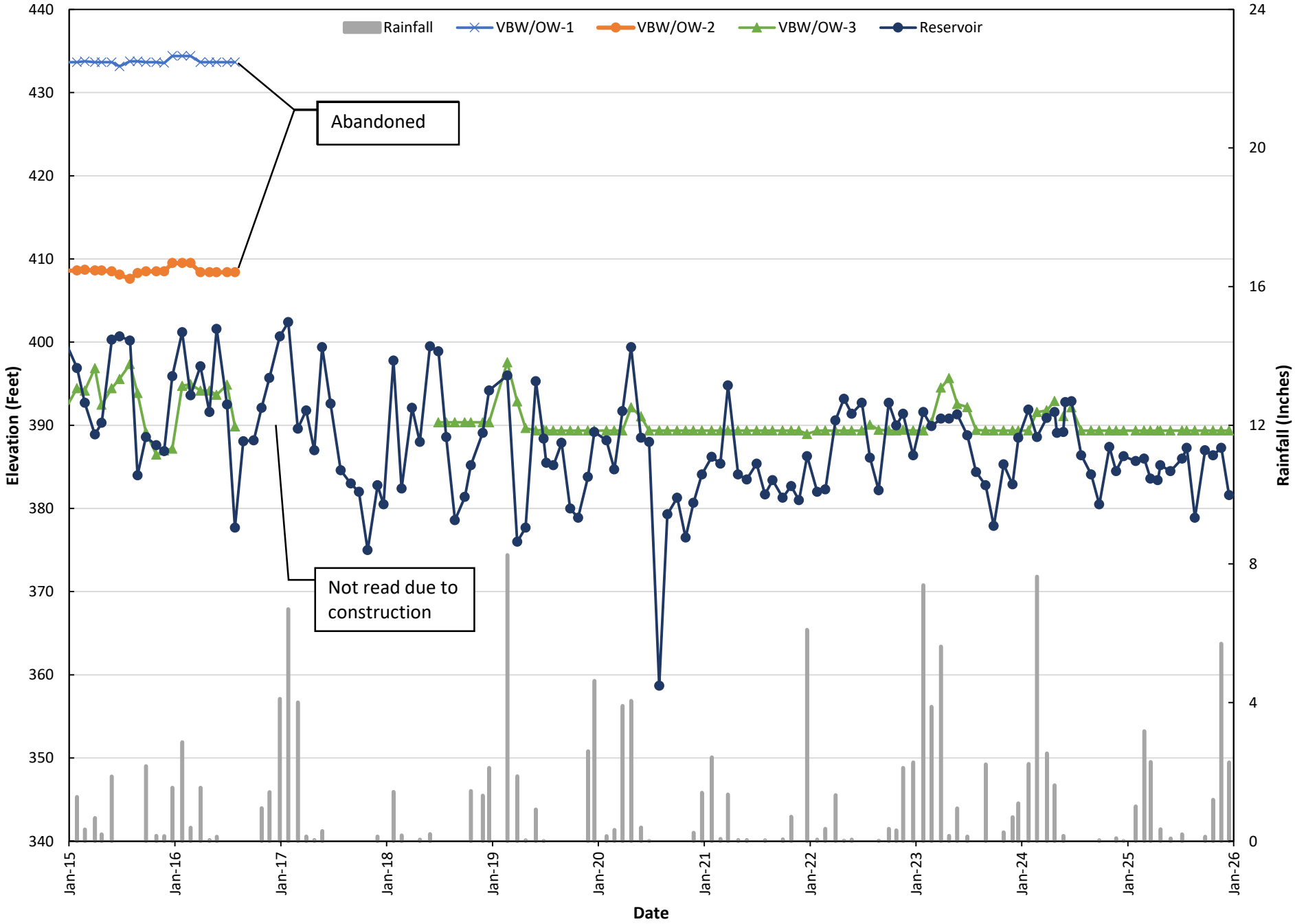


Figure 12
RATTLESNAKE CANYON DAM
HISTORICAL OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS
OPEN WELL PIEZOMETERS P-52, P-61, P-62, P-63, P-65, P-102A, AND P-102B
JANUARY 2015 THROUGH DECEMBER 2025

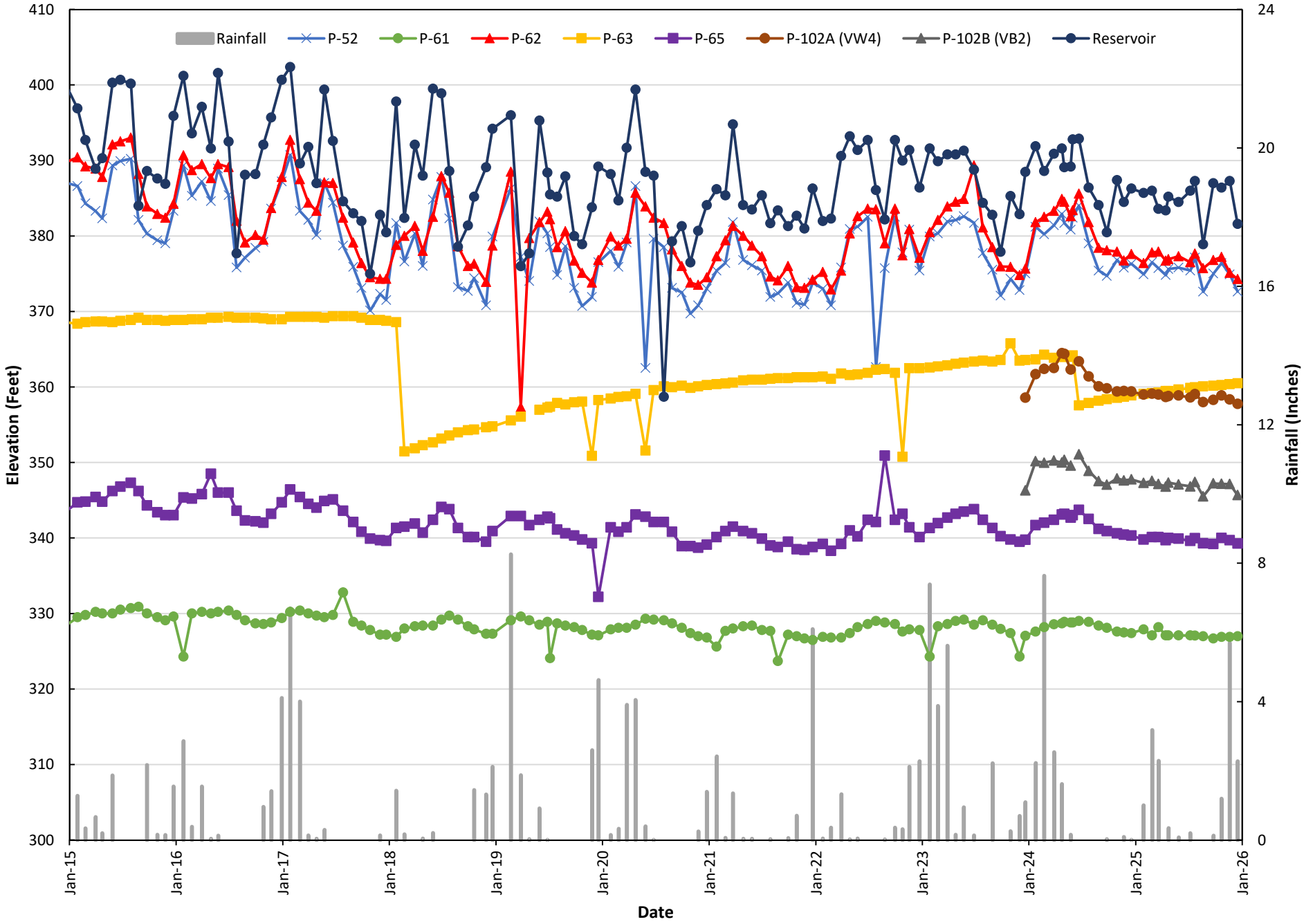


Figure 13
RATTLESNAKE CANYON DAM
2-YR SEEPAGE, RESERVOIR WATER SURFACE ELEVATIONS, AND RAINFALL
FLOW POINTS FP-11, FP-1 NORTH, AND FP-1 SOUTH
JANUARY 2024 THROUGH DECEMBER 2025

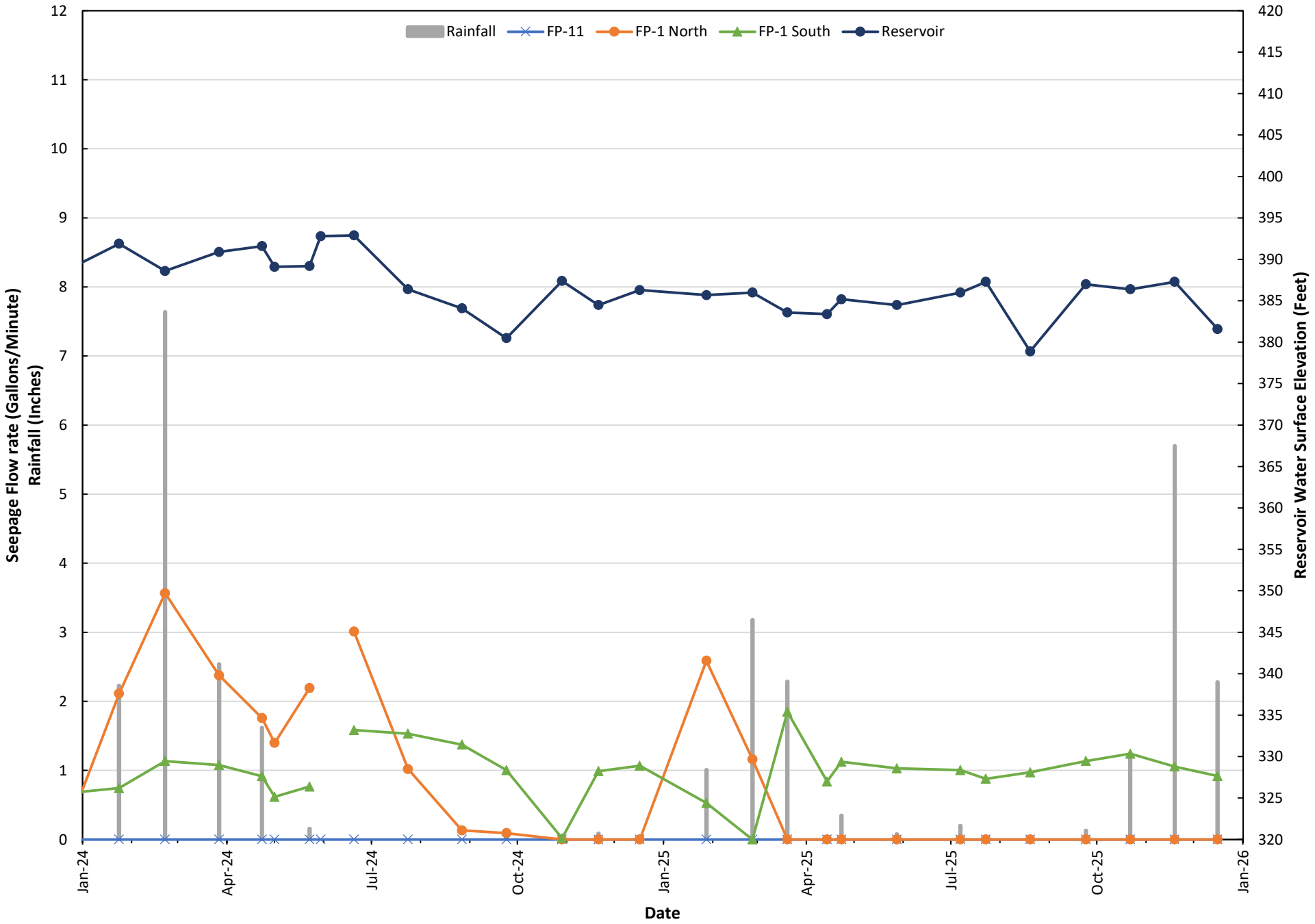


Figure 14
RATTLESNAKE CANYON DAM
2-YR SEEPAGE, RESERVOIR WATER SURFACE ELEVATIONS, AND RAINFALL
FLOW POINTS FP-2, FP-3, AND FP-4
JANUARY 2024 THROUGH DECEMBER 2025

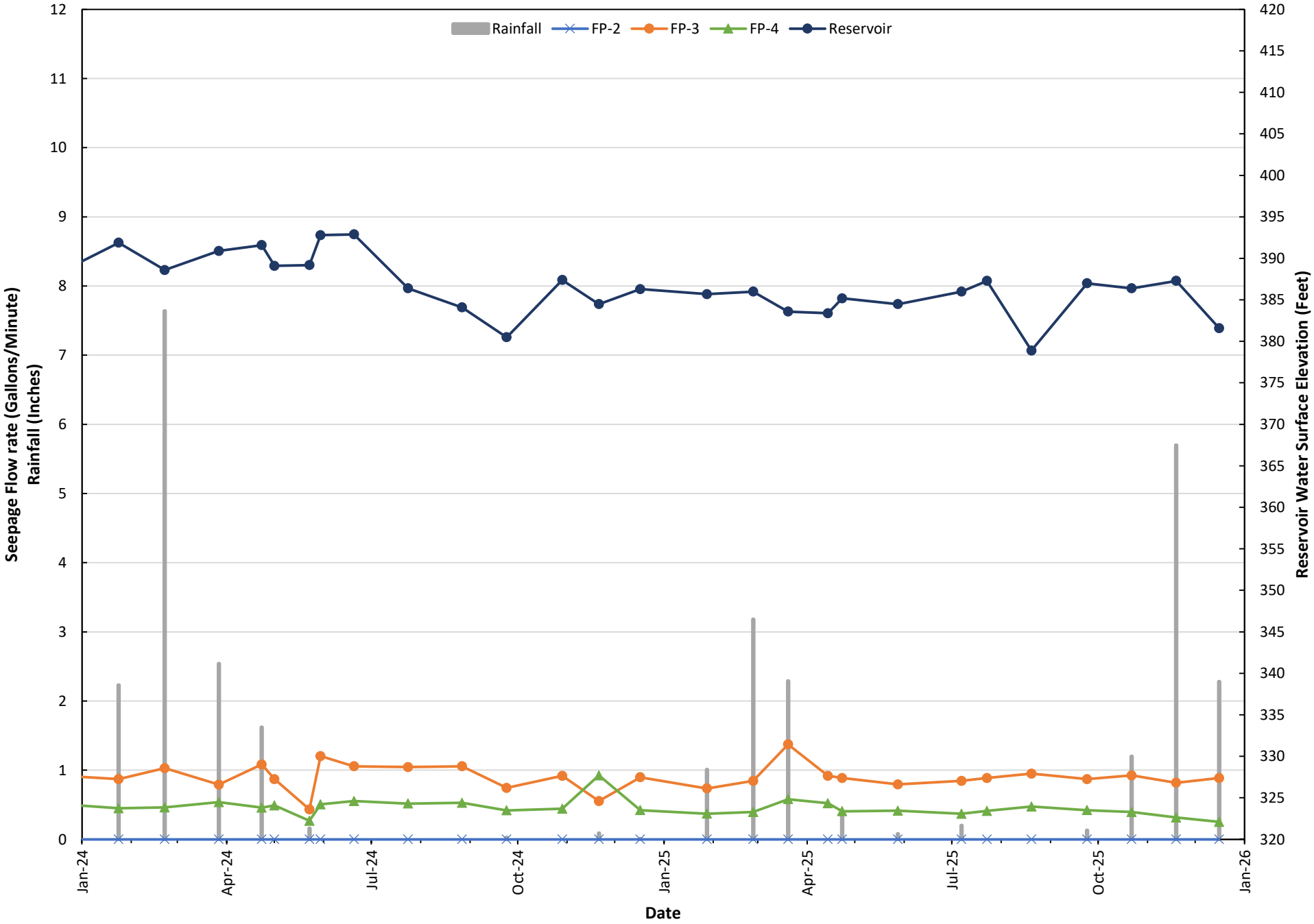


Figure 15
RATTLESNAKE CANYON DAM
2-YR SEEPAGE, RESERVOIR WATER SURFACE ELEVATIONS, AND RAINFALL
FLOW POINTS FP-5 AND FP-8
JANUARY 2024 THROUGH DECEMBER 2025

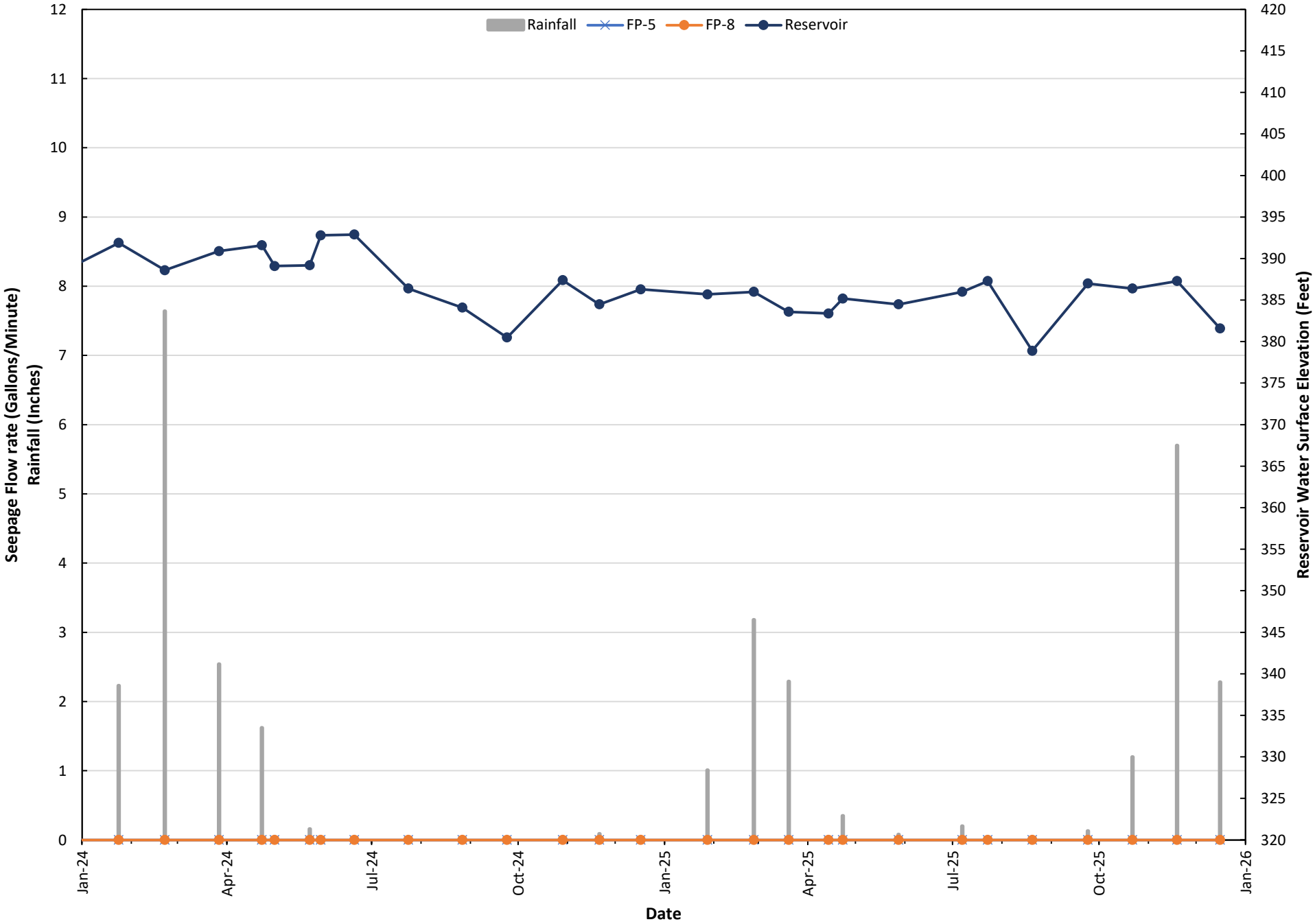


Figure 16
RATTLESNAKE CANYON DAM
HISTORICAL SEEPAGE AND RESERVOIR WATER SURFACE ELEVATIONS
FLOW POINTS FP-11, FP-1 NORTH, AND FP-1 SOUTH
JANUARY 2015 THROUGH DECEMBER 2025

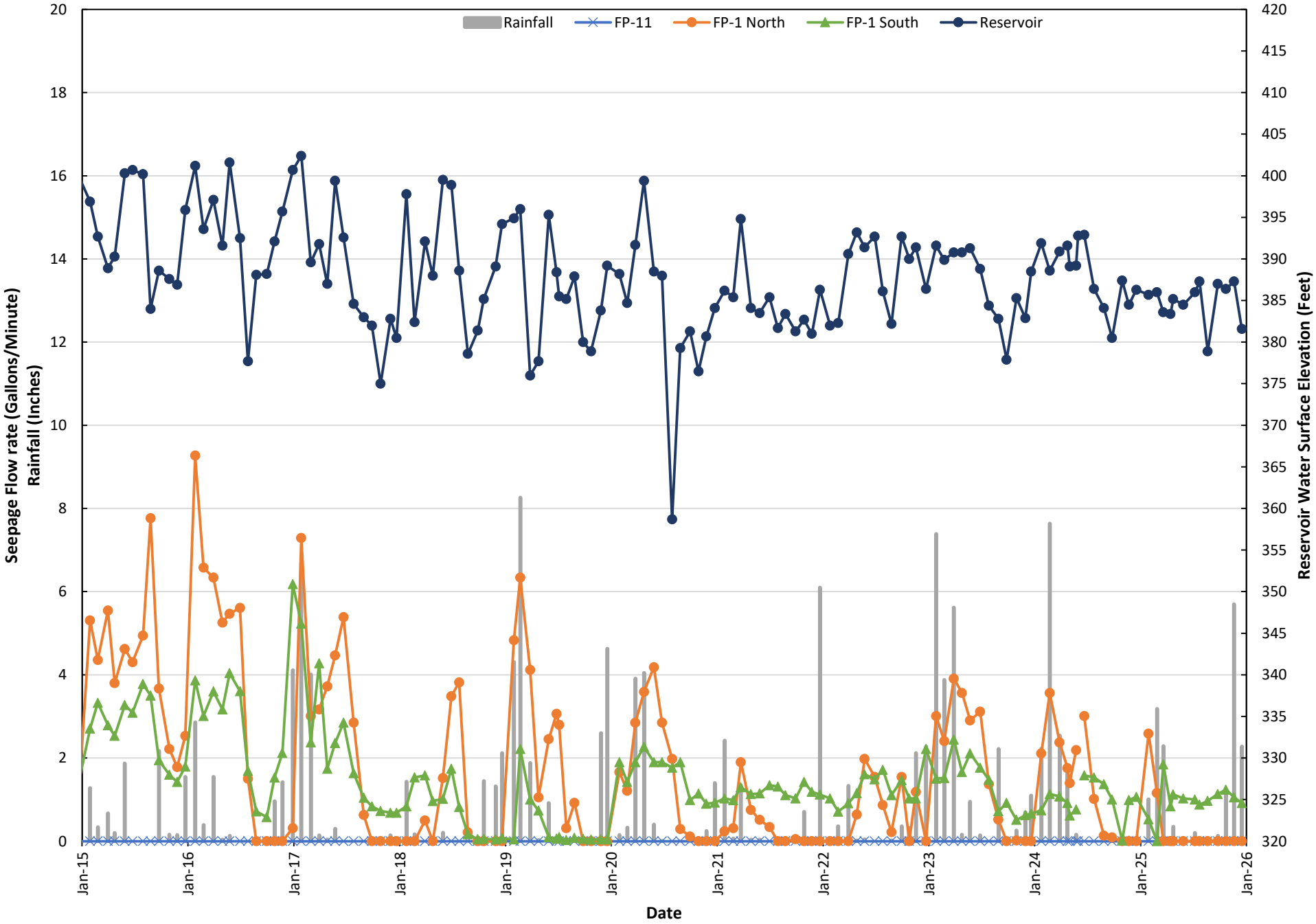


Figure 17
RATTLESNAKE CANYON DAM
HISTORICAL SEEPAGE AND RESERVOIR WATER SURFACE ELEVATIONS
FLOW POINTS FP-2, FP-3, AND FP-4
JANUARY 2015 THROUGH DECEMBER 2025

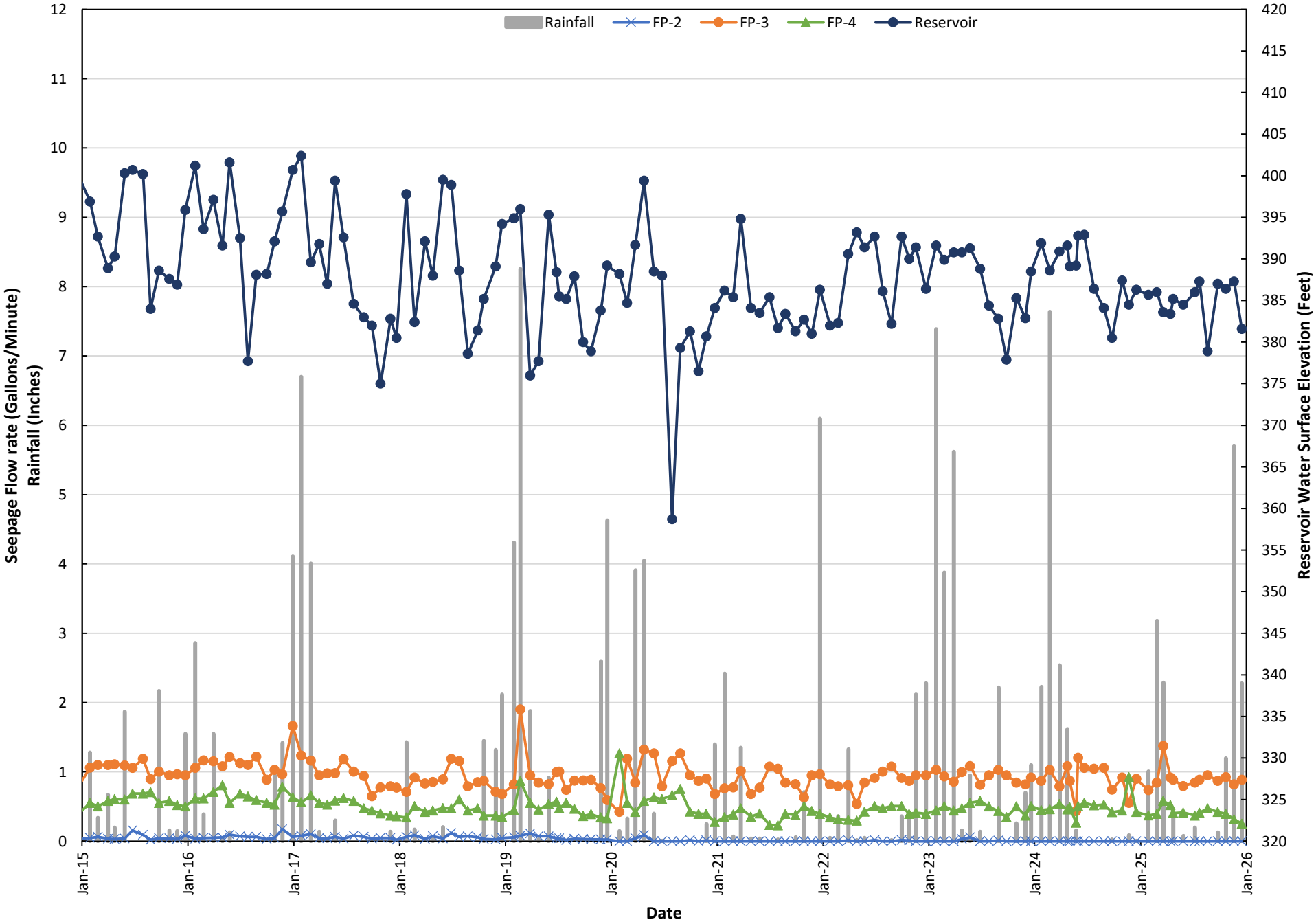


Figure 18
RATTLESNAKE CANYON DAM
HISTORICAL SEEPAGE AND RESERVOIR WATER SURFACE ELEVATIONS
FLOW POINTS FP-5 AND FP-8
JANUARY 2015 THROUGH DECEMBER 2025

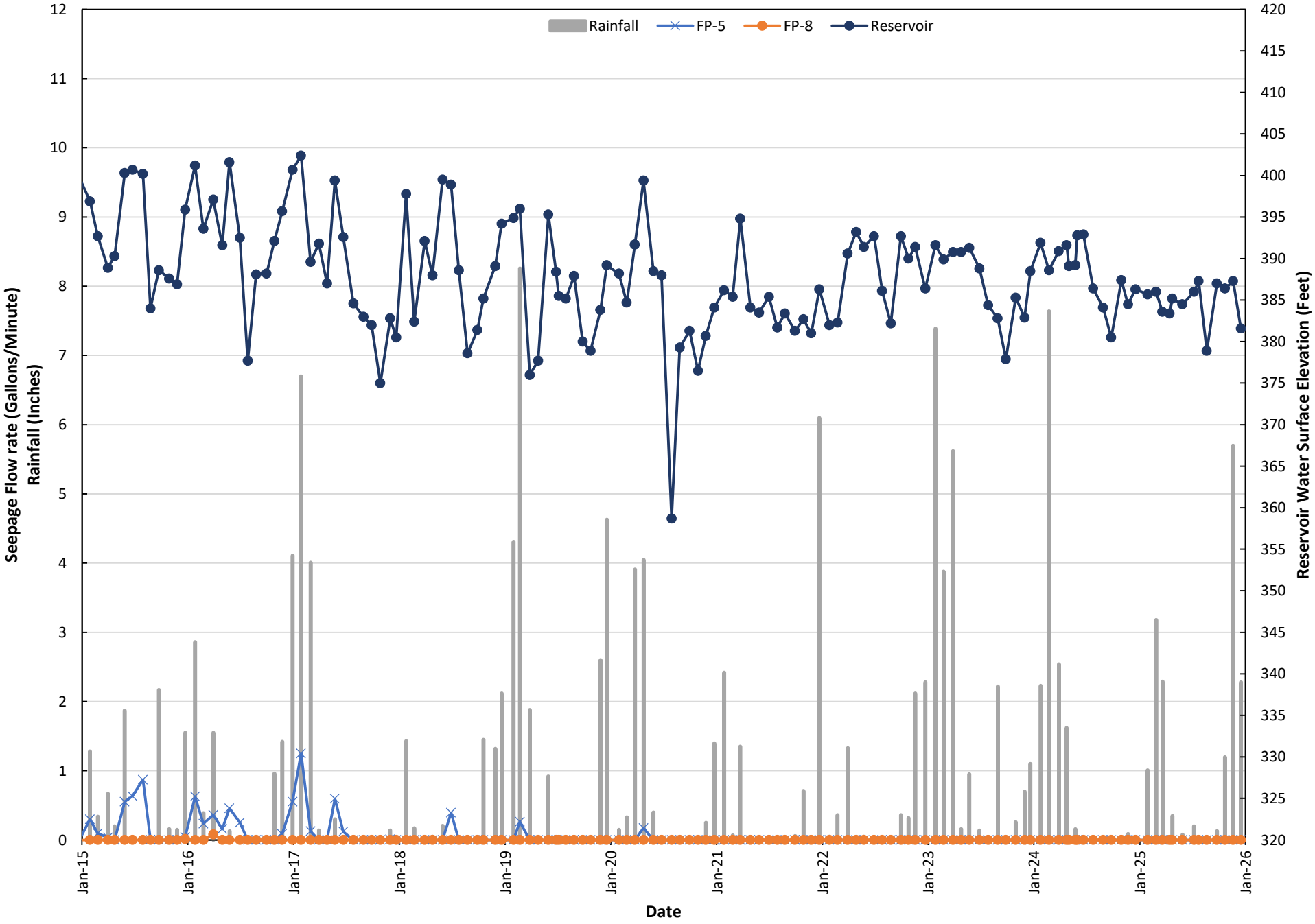


Figure 19
RATTLESNAKE CANYON DAM
HISTORICAL CUMULATIVE HORIZONTAL DISPLACEMENT
SURVEY MONUMENTS A, B, B-1, C, D, E, AND E-1
1985 THROUGH 2025

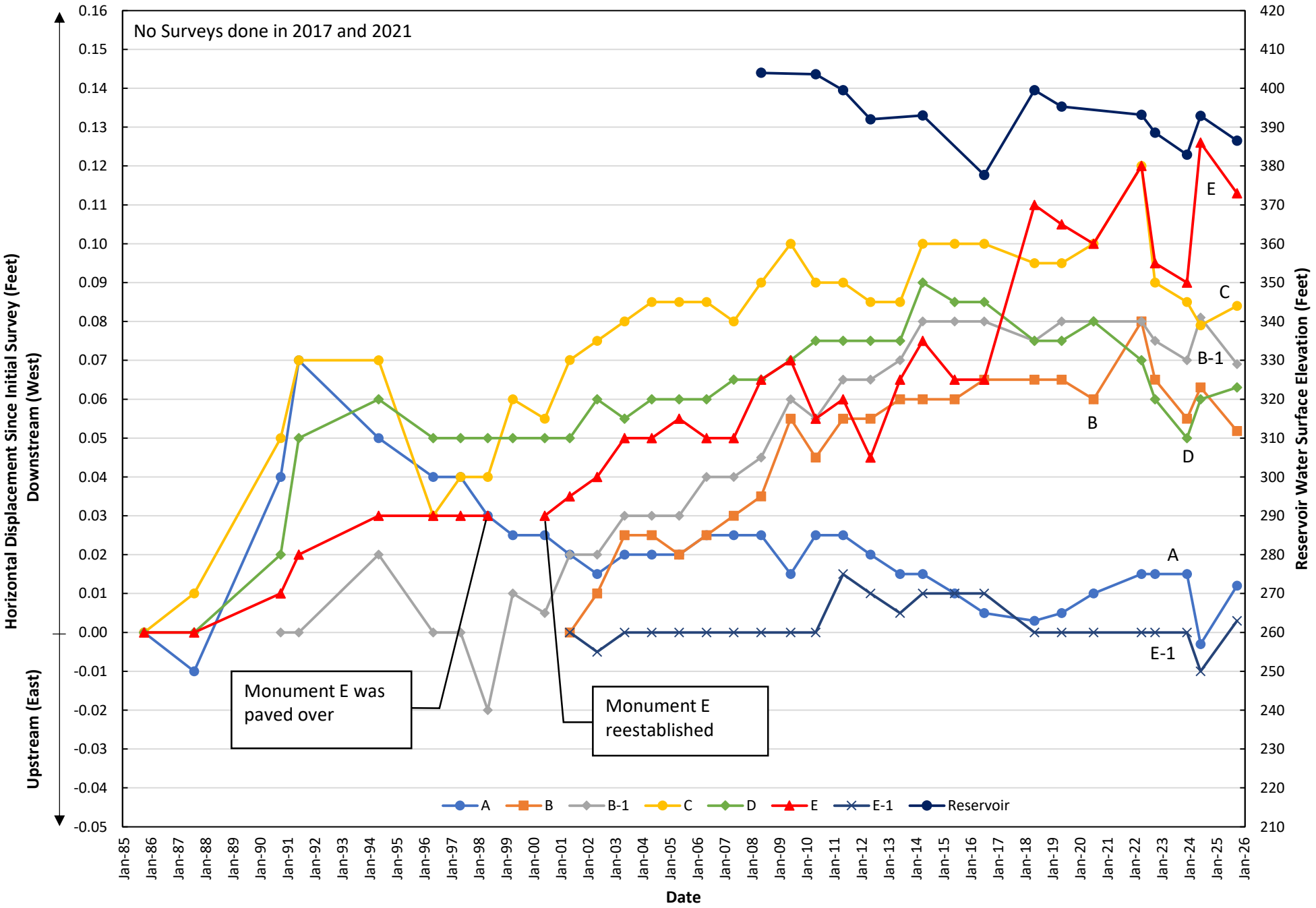
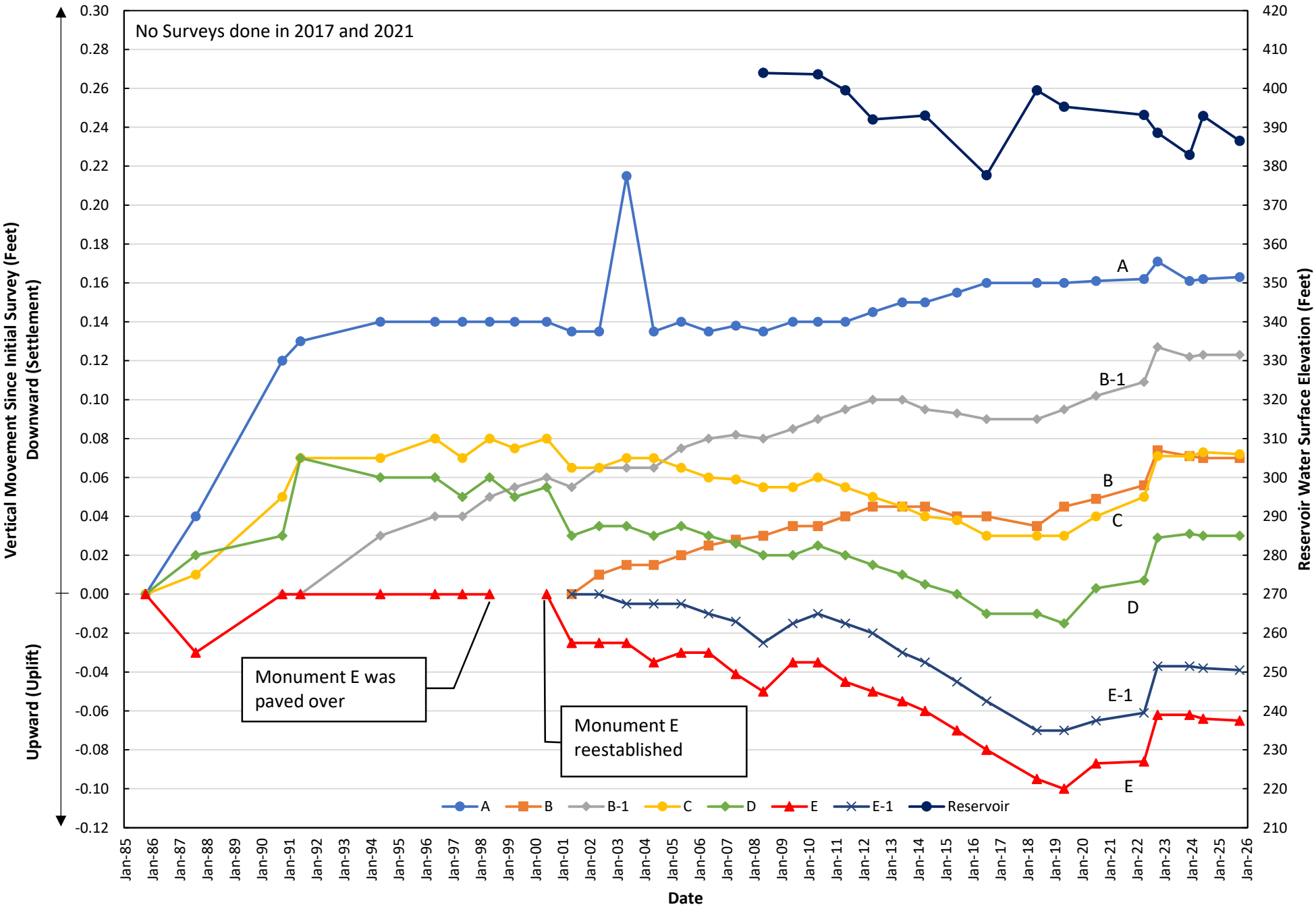


Figure 20
RATTLESNAKE CANYON DAM
HSTORICAL CUMULATIVE VERTICAL DISPLACEMENT
SURVEY MONUMENTS A, B, B-1, C, D, E, AND E-1
1985 THROUGH 2025



Appendix A

Inspection Photographs of Rattlesnake Canyon Dam – June 17, 2025

Photo 1) Downstream face looking towards right abutment from the middle bench.

Photo 2) Dam crest, downstream face, and upstream face looking towards right abutment.

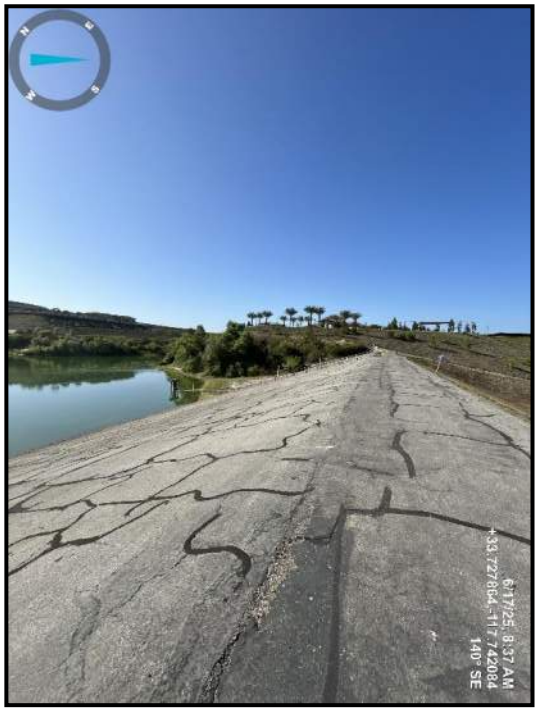


Photo 3) Dam crest, downstream face, and upstream face looking towards left abutment. Note minor cracking of AC liner.

Photo 4) Minor cracking and popout in crest AC liner.

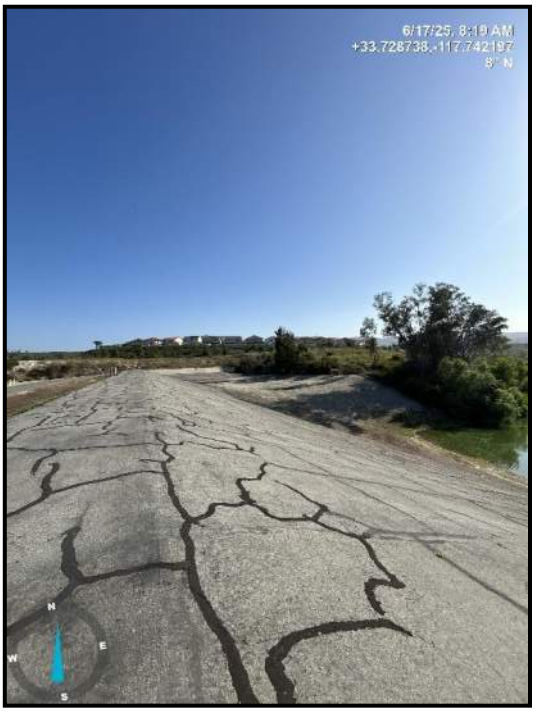


Photo 5) View of crest and upstream face of dam from the center of the dam.

Photo 6) Downstream face as viewed from right abutment access road.

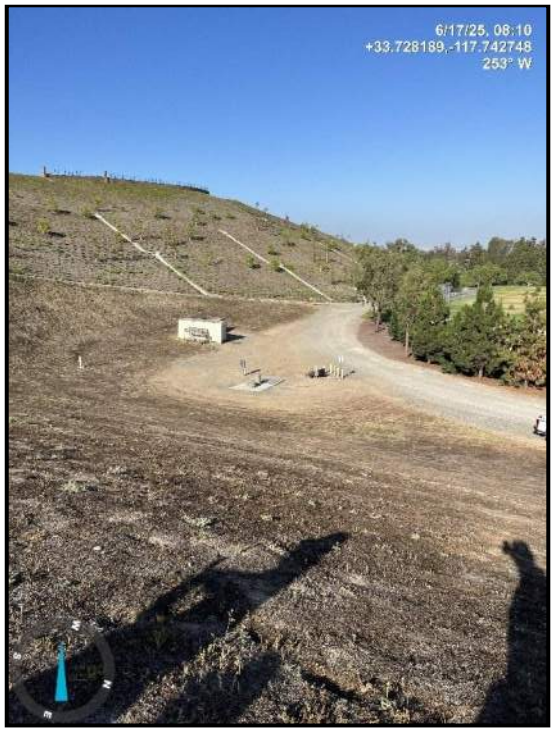


Photo 7) View along the left downstream face with view of the emergency blowoff valve.

Photo 8) Downstream face and toe as viewed from right abutment access road.

Photo 9) Rodent activity along right downstream face.

Photo 10) Taking reading at piezometer P-30A.

Photo 11) Recent repair of separation between AC pavement and spillway concrete liner joint.

Photo 12) Spillway side channel looking upstream. Note recent repair at the AC line approach and spillway contact.

Photo 13) Spillway channel looking upstream. Note trench concrete and adjacent cracking.

Photo 14) Spillway channel looking downstream. Note repairs of cracking on the right spillway wall and trench concrete in slab

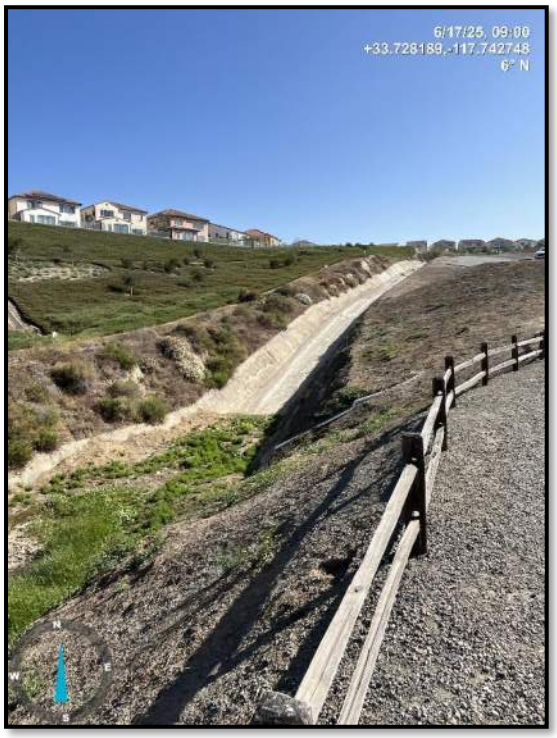


Photo 15) Spillway channel and stilling basin looking upstream. Note sediment and vegetation in stilling basin.

Photo 16) Downstream channel and seepage vault, looking downstream.

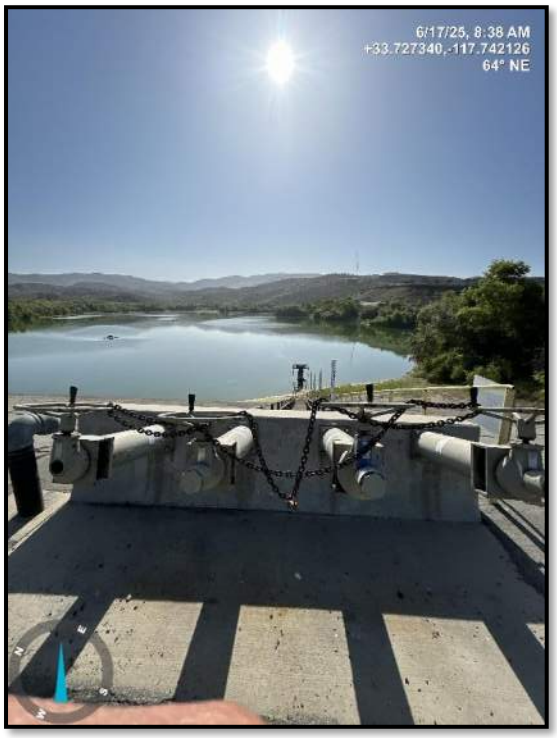


Photo 17) Upstream outlet valves.

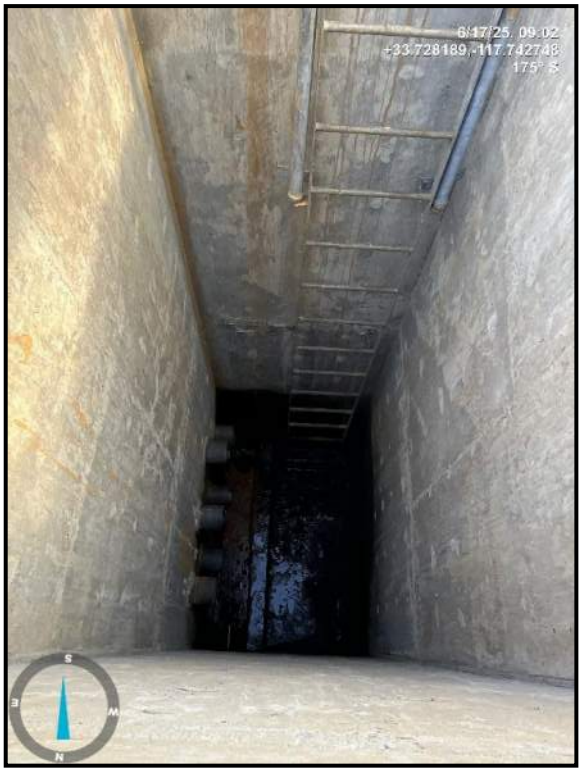


Photo 18) Seepage drain-pipe outfalls at the bottom of the seepage vault downstream of dam.

Photo 19) Seepage drain-pipe outfalls at the bottom of MH #1 downstream of dam.

Appendix B

IRWD Dam Outlet Valve Exercising Log

IRWD DAM OUTLET VALVE EXERCISING LOG

RATTLESNAKE CANYON DAM VALVE EXERCISING

DATE	INITIALS	30" TOP # OF TURNS(310) 390'	30" MIDDLE # OF TURNS(158) 384'	30" BOTTOM # OF TURNS(???) 375'	24" MAIN # OF TURNS(268) 369'	BLOW-OFF VALVE # 2	BLOW-OFF VALVE # 1	24" EMERGENCY VALVE FLOW (CFS)	TIME (MIN)	TOTAL GALLONS	REASON	COMMENT
5/7/2013		135	53	55	270	N/A	Not Turned			0		
4/22/2014		135	53	55	270	N/A	Not Turned			0		
4/20/2015		135	53	55	270	N/A	36			0	DSOD	
4/15/2016		135	53	55	270	N/A	Not Turned			0		
6/12/2016		135	53	55	270	N/A	36			0		
4/18/2017		135	53	55	270	N/A	36			0		
5/2/2018		135	53	55	270	N/A	Not Turned			0	DSOD	
8/14/2018		135	53	55	270	Installed; 36	36			0		
3/28/2019		135	53	55	270	36	36			0	DSOD	
1/14/2020		Not Turned	Not Turned	Not Turned	Not Turned	Not Turned	Not Turned			0	DSOD	
4/23/2020		135	53	55	270	36	36			0		
4/27/2021		135	53	55	270	36	36			0		
5/9/2022		135	53	55	270	36	36			0		
4/18/2023		135	53	55	270	36	36			0	DSOD	
11/6/2024	SH,AL,DQ	310	158	Broken	268	36	36			0	Inspection	Bottom valve
5/6/2025	SH,AL,NP	Not Turned	Not Turned	Not Turned	Not Turned	Not Turned	Not Turned			0	DSOD	Repair 10/2025
										0		
										0		
										0		
										0		
										0		

Appendix C

GUIDA Survey Report

GUIDA GEOSPATIAL SOLUTIONS

PAGE _____ of _____

CREW: _____ DATE: 1 2

GUIDA JOB NUMBER: JGROEN/R.Guida 2025-10-08

JOB DESCRIPTIONS: 0123-02577

RATTLESNAKE RESERVOIR

RESERVOIR MONITORING LAND SURVEYING NOTES

NAME	STATION	OFFSET	
BM-4	12+73.319		BRASS CAP IN WELL MONUMENT. HOLD FOR LINE
E-1	11+75.125	0.103'	0.003' HOLD STA.
E	11+74.708		
D	8+74.624	0.063'	
C	5+74.606	0.094'	
B-1	2+77.631	0.069'	
B	2+74.631	0.1118'	
		0.078'	
A	2+14.795		
BM3	1+96.770		HOLD FOR LINE BRASS DISC IN WELL MONUMENT

NOTES:

- A- REBAR/PUNCH MARK IN AC HOLE DN 0.20'
- B-E REBAR/PUNCH IN WELL MONUMENT
- E-1 PUNCH MARK ON RIM OF WELL MONUMENT

WEATHER CONDITIONS:
TEMP 62°
OVERCAST SKIES
HUMIDITY 86%
BAROMETRIC PRESSURE (INHG) 29.90
RESERVOIR WATER ELEVATION=386.5 +/-

INSTRUMENT SETUP

JOSHUA R. GROEN PLS 9753

GUIDA LEVEL NOTES

DATE: 2025-10-08

GUIDA JOB

CREW: J. GROEN/ R.GUIDA

NUMBER: 0123-02577

CLIENT NAME: IRWD

PROJECT NAME: IRWD ANNUAL DAM MONITORING

PROJECT LOCATION: RATTLESNAKE RESERVOIR

INSTRUMENT S/N: 759095

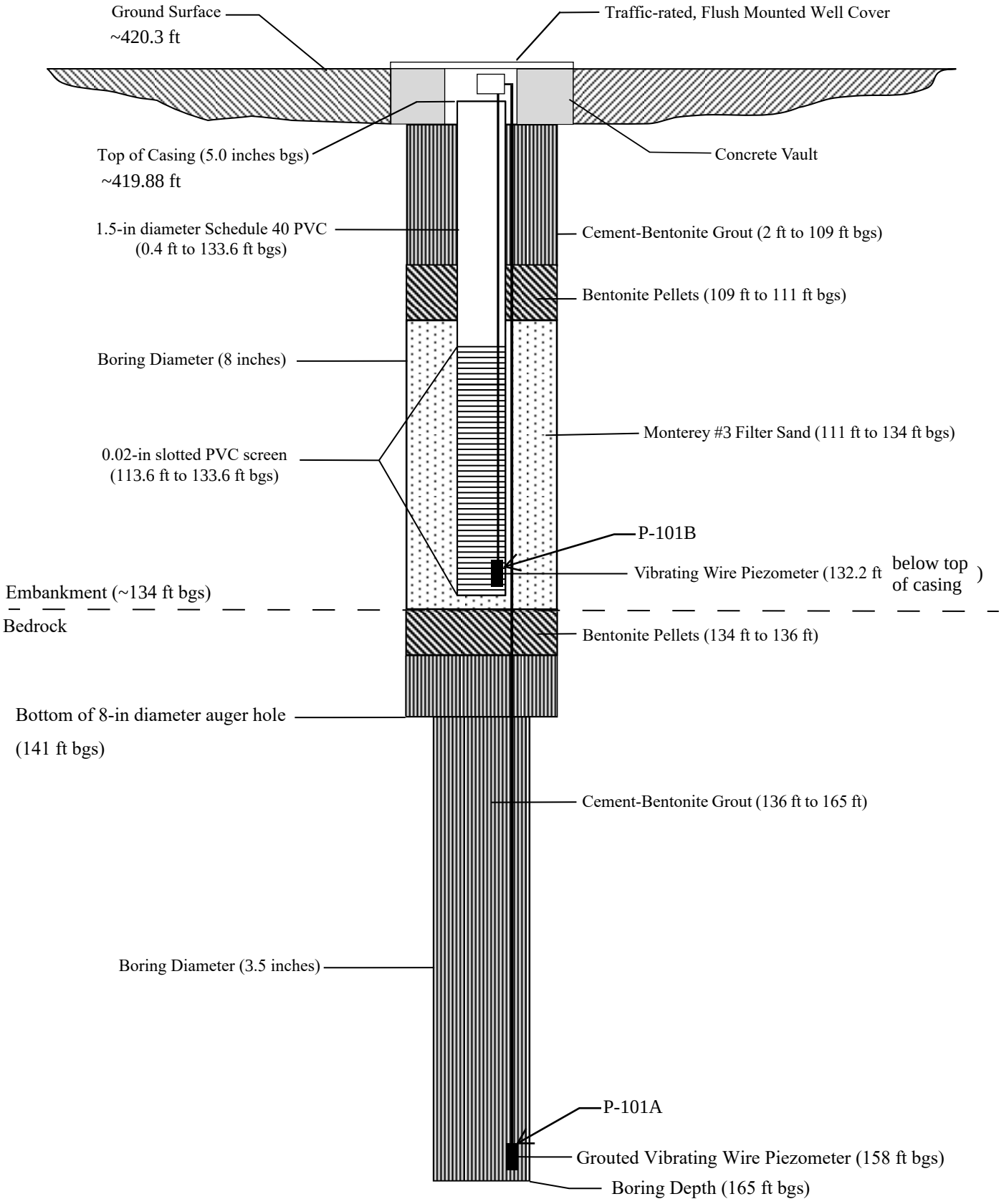
WEATHER	PRESSURE	TEMP
OVERCAST	29.9	62° F

STATION	BS	HI	FS	ELEV	ADJUSTED ELEVATION	DESCRIPTION/NOTES
BM3					420.005	
	6.313	426.318				
A			7.161	419.157	419.157	REBAR W/PUNCH IN AC
	4.164	423.321				
B			5.377	417.944	417.945	REBAR W/PUNCH IN AC
	5.462	423.406				AT PTS B THRU E
B1			5.550	417.856	417.857	
	5.177	423.033				
C			5.126	417.907	417.908	
	5.121	423.028				
D			4.779	418.249	418.250	
	5.398	423.647				
E			5.519	418.128	418.130	
	5.694	423.823				
E1			5.039	418.784	418.786	PUNCH ON WELL RIM
	4.937	423.721				
D			5.474	418.247	418.907	
	4.750	422.997				
C			5.092	417.905	417.907	
	5.070	422.974				
B			5.034	417.940	417.943	
	5.595	423.535				
BM3			3.534	420.002	420.005	

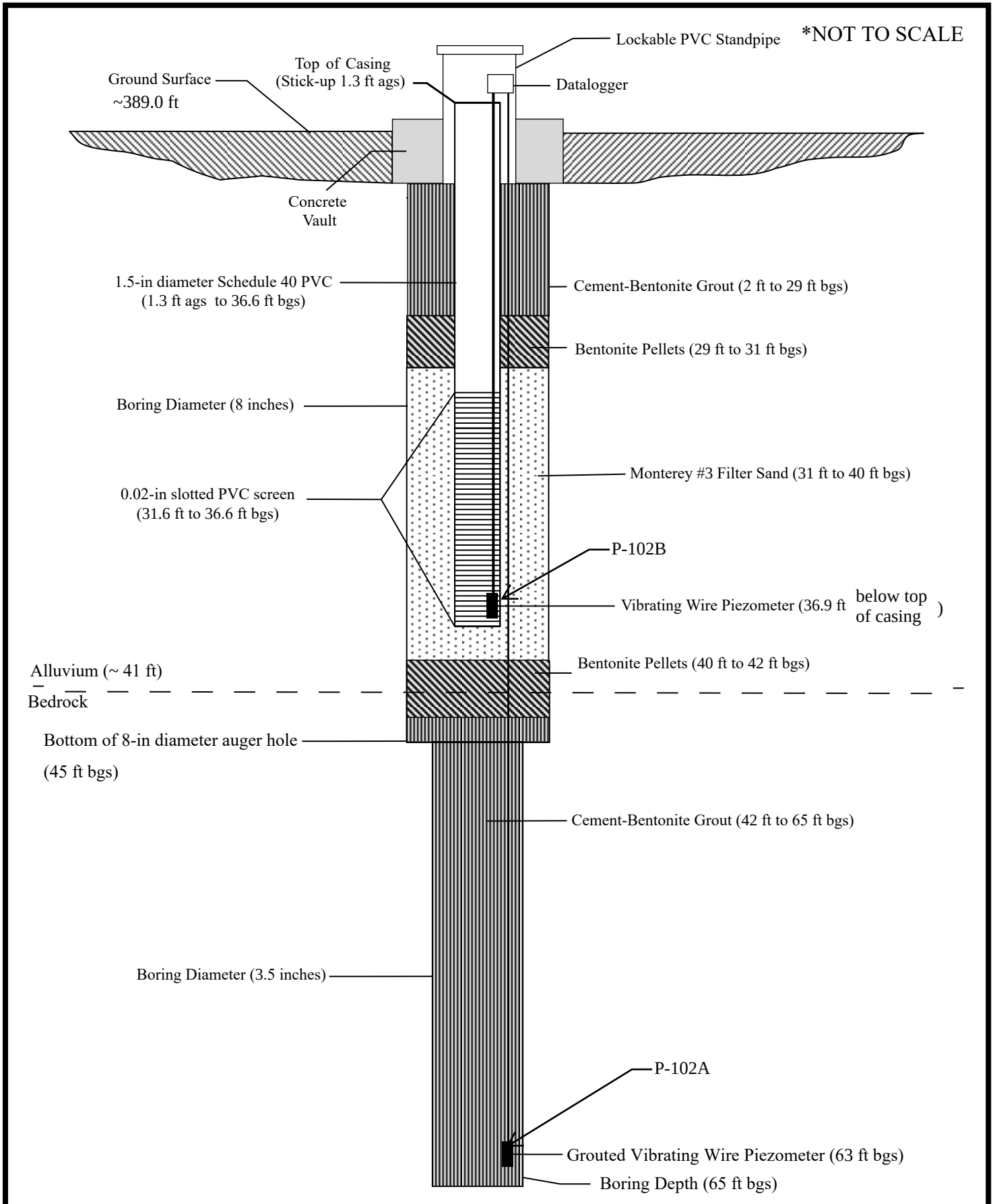
Appendix D

As-Built Well Details for P-101A/B and P-102A/B

*NOT TO SCALE



AECOM	As-built Well Details for P-101		Figure D-1
	Location: Rattlesnake Dam Irvine,CA	Date Installed: 10/7/23	



AECOM

As-Built Well Details for P-102

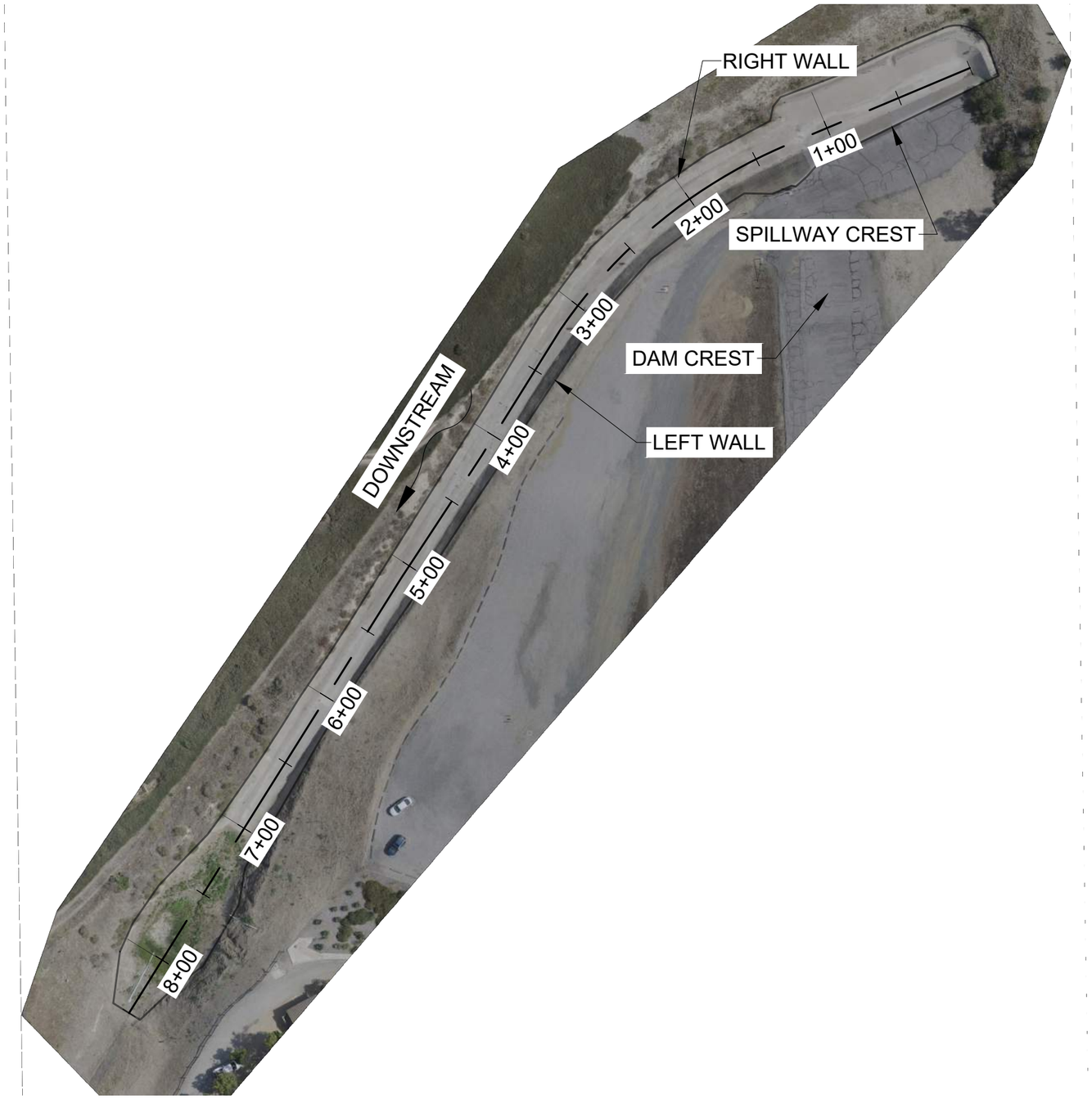
Location: Rattlesnake Dam Irvine,CA

Date Installed: 10/3/23

Figure
D-2

Appendix E

Spillway Inspection Exhibit



NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 PM.

0 80 160

SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

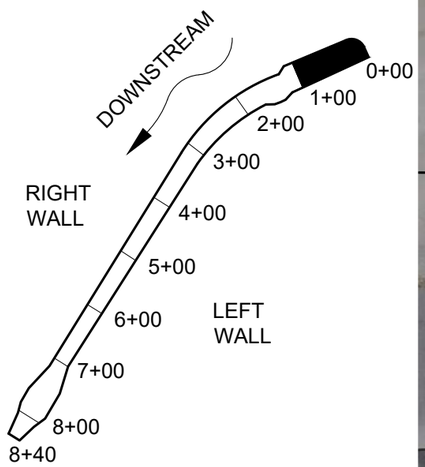
GEI Consultants

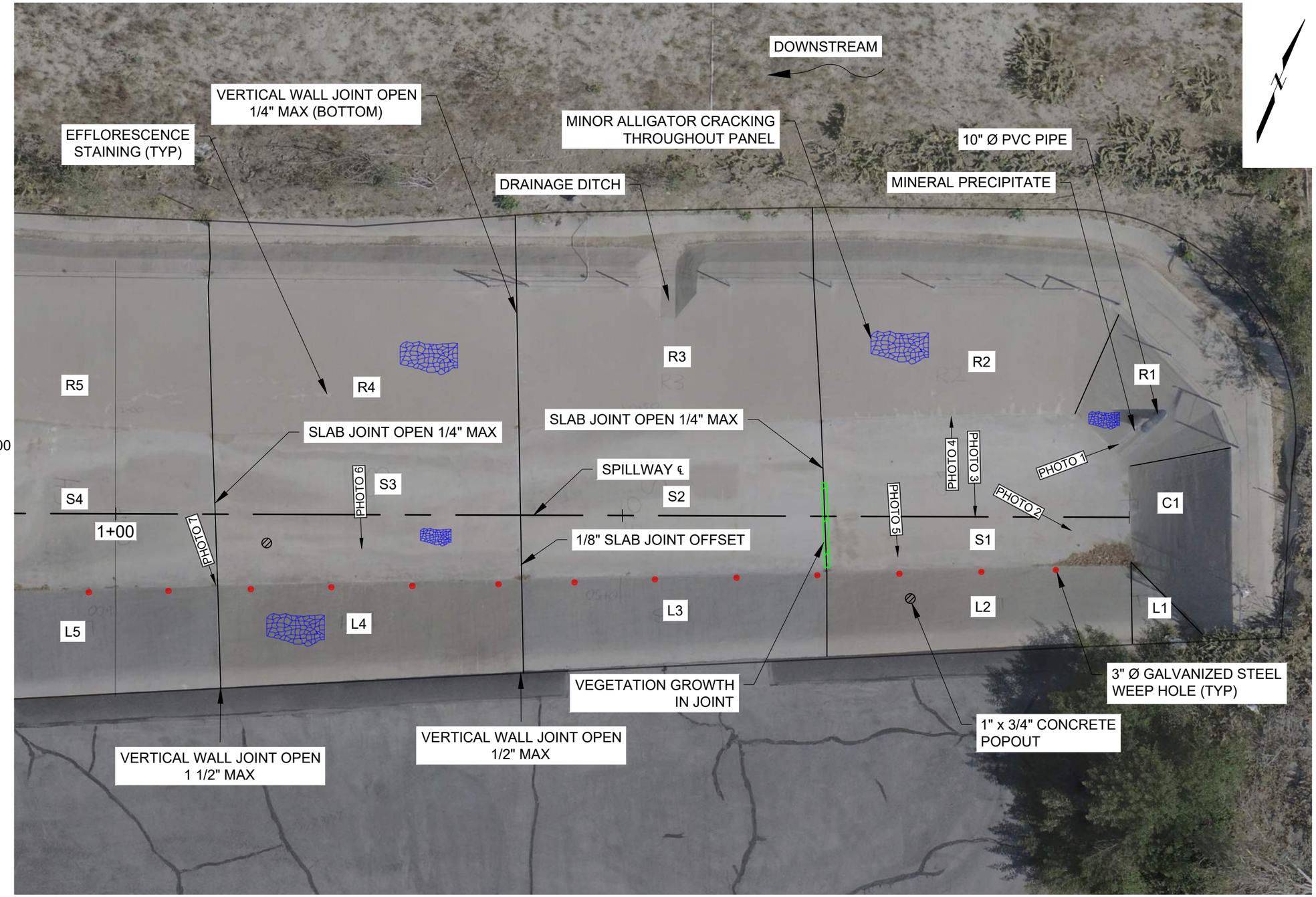
PLAN OVERVIEW

Project 2305575 | June 2025 | Fig. 1

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

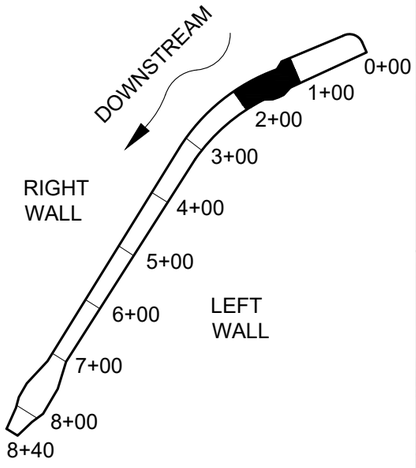
0 10 20
SCALE, FEET

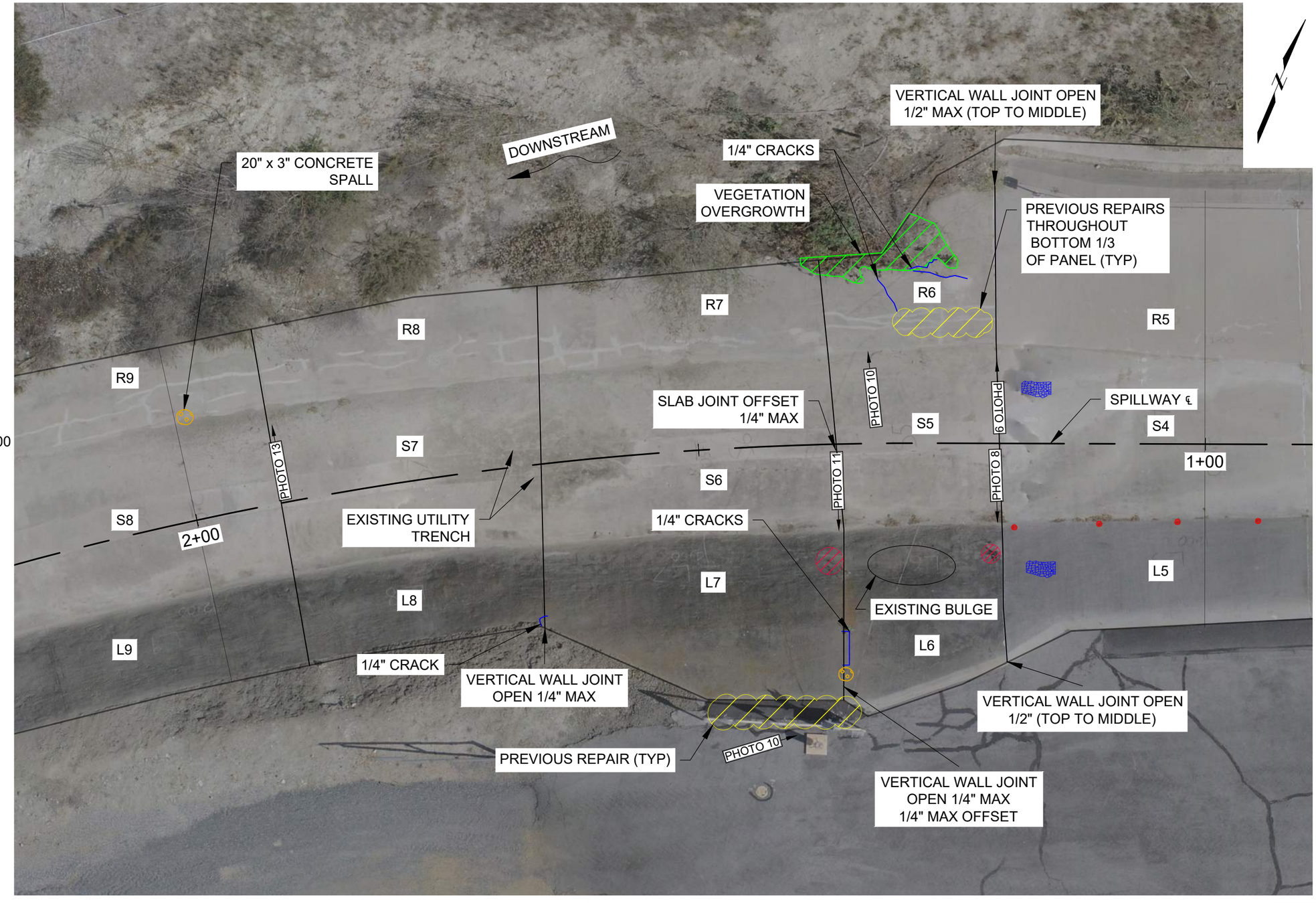
SPILLWAY INSPECTION RATTLESNAKE CANYON DAM IRVINE, CALIFORNIA	GEI Consultants SPILLWAY FLOOR AND WALLS STA 0+00 TO STA 1+00
IRVINE RANCH WATER DISTRICT IRVINE, CALIFORNIA	Project 2305575 · June 2025 · Fig. 2

SNYDER, ADAM B:\Working\IRVINE RANCH WATER DISTRICT\2305575 Three-Year Annual Dam Surveillance and Monitoring\00_CAD\Figures\2025 Spillway Inspections\2305575_Rattlesnake Canyon Spillway Inspection_EXHIBIT.dwg - 8/13/2025

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20

SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

GEI Consultants

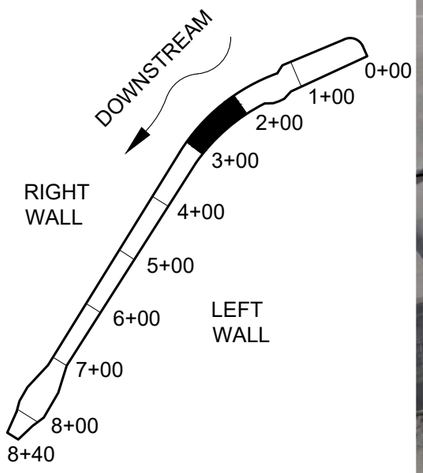
SPILLWAY FLOOR AND WALLS
STA 1+00 TO STA 2+00

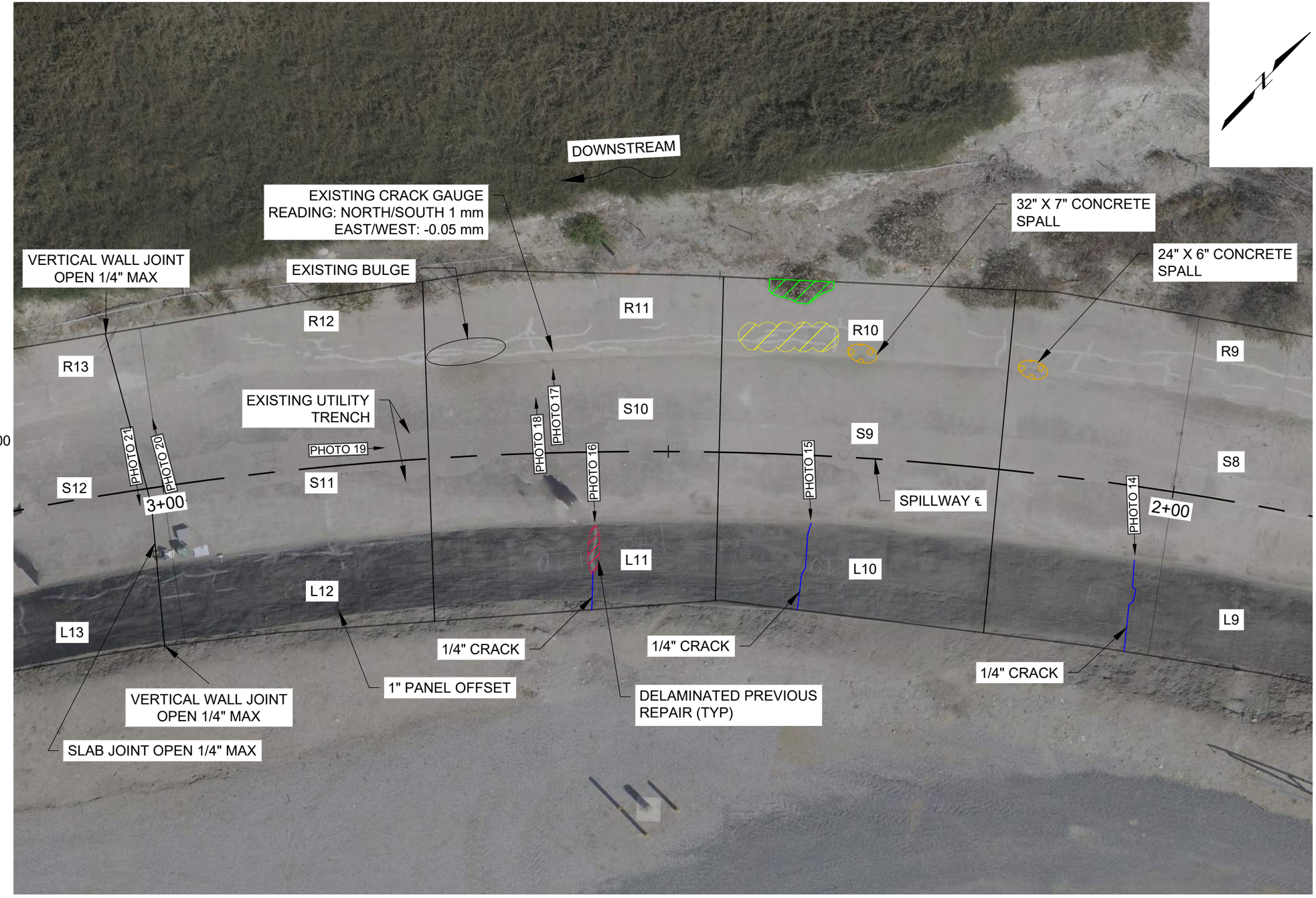
Project 2305575 | June 2025 | Fig. 3

SNYDER, ADAM B:\Working\IRVINE RANCH WATER DISTRICT\2305575 Three-Year Annual Dam Surveillance and Monitoring\00_CAD\Figures\2025 Spillway Inspections\2305575_Rattlesnake Canyon Spillway Inspection_EXHIBIT.dwg - 8/13/2025

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20

SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

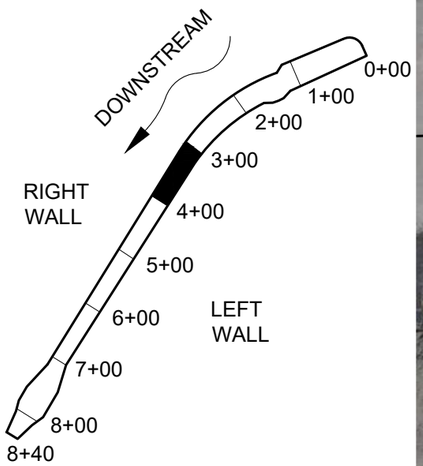
GEI Consultants

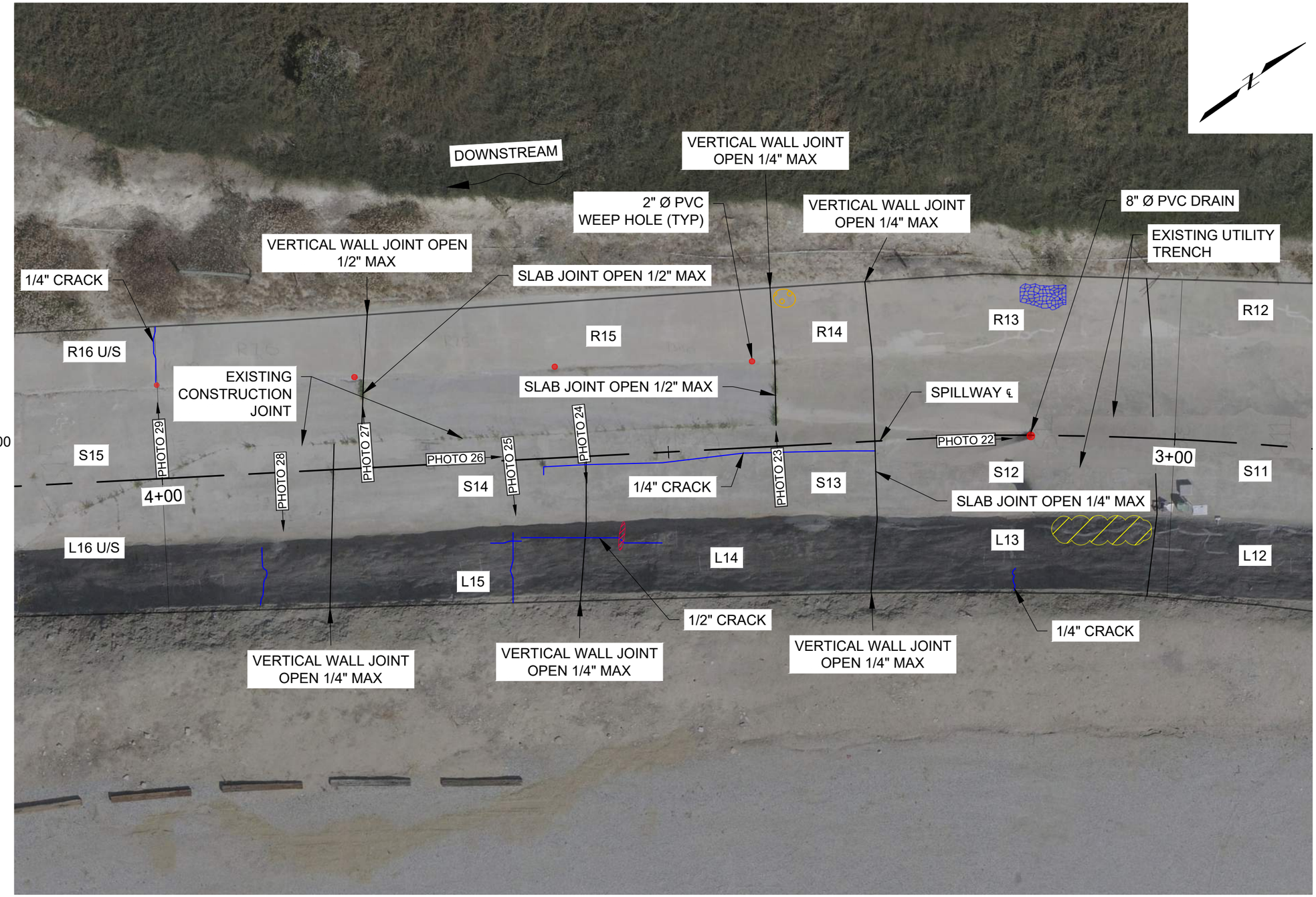
SPILLWAY FLOOR AND WALLS
STA 2+00 TO STA 3+00

Project 2305575 | June 2025 | Fig. 4

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20
SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

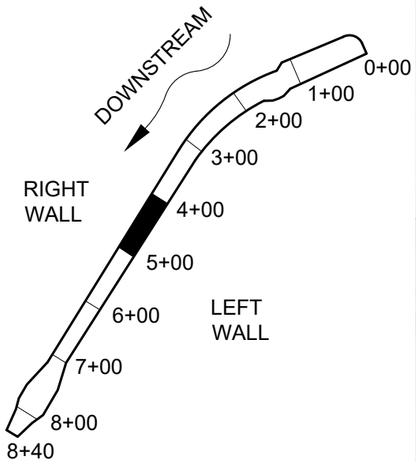
GEI Consultants

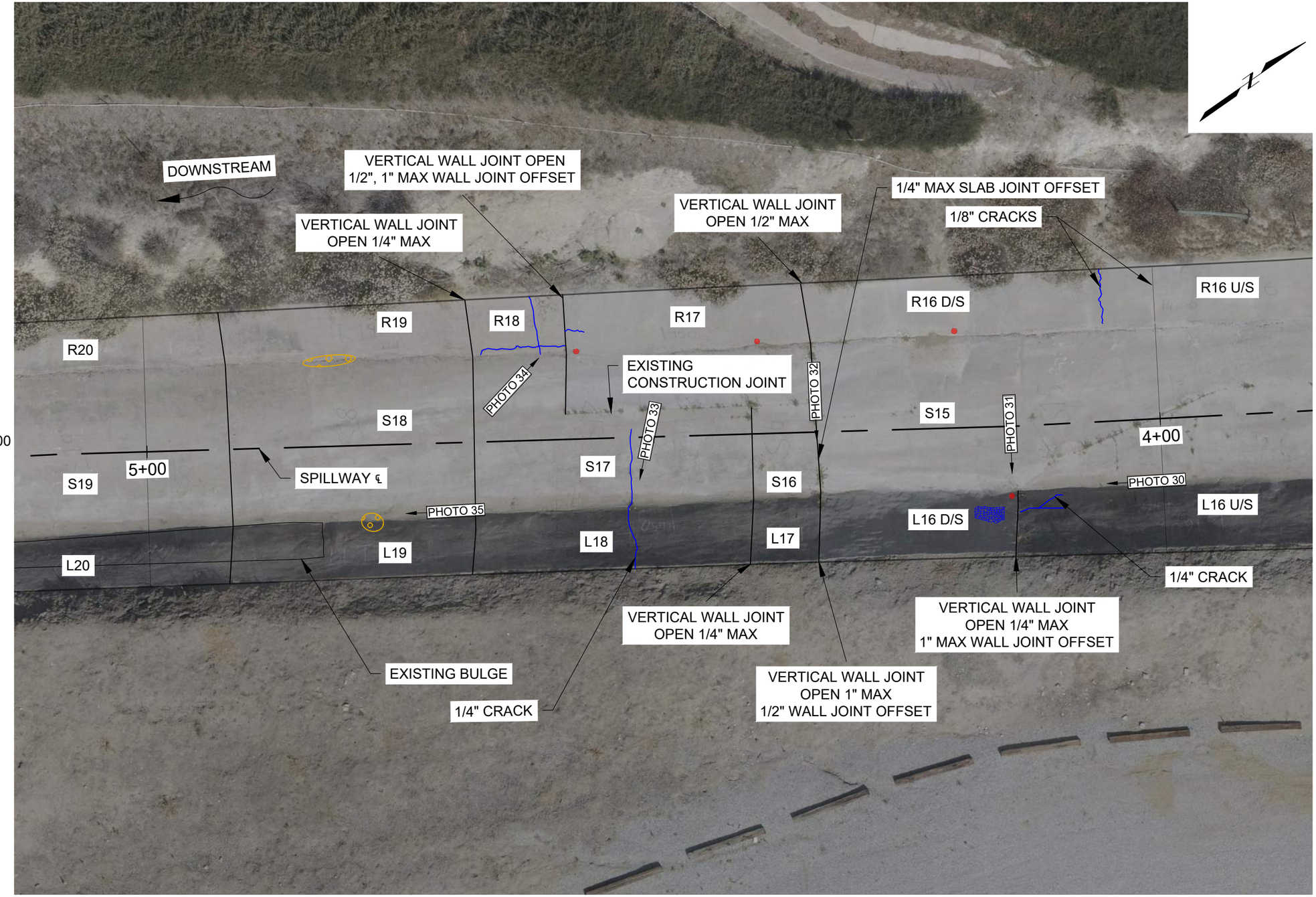
SPILLWAY FLOOR AND WALLS
STA 3+00 TO STA 4+00

Project 2305575 | June 2025 | Fig. 5

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20
SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

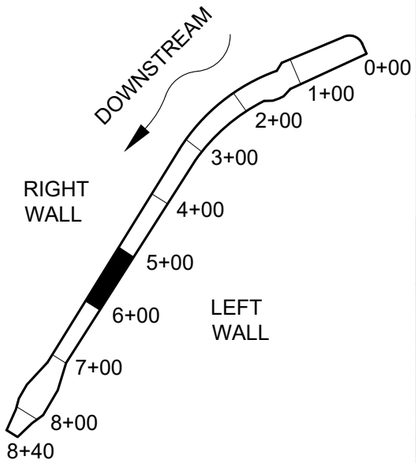
GEI Consultants

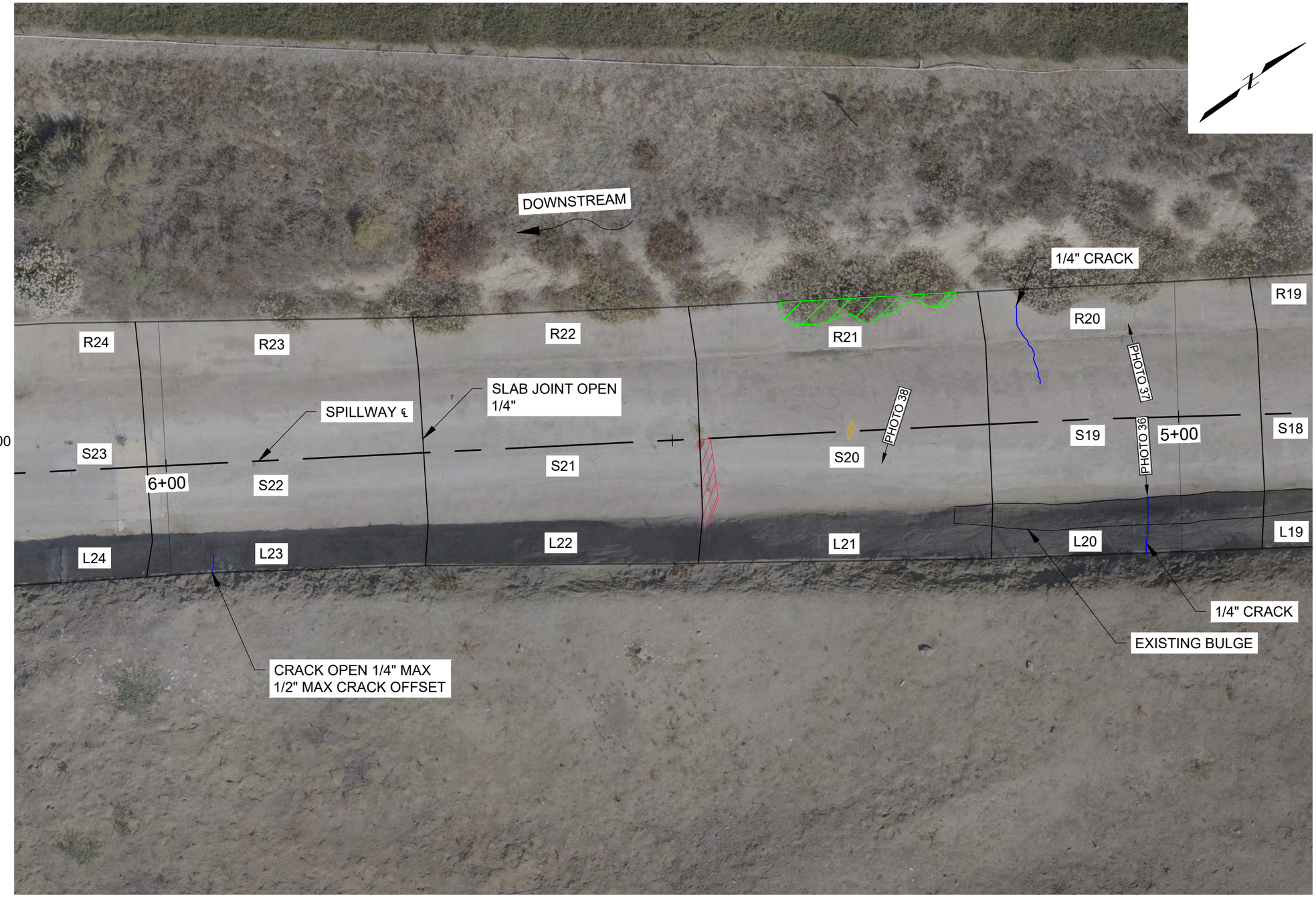
SPILLWAY FLOOR AND WALLS
STA 4+00 TO STA 5+00

Project 2305575 | June 2025 | Fig. 6

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20
SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

GEI Consultants

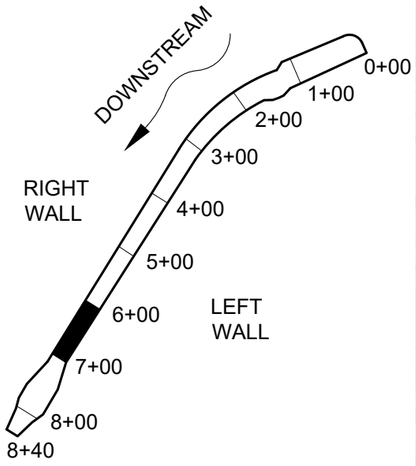
Project 2305575

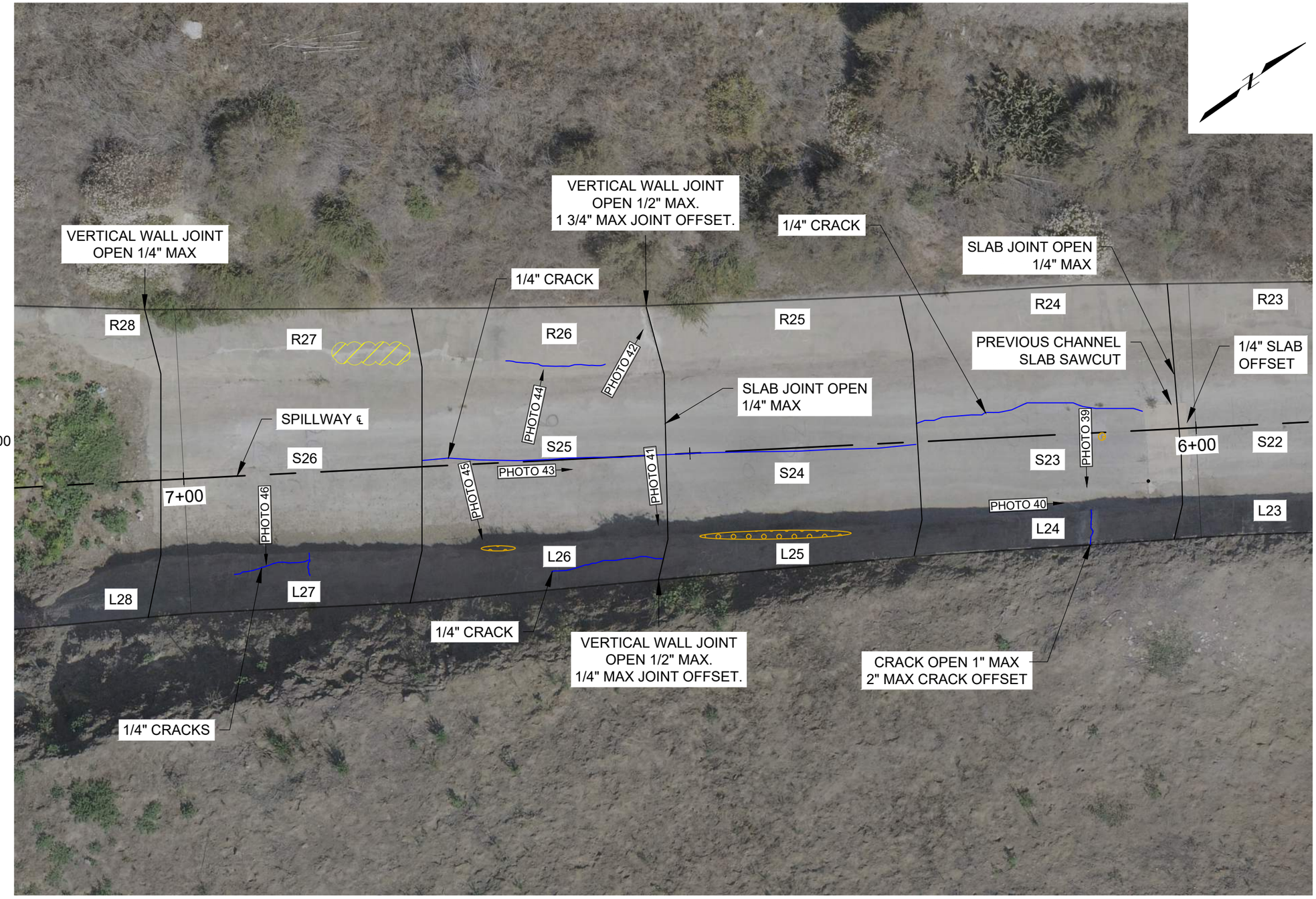
SPILLWAY FLOOR AND WALLS
STA 5+00 TO STA 6+00

June 2025 Fig. 7

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS





NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20
SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

GEI Consultants

SPILLWAY FLOOR AND WALLS
STA 6+00 TO STA 7+00

Project 2305575 | June 2025 | Fig. 8

LEGEND:

- CONCRETE SPALL
- PREVIOUS REPAIR
- DELAMINATED PREV. REPAIR
- CONCRETE POPOUT
- DEBRIS / VEGETATION
- CRACKING
- EXISTING DRAIN
- PHOTO 2 — PHOTO REFERENCE
- L1, R1, C1 — WALL PANEL NUMBER
- ALLIGATOR CRACKING
- SPILLWAY JOINTS

NOTES:

1. ORTHOMOSAIC COMPILED FROM IMAGERY CAPTURED ON 6/17/2025 FROM APPROXIMATELY 8:00 AM TO 11:00 AM.

0 10 20

SCALE, FEET

SPILLWAY INSPECTION
RATTLESNAKE CANYON DAM
IRVINE, CALIFORNIA

IRVINE RANCH WATER DISTRICT
IRVINE, CALIFORNIA

GEI Consultants

Project 2305575

SPILLWAY FLOOR AND WALLS
STA 7+00 TO STA 8+40

June 2025 Fig. 9

SNYDER, ADAM B:\Working\IRVINE RANCH WATER DISTRICT\2305575 Three-Year Annual Dam Surveillance and Monitoring\00_CAD\Figures\2025 Spillway Inspections\2305575_Rattlesnake Canyon Spillway Inspection_EXHIBIT.dwg - 8/13/2025

Appendix F

Spillway Inspection Photographs – June 17, 2025

6/17/2025 Spillway Inspection

Photo 1) Wall panel R1. Note 10" PVC pipe and mineral precipitate.

Photo 2) Wall panel C1 and L1. Note debris.

Photo 3) Wall panel L2. Note weep holes.

Photo 4) Alligator cracking throughout panel R2. Note efflorescence staining.

Photo 5) Typical 3”diameter weep hole. Note concrete popout.

Photo 6) Minor alligator cracking and efflorescence staining throughout panel L4.

Photo 7) Vertical wall joint open ½" max between wall panels L4 and L5.

Photo 8) Vertical wall joint open ½" top to middle between wall panels L5 and L6. Note previous concrete repair and plant growth.

Photo 9) Vertical wall joint open ½" top to middle between wall panels R5 and R6. Note previous concrete repairs and 1/4" cracks.

Photo 10) Previous repairs throughout panel R6. Note ¼" cracks and vegetation covering top of panel.

Photo 11) Vertical wall joint open ¼" max between wall panels L6 and L7. Note previous concrete repair and ¼" cracks. Concrete spall at top of joint with plant.

Photo 12) Previous repairs of spillway wall and dam crest separation (Typ).

Photo 13) Previous concrete repairs throughout wall panels R8 and R9. 20”x 3”. Note concrete spall and debris.

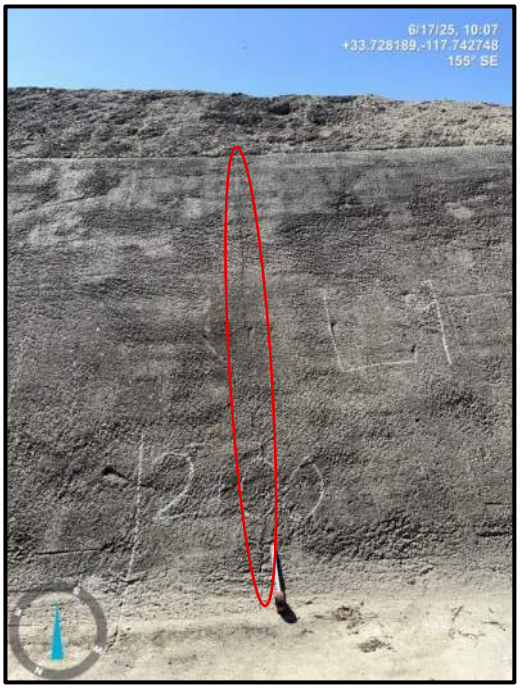


Photo 14) ¼”crack from top to bottom of wall panel L9.

Photo 15) ¼" crack from top to bottom of wall panel L10.

Photo 16) Delaminated previous repair and ¼" crack at wall panel L11.

Photo 17) Existing crack gauge along crack at wall panel R11. Reading: North/South 1.00 mm and East/West -0.05 mm.

Photo 18) Existing bulge along wall panel R11. Note previous concrete repairs throughout bottom 1/3 of panel.

Photo 19) View of spillway and existing utility trench looking upstream. Note cracks along trench construction joints.

Photo 20) Vertical wall joint open ¼" max between wall panels R12 and R13. Note previous concrete repair.

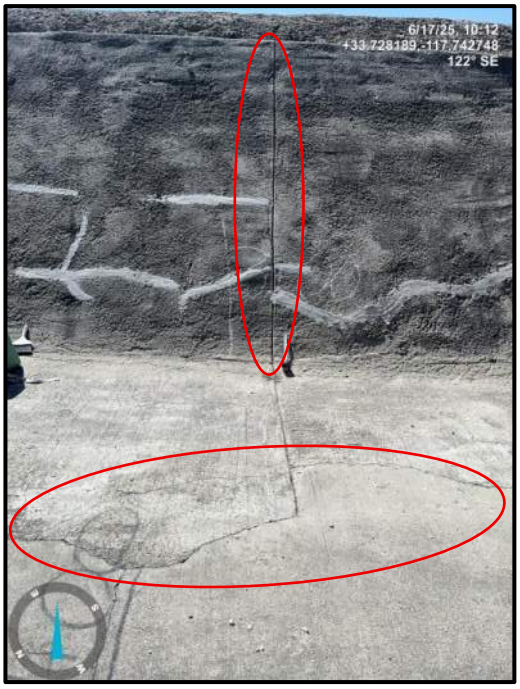


Photo 21) ¼" max slab joint opening and vertical wall joint opening at wall panels L12 and L13. Note utility trench construction joints.

Photo 22) Existing 8" diameter spillway subdrain. Looking upstream.

Photo 23) Vertical wall joint open ¼" max between wall panels R14 and R15 with 1" offset. Slab joint open ½" max. Note concrete spall and cracks on wall panel R14, and vegetation growth along existing construction joint.

Photo 24) Vertical wall joint open ½" max between wall panels L14 and L15. Note ½" transverse crack, concrete spalling, and previous repair.

Photo 25) ½" longitudinal and transverse cracks along wall panel L15.

Photo 26) Existing trench from previous spillway channel repairs looking upstream. Note cracks and vegetation along construction joints.

Photo 27) Vertical wall joint open ½" max between wall panels R15 and R16. Note slab joint open ½" max and vegetation in joint.

Photo 28) ¼" longitudinal and transverse cracks on panel L16. Note recent concrete repair.

Photo 29) ¼" crack at panel R16. Note 2" diameter PVC weep hole.

Photo 30) Vertical wall joint open ¼" max with 1" joint offset between wall panels L16 US and L16 DS. Note alligator cracking throughout panel.

Photo 31) Vertical wall joint open ¼" max with 1" joint offset between wall panels L16 US and L16 DS. Note ½" transverse crack and vegetation.

Photo 32) Vertical wall joint open 1" max with ½" joint offset between wall panels L16 DS and L17. Note vegetation.

Photo 33) ½" transverse crack from top to bottom of wall panel L18.

Photo 34) Vertical wall joint open ½" max with 1" joint offset between wall panels R17 and R18. Note longitudinal and transverse cracks.

Photo 35) Bulge along wall panels L19, L20, and L21.

Photo 36) ¼" longitudinal crack on wall panel L20.

Photo 37) ¼" longitudinal crack on wall panel R20.

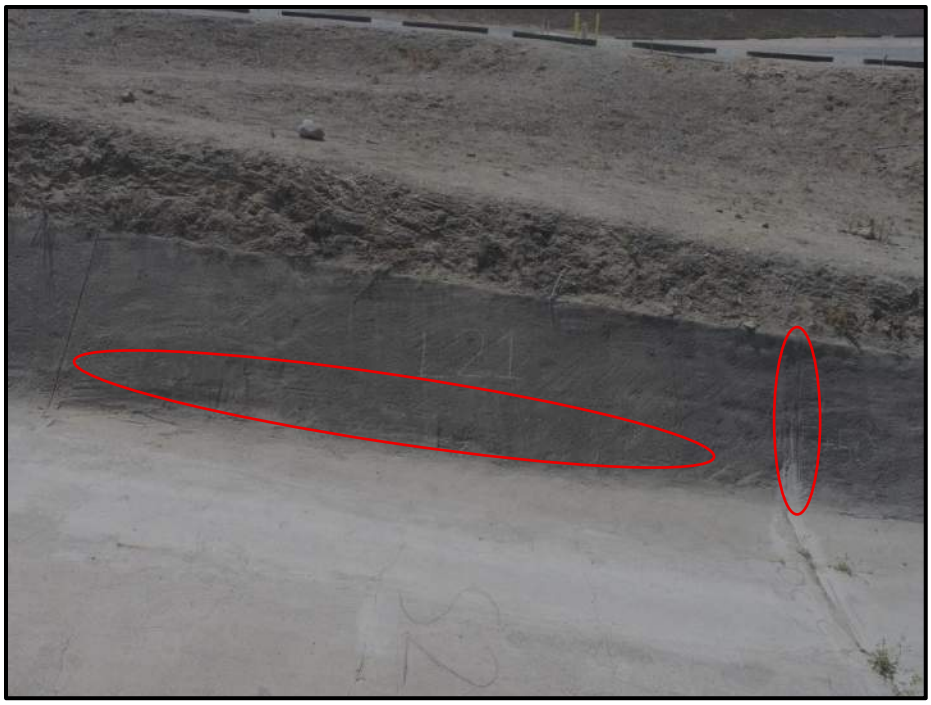


Photo 38) Bulge along wall panel L21. Note wall joint open ¼" max between wall panels L21 and L22.

Photo 39) Crack open 1” max with 2” offset at wall panel L24.

Photo 40) Crack open 1” max with 2” offset at wall panel L24.

Photo 41) Vertical wall joint open ½" max with ¼" joint offset between wall panels L25 and L26. Note ½" transverse crack.

Photo 42) Vertical wall joint open ½" max with 1 ¾" joint offset between wall panels R25 and R26. Note vegetation growth.

Photo 43) ¼ ” longitudinal and transverse cracks along spillway floor.

Photo 44) ¼” transverse crack on wall panel R26.

Photo 45) Concrete spall and ¼" longitudinal crack on wall panel L26. Note debris.

Photo 46) Concrete spall and ¼" transverse crack on wall panel L27.

Photo 47) View of spillway stilling basing looking downstream. Note vegetation and sediment.

Photo 48) Vertical wall joint open ½" max with 1 ½" joint offset between wall panels R28 and R29. Note vegetation growth and ½" transverse cracks.

Photo 49) View of spillway stilling basin looking upstream. Note vegetation and sediment.

Appendix G

Piezometer Cleaning Report – Confluence Environmental (2024)

Meter Calibration Log

EQUIPMENT MAKE	EQUIPMENT MODEL	SERIAL NUMBER	DATE	TIME	TEMP OF CALIBRATION STANDARD (°C or °F)	pH STANDARD 4	pH STANDARD 7	pH STANDARD 10	SPECIFIC CONDUCTANCE 1413 µS/cm	ORP _____ mV	DISSOLVED OXYGEN _____ mg/L or %
YSI	Pro Plus	402	6/17	0600	19.3	4.00	7.00	10.00	1413	-	-
			6/18	0600	19.8	4.00	7.00	10.00	1413	-	-
			6/19	0600	20.2	4.00	7.00	10.00	1413	-	-
			6/20	0600	19.7	4.00	7.00	10.00	1413	-	-
YSI	Pro +	948	6/20	0615	19.9	4.00	7.00	10.00	1413	-	-

Site: Rattlesnake Dam

Technician: LK

ORP Values (degrees in C then value): 5:257.0 10:250.5 15:244.0 20:237.5 25:231.0 30:224.5 35:218.0 40:211.5

Water Level Measurements

Job Number: TA1-240617 Date: 6/17/24

Site: Rattlesnake Dam Client: IRWD

Well I.D.	Time	Dia	Depth to NAPL	Thickness of NAPL	Depth to water (DTW)	Total Depth (measured)	Total Depth (historical)	Ref Point TOC/TOB		
P-2	0815	1"	-	-	dry	13.70	-	TOC		
P-30A	0822	1"	-	-	dry	37.32	-	TOC		
P-63	0830	2"	-	-	57.78	70.70	-	TOC		
OW-3	0900	2"	-	-	27.98	32.49	-	TOC		
P-35B	820	1"	-	-	48.28	74.79	-	TOC		
P-64	0831	2"	-	-	44.50	76.44	-	TOC		
P-66	0837	2"	-	-	21.99	50.65	-	TOC		

Confluence Environmental, Inc. 3308 El Camino Ave, Suite 300 #148, Sacramento CA, 95821, 916-760-7641

Esteban 909 767 5197

Development Data Sheet

Job#: TAF 240617	**Developer:** CW	**Client:** IRWD
Well ID: OW-3	**Date:** 6/18/24	**Site:** Rattlesnake Dam
Well diam: 1" (2)	**DTW:** 27.98	**TD Before:** 32.49 **TD After:** 32.52
Purge equip: Non-Bladder Bladder Peri Waterra (Positive Air Displacement) disp bailer teflon bailer other:		
Length of time swabbed prior to development: 10 Min		
Pump depth/ intake: MS	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 0.72 X 10 = 7.2 (Total Purge) Meter(s):

Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal) or mL/min)	Volume Removed (gal / L)	DTW	Notes (Chlorsafe added)
0745	17.3	7.43	2213	7	-	1	27.98	Chlorsafe not yet added.
0800	Finished Swab / added 1 Liter DI with Chlorsafe							
0803	started 2nd Swab						27.46 ~~28.46~~	
0823	Finished 2nd Swab						27.46 ~~28.46~~	
1109	Added 1 Liter of DI with more chlorsafe / started swabbing							
1134	Finished 3rd Swab						27.28	
06/20 0957	start purge				.125	—	27.05	
1003	25.9	7.67	2364	111	.125	0.75	28.08	
6 min 1009	25.4	7.60	2336	234	.125	1.50	28.10	
1015	24.8	7.79	2304	47	.125	2.25	28.17	
1021	24.9	7.83	2195	1000	.125	3.00	28.18	
1027	25.1	7.81	2311	817	.125	3.75	28.19	
1033	25.0	7.84	2232	445	.125	4.50	28.21	
1039	26.0	7.47	2297	207	.125	5.25	28.23	
1045	27.5	7.52	2374	82	.125	6.00	28.23	
1051	27.8	7.65	2292	130	.125	6.75	28.24	
1057	26.4	7.53	2309	84	.125	7.50	28.24	
1103	26.1	7.48	2296	60	.125	8.25	28.26	
1109	26.3	7.46	2304	40	.125	9.00	28.25	

Development Data Sheet

Job#: TAI-240617	**Developer:**	**Client:** IRWD
Well ID: OW-3	**Date:** 6/20/24	**Site:** Rattlesnake Dam
Well diam: 1" (2")	**DTW:** 27.85	**TD Before:** 32.99 **TD After:** 32.52
Purge equip: Non-Bladder Bladder Peri Waterra (Positive Air Displacement) disp bailer teflon bailer other:		
Length of time swabbed prior to development: 10 min		
Pump depth/ intake: MS	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 0.72 X 10 = 7.2 (Total Purge) Meter(s):

Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DTW	Notes (Chlorsafe added)
1115	26.3	7.47	2340	17	.125	9.75	28.26	
1121	26.4	7.46	2332	6	.125	10.50	28.26	
				development finished				

Development Data Sheet

Job#: TA1-240617	**Developer:** T.Allen	**Client:** IRWD
Well ID: P-2	**Date:** 6/17/24	**Site:** Rattlesnake Dam
Well diam: (1") 2"	**DTW:** -	**TD Before:** 13.70 **TD After:** 13.70
Purge equip: Non-Bladder Bladder Peri Waterra Positive Air Displacement		
disp bailer teflon bailer other:		
Length of time swabbed prior to development:		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius^2 X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = - X **10** = - (Total Purge) Meter(s): _____

	Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	DTW	Notes (Chlorsafe added)	
	1130	—	started	1st swab,	finished @	1150				
		—	observed	"likely	potassium	permanganate"	on swab			
	1155	—	added 1	liter of	DI water	to well				
	1200	—	started 2nd	swab,	finished @	1225				
	1230	—	added	chlorsafe	to well.					
	1234	—	started 3rd	swab,	finished @	1250				
6/18	1310	—	added	0.5 liter	of DI	water		DTW 7.67		
	1315	—	started 4th	swab,	finished @	1325				
6/19	0945	20.7	6.24	2124	764	200	-	10.42	started purge/ initial parameters	"orange in color"
	0950	21.5	6.54	1720	461	200	1.0	dry	added 1 liter of DI	
	0958	21.7	6.65	974	101	200	2.0	dry	started purge @ 0953 added 1 liter of DI	"pink in color"
	1008	21.7	6.72	211	37	200	3.0	dry	started purge @ 1003 added 1 liter of DI	
	1018	21.9	6.89	6.2	21	200	4.0	dry	started purge @ 1013 added 1 liter of DI	
	1027	22.0	7.07	4.1	7	200	5.0	dry	started purge @ 1022 added 1 liter of DI	"light pink in color"
	1039	21.7	7.22	2.3	4	200	6.0	dry	started purge @ 1034	
	1040	development		complete						

Development Data Sheet

Job#: TAI-240617	**Developer:** T. Allen	**Client:** IRWD
Well ID: P-30A	**Date:** 6/17/24	**Site:** Rattlesnake Dam
Well diam: (1") 2"	**DTW:** -	**TD Before:** 37.32 **TD After:** 37.35
Purge equip: Non-Bladder Bladder Peri Waterra Positive Air Displacement		
disp bailer teflon bailer other:		
Length of time swabbed prior to development:		
Pump depth/ intake:	**Multipliers:** (1"= 0.04) 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = - X 10 = - (Total Purge) Meter(s):

	Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or (mL)/min)	Volume Removed (gal / (L))	DTW	Notes (Chlorsafe added)
	0930	—	started	1st swab					
	0950	—	finished 1st swab						
	0955	—	added 3.5 liters of DI water to well						
	1005	—	started 2nd swab, finished @ 1030						
	1040	—	added chlorsafe						
	1045	—	started 3rd swab, finished @ 1100						
6/18	1245	—	added 1.0 liter of DI water					16.91	DTW
	1250	—	started 4th swab, finished @ 1305						
6/19	0800	19.9	5.79	1412	71000	400	-	-	started purge
	0805	22.0	5.88	1330	243	400	2.0	dry	added 2 liters
	0815	—	added 2.0 liters of DI water						
	0830	21.7	6.06	2727	71000	400	4.0	dry	Start purge @ 0825
	0835	—	added 2.0 liters of DI water						Start purge @ 0842
	0847	20.5	6.19	7.9	47	400	6.0	dry	added 2 liters
	0905	21.7	6.64	5.0	5	400	8.0	dry	start purge @ 0900
	0917	21.4	7.01	4.3	4	400	10.0	dry	added 2 liters DI start purge @ 0912
	0929	21.8	7.13	3.7	4	400	12.0	dry	added 2 liters DI start purge @ 0924

0930 development completed

Development Data Sheet

Job#: TAI-240617	**Developer:** L. Kiesel	**Client:** IRWD
Well ID: P-35B	**Date:** 6/17/24	**Site:** Rattlesnake Dam
Well diam: (1") 2"	**DTW:** 48.28	**TD Before:** 74.79 **TD After:** 74.83
Purge equip: Non-Bladder Bladder Peri Waterra (Positive Air Displacement) disp bailer teflon bailer other:		
Length of time swabbed prior to development: 10 Min.		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 1.06 X 10 = 10.6 (Total Purge) Meter(s):

	Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal) L)	DTW	Notes (Chlorsafe added)
	1047	18.6	7.19	1612	37.1	—	—	48.28	Chlorsafe not yet added.
	1109	Finished Swabbing well						49.00	
	1112	Added 1 Liter of DI with Chlorsafe / Began Swabbing again							
	1133	Finished 2nd Swab						48.62	
	1308	Started Swabbing							
	1338	Finished 3rd Swab						48.63	
6/18	1031	Added 1 Liter of DI with more Chlorsafe / swabbed for 10 Min.							
6/19	1240	Started Purge				0.125	-	48.63	
	1249	14.2	6.87	1615	>1000		1.125		
	1257	14.1	6.98	1621	573		2.125		
	1306	14.4	7.26	1609	106		3.25		
	1314	14.1	7.27	1613	46		4.25		
	1323	14.3	7.27	1608	39		5.25		
	1332	14.3	7.27	1616	30		6.50		
	1340	14.2	7.26	1620	13		7.50		
	1348	14.1	7.26	1617	9		8.50		
	1357 ~~1354~~	14.0	7.26	1620	9		9.625		
	1405 ~~1408~~	13.9	7.26	1616	9		10.625	50.16	
		Devtlopmet Complete							

Development Data Sheet

Job#: TN-240617	**Developer:** L. Kiesel	**Client:** IRWD
Well ID: P-64	**Date:** 6/17/24	**Site:** Rattlesnake Dam
Well diam: 1" (2")	**DTW:** 44.50	**TD Before:** 76.44 **TD After:** 76.77
Purge equip: Non-Bladder Bladder Peri Waterra (Positive Air Displacement) disp bailer teflon bailer (other: 2" DC)		
Length of time swabbed prior to development: 10 Min.		
Pump depth/ intake: MS	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 5.11 X 10 = 51.1 (Total Purge) Meter(s):

	Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal) (L)	DTW	Notes (Chlorsafe added)
	0940	18.9	7.50	1480	15.4	-	1 L.	44.50	Chlorsafe not yet added. Strong odor
	1003	Finished swabbing well						43.56	
	1006	Added 1 Liter of DI with Chlorsafe / Began swabbing again							
	1036	Finished 2nd Swab						43.31	
	1232	Started Swabbing							
	1303	Finished 3rd Swab						44.19	
6/18	1015	Added 1 Liter of DI with more Chlorsafe /							swabbed for 10 Min
6/19	0801	Started Purge				2	0	44.19	started with DC Pump
	0804	13.5	5.79	1383	51		6	46.71	
	0807	13.3	5.86	1401	34		12	51.43	
	0809	13.5	5.99	1391	30		16	55.37	
	0812	13.3	6.38	1394	31		22	59.20	
	0816	13.8	6.70	1402	71000	1	26	59.49	Brown water, sediment
	0821	13.6	6.97	1405	71000		31	63.01	
	0826	13.7	7.25	1383	71000		36	67.11	
	0831	13.5	7.40	1378	71000		41	71.03	
	~~0836~~						~~46~~		
	~~0841~~						~~52~~		
	0832	water level dropped below pump, waiting for recharge							

Development Data Sheet

Job#: TAI-240617	**Developer:** L. Kiesel	**Client:** IRWD
Well ID: P-64	**Date:** 6/19/24	**Site:** Rattlesnake Dam
Well diam: 1" (2")	**DTW:** 44.50	**TD Before:** 76.74 **TD After:** 76.77
Purge equip: Non-Bladder Bladder Peri Waterra (Positive Air Displacement) disp bailer teflon bailer (other: 2" DC)		
Length of time swabbed prior to development:		
Pump depth/ intake: MS	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 5.11 X 10 = 51.1 (Total Purge) Meter(s):

0949 Start Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DTW	Notes (Chlorsafe added)
0959	13.3	7.43	1317	>1000	0.5	46	43.21	started with veridian pump
1010	13.0	8.03	1346	>1000		51.5	44.45	
1020	13.2	8.12	1349	>1000		56.5	47.30	
1030	13.3	8.09	1372	>1000		61.5	46.86	
1040	13.4	8.04	1366	>1000		66.5	46.21	
1051	13.5	7.97	1361	>1000		72	46.33	
1101	13.2	7.95	1355	>1000		77	46.45	
1111	13.6	7.93	1347	>1000		82	46.39	
1121	13.5	7.96	1341	>1000		87	46.46	
	Paused to cam well							
6/20 1028	Resumed	Purge			0.25	87 ~~92.25~~	43.18	resumed with veridian pump
1049	13.6	7.61	1375	16		92.25	46.01	
1110	13.5	7.61	1369	14		97.50	46.17	
1130	13.4	7.58	1362	9		102.50	46.29	
		Completed Development						

Development Data Sheet

Job#: TAI-240617	**Developer:** N.Alva, T.Allen	**Client:** IRWD
Well ID: P-63	**Date:** 6/17/24	**Site:** Rattlesnake Dam
Well diam: 1" (2")	**DTW:** 57.78	**TD Before:** 70.70 **TD After:** 70.72
Purge equip: Non-Bladder Bladder Peri Waterra Positive Air Displacement		
disp bailer teflon bailer other:		
Length of time swabbed prior to development:		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 (2"= 0.16) 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 2.06 X **10** = 20.67 (Total Purge) Meter(s):

	Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DTW	Notes (Chlorsafe added)
6/18 "baseline"	1030	18.4	7.72	2117	34	-	0.25	58.16	chlorsafe not yet added
	1040	—	started	1st swab,	finished	@ 1105			
	1110	—	added	chlorsafe					
	1117	—	started	2nd swab,	finished	@ 1135			
	1215	—	started	3rd	swab,	finished @	1230		
6/19	1054	18.2	5.72	2024	71000	0.5	2.0	59.16	start purge @ 1050
	1058	18.4	5.74	2067	>1000	0.5	4.0	61.74	
	1102	18.5	5.80	2067	>1000	0.5	6.0	62.99	
	1106	18.7	5.84	2070	>1000	0.5	8.0	64.35	
	1110	18.9	5.98	2074	>1000	0.5	10.0	65.12	
	1114	19.0	6.12	2095	>1000	0.5	12.0	66.05	
	1118	19.2	6.20	2122	742	0.5	14.0	67.42	
	—	water at	pump	inlet,	wait	for	recharge		
	1200	18.5	6.31	2179	>1000	0.5	16.0	62.17	
	1204	18.8	6.52	2187	645	0.5	18.0	63.38	
	1208	19.0	6.69	2191	424	0.5	20.0	64.82	
	1212	19.2	6.84	2200	217	0.5	22.0	66.70	
	1216	19.3	6.99	2205	101	0.5	24.0	67.24	

Development Data Sheet

Job#: TAI-240617	**Developer:** T. Allen	**Client:** IRWD
Well ID: P-63	**Date:** 6/19/24	**Site:** Rattlesnake Dam
Well diam: 1/4" 1" (2") 3" 4" 6" Other:	**DTW:** 57.78	**TD Before:** 70.70 **TD After:** 70.72
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other: non bladder	**Surge block used:** Y N	
Length of time surged prior to development:		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 2.06 X **10** = 20.67 (Total Purge) Meter(s):

Time	Temp (°C / °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DTW	Notes
— water at pump inlet, allowed recharge —								
1225 — started 4th swab, finished @ 1240								
1300	18.9	7.07	2210	215	0.5	26.0	61.54	
1304	19.0	7.20	2212	74	0.5	28.0	62.77	
1308	19.2	7.37	2217	22	0.5	32.0	63.99	
1312	19.5	7.54	2220	10	0.5	36.0	65.22	
1316	19.6	7.10	2223	8	0.5	40.0	67.05	
1320	development complete							

Did well dewater? YES NO	Total volume removed:	(gal / L)
Sample method (if applicable): Disp Bailer Ded. Tubing New Tubing Ext. Port Other:		
Sample date:	Sample time:	DTW at sample:
Sample ID:	Lab:	Number of bottles:
Analysis:		

Development Data Sheet

Job#: TA-240617	**Developer:** L. Kiesel	**Client:** IRWD
Well ID: P-66	**Date:** 6/18/24	**Site:** Rattlesnake Dam
Well diam: 1" (2")	**DTW:** 21.99 **TD Before:** 50.65 **TD After:** 50.67	
Purge equip: Non-Bladder Bladder Peri Waterra (Positive Air Displacement) disp bailer teflon bailer other:		
Length of time swabbed prior to development: 10 Min.		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 4.59 X 10 = 45.9 (Total Purge) Meter(s):

Time	Temp (°C)	pH	Cond (µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	DTW	Notes (Chlorsafe added)
0929	18.6	8.31	1573	9	-	1	21.99	chlorsafe not yet added.
0941	Finished swab / added chlorsafe with 1 Liter of DI							
0947	Started 2nd Swab						21.79	
1004	Finished 2nd Swab						21.79	
1231	Added 1 Liter DI water with more chlorsafe / started 3rd swab							
1301	Finished 3rd Swab						21.56	
6/20 0748	Start Purge				0.5	-	22.00	
0758	13.2	7.14	1309	10		5	23.61	
0807	13.8	7.60	1297	14		9.5	23.61	
0816 ~~0826~~	13.7	7.64	1302	9		14	23.61	
0825 ~~0835~~	13.4	7.75	1311	15		18.5	23.61	
0834 ~~0844~~	13.6	7.84	1305	11		23	23.61	
0844 ~~0854~~	13.5	7.96	1300	9		28	23.61	
0853 ~~0903~~	13.3	8.08	1306	8		32.5	23.61	
0902 ~~0912~~	13.3	8.13	1304	9		37	23.61	
0911 ~~0921~~	13.4	8.19	1308	9		41.5	23.61	
0920 ~~0930~~	13.6	8.16	1305	8		46	23.61	
	Development Complete							