MONTGOMERY & ASSOCIATES
Water Resource Consultants

January 19, 2026

Monterey Subbasin Corral de Tierra Area Monitoring Well Construction, Development, Testing, Sampling, & Equipping

Prepared for:

Salinas Valley Basin Groundwater Sustainability Agency

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1 INTRODUCTION

Montgomery & Associates (M&A) has prepared this report on behalf of the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) to summarize the drilling, construction, development, testing, and equipping of 1 monitoring well installed in 2025 in the Corral de Tierra Area of the Monterey Subbasin. SVBGSA installed monitoring well M-GWL-1 to fill a monitoring network data gap along San Benancio Road identified in the approved Monterey Subbasin Groundwater Sustainability Plan (GSP) (MCWDGSA and SVBGSA, 2022). Monitoring well installation activities were funded by the Department of Water Resources (DWR) Sustainable Groundwater Management Round 2 (SGM R2) Implementation Grant for the Monterey Subbasin. This report summarizes the well installation activities that occurred from July 22 to November 20, 2025.

1.1 Background

The GSP established a monitoring network to assess groundwater levels in the Monterey Subbasin GSP and identified data gaps within the groundwater level network. Since the GSP was submitted, SVBGSA attempted to fill data gaps by adding existing wells to the monitoring network. SVBGSA installed 4 new monitoring wells with the Monterey Subbasin SGM R2 Implementation Grant and then re-evaluated the monitoring networks. Data from completion of the first set of wells helped refine the understanding of the hydrogeologic conceptual model (HCM). Re-evaluation of the monitoring networks indicated that an additional well was needed in the southern portion of the Subbasin to address insufficient groundwater level data in an area with substantial groundwater withdrawal. Installation of M-GWL-1 considered land access constraints and groundwater level information gained from the installation of the first set of wells.

1.2 Hydrogeologic Setting

The groundwater aquifers in the Corral de Tierra Area have historically been described by their geologic names, including the Aromas Red Sands, Paso Robles Formation, and Santa Margarita Sandstone, from shallowest to deepest (MCWDGSA and SVBGSA, 2022). These geologic formations are grouped together to form the El Toro Primary Aquifer System for the Corral de Tierra Area.

In 2024 and 2025, M&A reviewed new data to update the HCM of the Monterey Subbasin (M&A, 2025a). The HCM updates revealed a bedrock surface that is both shallower and more undulating than previously understood. This bedrock surface, defined as the Monterey Formation or quartz monzonite where they occur, hydrogeologically isolates the southern Corral de Tierra Area near Corral de Tierra Road and San Benancio Road from the Salinas Valley Basin both to

the north and east. A review of the hydrostratigraphic features in the Corral de Tierra Area shows the Monterey Formation bedrock unit rises to the land surface near the Laguna Seca Anticline and creates a groundwater divide. The groundwater basin on the northwestern side of the divide in the Marina-Ord Area is hydraulically associated with the aquifers of the adjacent 180/400-Foot Aquifer (180/400) Subbasin. The HCM updates show groundwater flow to/from the El Toro Primary Aquifer System is restricted by the Laguna Seca Anticline and potentially restricted by the Reliz Fault Zone, both of which are shown on Figure 1.

1.3 Well Location and Objective

M-GWL-1 was installed to enhance the groundwater level monitoring network in the Corral de Tierra Area and to make sure a well is installed in a saturated zone at this location. The well was installed in the southeast portion of the Subbasin, on the south side of San Benancio Road, southeast of the intersection with Deer Run Lane (Figure 1). The location is immediately adjacent to monitoring well M-GWL-3. Initial monitoring of M-GWL-3 showed groundwater levels are below 325 feet below ground surface at times. The target depth for the M-GWL-1 borehole was 800 feet below ground surface to ensure the well is screened in the saturated zone. This well was screened in the Monterey Formation because the Paso Robles Formation and Santa Margarita Sandstone aquifers above are unsaturated at this location.

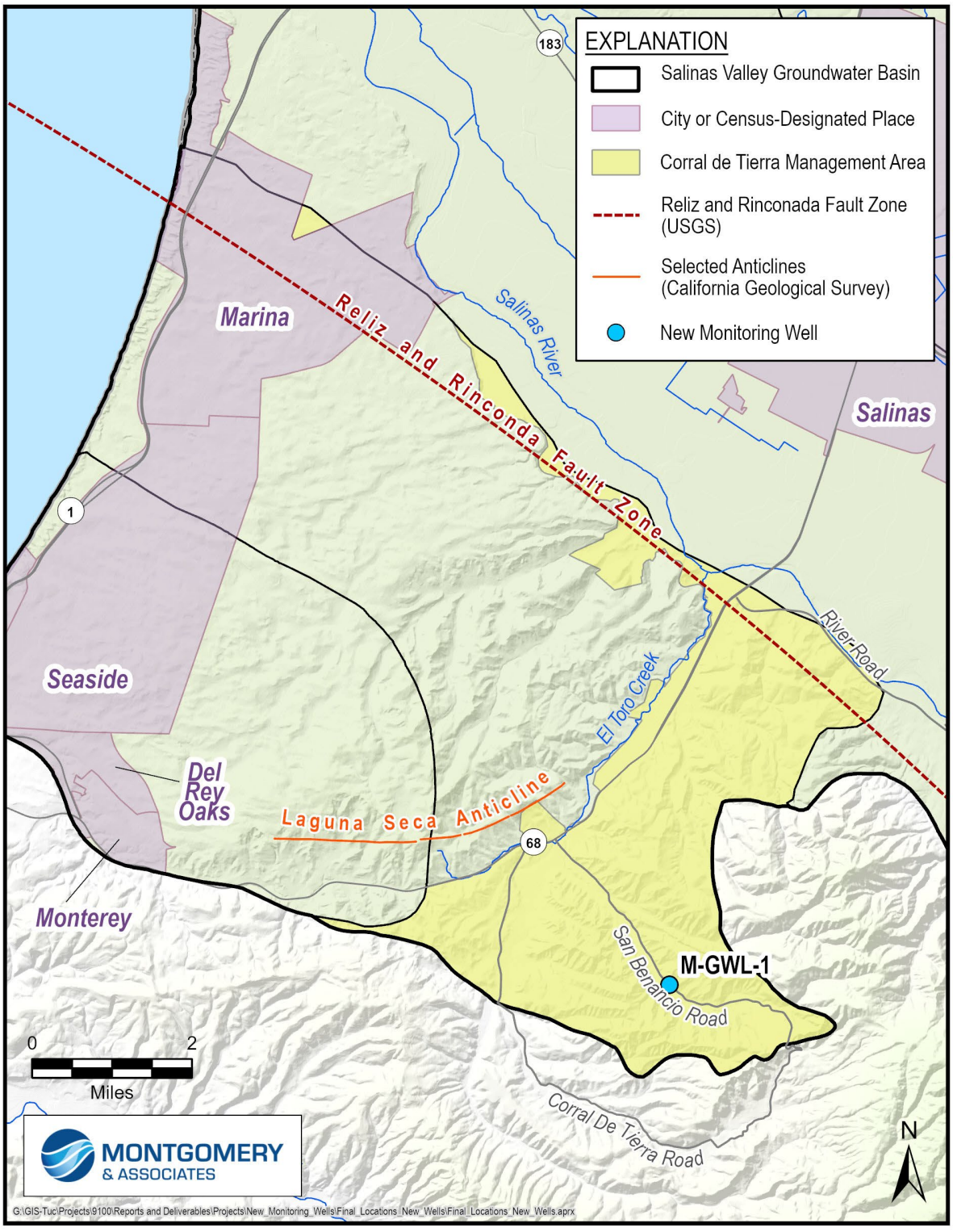


Figure 1. Monitoring Well Location

2 MONITORING WELL INSTALLATION

Well installation activities were conducted from July 22 to August 20, 2025 in accordance with M&A's *Technical Specifications, Salinas Valley Basin Groundwater Sustainability Agency Monterey Subbasin Monitoring Well Construction and Development* (M&A, 2025b). Well installation activities involved the following parties:

- M&A – Contracted by SVBGSA for planning, field construction management services, groundwater quality sampling, pneumatic slug testing, and reporting of well installation activities
- Bradley & Son's, Inc. (Bradley) - Licensed C-57 well driller contracted by SVBGSA for monitoring well drilling, construction, and development
- Pacific Surveys LLC (Pacific) – Contracted by Bradley for geophysical and caliper logging services
- Polaris Land Surveying, Inc. (Polaris) – Licensed land surveyor contracted by SVBGSA for surveying right-of-way and monitoring well location and elevation

M&A observed most site activities associated with monitoring well installation and development. The following sections summarize activities observed by M&A and information provided to M&A by Bradley, Pacific, and Polaris. M-GWL-1 drilling, construction, and development activities are described in the following sections.

2.1 Drilling and Construction

Drilling and well construction activities were conducted by Bradley from July 22 to August 12, 2025. M-GWL-1 was installed in accordance with procedures described in State of California Water Well Standard Bulletins 74-81 (State of California, 1981) and 74-90 (State of California, 1991). A copy of the monitoring well construction permit obtained from the Monterey County Environmental Health Bureau is provided in Appendix A.

2.1.1 Direct Rotary Drilling

The M-GWL-1 borehole was advanced by direct rotary drilling methods using a VersaDrill V-100NG drill rig and a combination of 10.625-inch diameter drag and mill tooth bits. During drilling, a bentonite-based drilling fluid was used to stabilize the borehole, after which drill cuttings and drilling fluids were removed from the site for proper disposal.

During drilling, Bradley collected representative samples of drill cuttings at 10-foot intervals. An M&A hydrogeologist maintained a lithologic log of all subsurface materials encountered and

prepared chip trays with representative samples. Detailed lithologic logs and photographs of the chip trays are provided in Appendix A.

During drilling, borehole advancement was slowed by borehole stability issues. Drilling activities were conducted on a weekday/daytime drilling schedule. Several times during the drilling period, sidewall material sloughed into the open borehole overnight or during non-drilling days. Based on notable washout zones observed during caliper logging, the sloughed material appears to be primarily from a coarse-grained sand and gravel zone from 10 to 80 feet below ground surface (bgs). Drilling continued to a depth of 780 feet bgs. At 780 feet bgs the rate of penetration slowed to approximately 5 feet per hour. Drilling refusal was met at 785 feet bgs, approximately 15 feet short of the target total depth of 800 feet bgs. Monterey County Environmental Health Bureau and Monterey County Water Resources Agency (MCWRA) agreed this depth was acceptable.

2.1.2 Geophysical Logging

After reaching a total borehole depth of 785 feet bgs, Pacific conducted downhole geophysical surveys that included natural gamma radiation, spontaneous potential, short and long normal resistivities, and single point resistance. Pacific also conducted a caliper survey to measure borehole diameter and shape. Copies of the geophysical and caliper survey reports are provided in Appendix A.

2.1.3 Well Design

M&A and Pacific collected lithologic and geophysical data used to support well design. M&A interpreted multiple types of data together to determine the downhole lithology. This included the cuttings samples, observations made during drilling, and the geophysical survey results. The interpreted lithology of the borehole is included in Appendix A. The screen depth was picked such that the monitoring well would be perforated in a water bearing zone. The intended screened interval was 600-760 feet bgs. However, as described later in the well construction section, Bradley was only able to install a screen from 600-740 feet bgs due to ongoing borehole collapse. Based on the drill cuttings, geophysical logs, and water level data from the adjacent M-GWL-3 monitoring well, the Paso Robles Formation and Santa Margarita Sandstone are not saturated in this area. The well screen was placed in a fractured zone of the Monterey Formation at similar depths as nearby domestic supply wells. Monitoring well M-GWL-1 was installed deep enough to ensure it was screened in a saturated zone, and the well design included a 160-foot-long screen to capture as much water bearing formation as possible. This design targeted a water bearing portion of the Monterey Formation that the nearby domestic wells produce water from. As described later in the development and pneumatic slug testing sections production from this

well is low because the well is screened in fine-grained materials. Similar low production rates (~11-13 gpm) at nearby domestic supply wells has been reported.

2.1.4 Well Construction

On August 5, 2025, Bradley attempted to complete a borehole cleanout pass in preparation for well construction. However, borehole collapse at 500 feet bgs prevented completion of the pass. Bradley elected to install a 12-3/4-inch outer diameter Schedule 80 poly vinyl-chloride (PVC) conductor casing to stabilize the upper portion of the borehole and facilitate well construction. Bradley used a 12-3/4-inch mill tooth bit with welded 1/2-inch extensions to conduct a cleanout pass to 60 feet bgs. After thinning the drilling fluid, the conductor casing was installed in 20-foot lengths, with 11 inches of overlapping coupling. The conductor was advanced to approximately 41 feet bgs. The annular space between the expanded borehole and conductor casing was filled with bentonite chips while the conductor casing was still suspended by the drill rig.

On August 6, 2025, Bradley completed a cleanout pass through the conductor casing to 785 feet bgs. On August 7, 2025, the borehole total depth was measured at 765 feet bgs, indicating that 20 feet of fill had sloughed into the borehole. The Monterey County Environmental Health Bureau and MCWRA agreed to modify the well design and shorten the screened interval by 20 feet to accommodate the accumulation of fill in the bottom of the borehole. Based on the modified design, the screened interval would extend from 600 to 740 feet bgs.

M-GWL-1 was constructed with nominal 4-inch diameter (3.8-inch inner diameter and 4.5-inch outer diameter), flush threaded, Schedule 80 PVC blank casing and well screen, with horizontal machine-cut 0.040-inch slots. The well was screened from 600 to 740 feet bgs and completed with a 5-foot cellar and stainless-steel threaded end cap. Casing centralizers were installed at the top and bottom of the screened interval and every 80 feet along the casing to ensure that it was centered in the borehole.

Following casing installation, annular materials were placed from the bottom to the top of the borehole using a tremie pipe. From bottom to top, annular materials included 8 x 16 gradation filter media (provided by SRI Supreme) from 590 to 765 feet bgs, hydrated bentonite tablets from 585 to 590 feet bgs, high solids powdered bentonite grout from 100 to 585 feet bgs, and 10.3-sack sand-cement annular seal from 100 feet bgs to ground surface. Placement of the annular seal on August 12, 2025 was overseen and approved by a Monterey County Environmental Health Bureau inspector.

The well schematic for M-GWL-1 is provided in Appendix A. Table 1 summarizes the as-built construction details.

Table 1. Well Construction Summary

	M-GWL-1
Total Drilled Depth (feet)	785
Final Borehole Depth (feet)	765
Borehole Diameter (inches)	10.625
Completed Depth[a] (feet)	745
Casing Diameter (inches)	4 (nominal)
Casing Material	Schedule 80 PVC
Screened Interval (feet)	600-740
Filter Pack Material	8 x 16
Depth of Annular Seal (feet)	150
Static Water Level[b] (feet btoc)	383.32

Notes:
btoc – below top of casing
[a]Completed depth is defined as the bottom of the casing.
[b]Static water level was measured on November 19, 2025.

2.2 Well Development

Following well construction, well development activities were conducted at M-GWL-1 from August 15 to 20, 2025. After allowing at least 24 hours for the sanitary well seal to cure, Bradley began development using open-ended airlift methods. Using a 1-inch airline and tremie pipe as an eductor pipe, airlifting was completed from the top of the well screen to the bottom of the well, until the discharge was free of drilling fluid and purge water was visibly clear. Fill generated during airlifting was removed by lowering the tremie pipe to the bottom of the well and purging the cellar section.

Following open-ended airlifting, M-GWL-1 was further developed by swabbing while simultaneously airlifting. This process was completed from the top of the well screen to the bottom of the well using a 5-foot dual-swab tool comprised of a perforated pipe equipped with two 4-inch diameter rubber flanges on either end. Swabbing and simultaneous airlifting was generally conducted in 5-foot intervals across the screened zone until the discharge water became visibly clear.

2.3 Well Completion

At the request of MCWRA, M-GWL-1 was completed with an above-grade, steel, 8-inch diameter security monument, with locking lid to prevent tampering. Three steel traffic bollards

were installed to protect the standpipe completion. The M-GWL-1 surface completion is shown on Figure 2. The State of California Well Completion Report for the completed well is provided in Appendix A.

Figure 2. Standpipe Monument

2.4 Monitoring Well Surveying

Following M-GWL-1 well installation activities, Polaris surveyed the well location, land surface elevation, and top of casing reference point elevation. Survey information is summarized in Table 2. The land surveyor data report is provided in Appendix B.

Table 2. Monitoring Well Surveyed Elevations

Well	California State Plane Zone IV, NAD 83		Land Surface Elevation NAVD 88 (feet amsl)	Measuring Point Elevation [a] NAVD 88 (feet amsl)	Approximate Elevation at Top of Screen NAVD 88 (feet amsl)	Approximate Elevation at Bottom of Screen NAVD 88 (feet amsl)	Approximate Elevation of Groundwater Surface NAVD 88 (feet amsl)
	X Coordinate (feet)	Y Coordinate (feet)					
M-GWL-1	5770486.157	2095848.684	668.02	669.759	69	-70	279

Notes:
NAD = North American Datum
NAVD = North American Vertical Datum
feet amsl = feet above mean sea level
[a] Measuring point elevation or reference point elevation is marked on the north side of the casing in permanent marker.

3 MONITORING WELL SAMPLING, TESTING, AND EQUIPPING

Following well installation activities, groundwater sampling and aquifer testing were conducted at M-GWL-1. Additionally, the well was equipped with a pressure transducer to monitor changes in groundwater elevations over time. Sampling, testing, and equipping activities are summarized in the following sections.

3.1 Groundwater Sampling

Groundwater sampling was conducted at M-GWL-1 in September 2025 to provide baseline water quality data in the data gap area.

3.1.1 Sampling Methods

On September 24, 2025, M&A collected a groundwater sample from M-GWL-1 by grab method using a disposable bailer. The grab method was selected for sample collection based on observations during development activities. During airlift development, the well rapidly dewatered multiple times and recovered very slowly. Poor water production in the well, slow recovery rate, and the deep static depth to water prevented sample collection by standard purge methods.

The groundwater sample was delivered to the Monterey County Health Department Laboratory for analyses including irrigation suitability parameters, arsenic, iron, and manganese.

3.1.2 Results

In the groundwater sample from M-GWL-1, conductivity, iron, manganese, and total dissolved solids (TDS) were reported at concentrations above respective secondary maximum contaminant levels (MCL). Water quality results are summarized in Table 3. A copy of the laboratory report is provided in Appendix C.

Table 3. Water Quality Summary

Analyte	M-GWL-1	State MCL	Secondary MCL	Units
Arsenic	5	10	--	ug/L
Boron	130	--	--	mg/L
Calcium	56	--	--	mg/L
Chloride	104	--	250	mg/L
Conductivity @ 25°C	**1,680**	--	900	umho/cm
Hardness	210	--	--	mg/L
Iron	**365**	--	300	ug/L
Magnesium	17	--	--	mg/L
Manganese	**330**	--	50	ug/L
Nitrate as NO3	<1	45	--	mg/L
pH	6.8	--	--	pH
Potassium	13	--	--	mg/L
Sulfate	247	--	250	mg/L
Sodium	273	--	--	mg/L
Total Alkalinity as CaCO3	449	--	--	mg/L
Total Dissolved Solids	**993**	--	500	mg/L

Notes:
MCL = maximum contaminant level
mg/L = milligrams per liter
ug/L = micrograms per liter
umhos/cm = micromhos per centimeter
Concentrations in red bold font exceed MCL

3.2 Pneumatic Slug Testing

In November 2025, M&A attempted to conduct pneumatic slug testing at M-GWL-1 to evaluate aquifer properties at the well. Pneumatic slug testing is conducted by applying air pressure to a sealed monitoring well. Once the pressure head within the well equilibrates with the aquifer, a rising-head test is conducted by instantaneously releasing the air pressure and measuring the water level response.

On November 19, 2025, the well was equipped with a wellhead manifold and a datalogging pressure transducer to measure water level response during testing. The datalogger was programmed to record water levels at a rate of 1 reading per second. During testing, pressure response data was monitored in real time on a laptop computer.

During the first attempted slug test, approximately 2 pounds per square inch (psi) of pressure was applied to the sealed well. An increase in system pressure was observed in the measured data.

However, the pressure response over time was not typical. The aquifer did not equilibrate to the applied pressure change over an extended period of time. Testing was repeated several times with similar results.

The atypical pressure response in the well prevented acquisition of usable data for aquifer test analysis. If the pressure in the well does not equilibrate with the surrounding aquifer, the initial head displacement when pressure is released is not well-defined, and the subsequent recovery data cannot be referenced to a stable baseline or a known static water level.

The failure of the well to reach equilibration with the aquifer after the pressure was increased may indicate extremely slow hydraulic communication between the well and the surrounding formation. The formation likely has a very low hydraulic conductivity and storage capacity, effectively behaving as an aquitard. This is consistent with observations during drilling and well development. Lithologic and geophysical logging indicates the well is screened within a zone of primarily fine-grained material. During development, the well screen became dewatered and recovered at a slow rate.

Low conductivity formations such as aquitards exhibit very slow groundwater movement due to small, poorly connected pore spaces. In a low permeability, low effective-porosity formation, the volume of water that can move in or out of the aquifer per unit time under a given pressure gradient is minimal. When air pressure is applied to the well to displace water into the formation, the water cannot readily dissipate into the surrounding matrix. The result is a prolonged period (potentially hours or longer) during which the aquifer is still attempting to reach equilibrium with the applied pressure.

3.3 Well Equipping

On November 20, 2025, M-GWL-1 was equipped with a dedicated In-Situ Level TROLL 500 datalogging pressure transducer to continuously measure groundwater levels. The pressure transducer was suspended in the well using a vented direct-read data cable.

The pressure transducer was installed approximately 200 feet below the static water level, just above the top of the screened interval. Table 4 summarizes the pressure transducer specifications and installation depth.

Table 4. Transducer Specifications

Monitoring Well	Screened Interval (feet btoc)	Static Groundwater Level (feet btoc)	Transducer Depth (feet btoc)	Transducer Model	Pressure Range/Maximum Submergence (ft H_2O)
M-GWL-1	600-740	390.65	591	In-Situ Level TROLL 500	692

btoc – below top of casing
ft H_2O - feet of Water Column

4 REFERENCES

M&A (Montgomery & Associates). 2025a. Monterey Subbasin Hydrogeological Conceptual Model Update: Data, Methods, and Findings. March 2025.

_____. 2025b. Technical Specifications, Salinas Valley Basin Groundwater Sustainability Agency Monterey Subbasin Monitoring Well Construction and Development. February 2025.

MCWDGSA and SVBGSA (Marina Coast Water District Groundwater Sustainability Agency and Salinas Valley Basin Groundwater Sustainability Agency). 2022. Salinas Valley Groundwater Basin Monterey Subbasin Groundwater Sustainability Plan. Prepared by EKI Environment and Water, Inc. and Montgomery & Associates. Submitted to the California Department of Water Resources January 2022.

State of California, 1981. Water Well Standards: State of California, Bulletin 74-81. December 1981.

State of California, 1991. Water Well Standards: State of California, Bulletin 74-90. June 1991.

5 ACRONYMS & ABBREVIATIONS

bgs.....below ground surface
Bradley.....Bradley & Son's, Inc.
btoc.....below top of casing
DWR .....Department of Water Resources
ft H_2O.....feet of Water Column
GSP .....Groundwater Sustainability Plan
HCM .....hydrogeologic conceptual model
M&A.....Montgomery & Associates
MCL.....maximum contaminant level
MCWDGSA...Marina Coast Water District Groundwater Sustainability Agency
MCWRA.....Monterey County Water Resources Agency
mg/L.....milligrams per liter
NAD.....North American Datum
NAVD.....North American Vertical Datum
PVC.....polyvinyl chloride
SGM R2 .....Sustainable Groundwater Management Round 2
Pacific ..... Pacific Surveys LLC
Polaris .....Polaris Land Surveying, Inc.
psi..... pounds per square inch
SVBGSA.....Salinas Valley Basin Groundwater Sustainability Agency
TDS.....total dissolved solids
ug/L.....micrograms per liter
umhos/cm.....micromhos per centimeter

MONTGOMERY & ASSOCIATES

Appendix A

Well Permit, Geophysical, Caliper, and Lithologic Log, Cuttings Photos, As-Built Diagram, Well Completion Report, Encroachment Permit, Concrete Tickets, and Project Chronology

MONTEREY COUNTY

DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH BUREAU
1270 Natividad Road
Salinas, CA 93906
(831) 755-4507

MONITORING WELL CONSTRUCTION PERMIT

WELL PERMIT: 25-000549 **ISSUANCE DATE: 6/25/2025**

SITE LOCATION: San Benancio Road **EXPIRATION DATE: 6/25/2026**

M-GWL-1, 36.553819, -121.693994

INTENDED USE: GSA Monitoring Well Project

PROPERTY OWNER: County Road Easement

APPLICANT: SVBGSA (Salinas Valley Basin Groundwater Sustainability Agency)

ADDRESS: P.O. Box 1350 **PHONE: (559) 441-1401**

CITY: Carmel Valley, CA

DRILLING CONTRACTOR: Bradley & Son's Inc. **LICENSE: 414178**

ISSUED BY: CHRISTIE VO

Christie T. Vo, R.E.H.S.

PROJECT DESCRIPTION:

This well permit authorizes the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) to install a monitoring well subject to the conditions of approval set forth herein. The project consists of a monitoring well to evaluate hydrological information. The issuance of this permit is exempt from the California Environmental Quality Act pursuant to 14 CCR section 15300.

CONDITION OF APPROVAL:

1. Owner, Applicant and any agents working on Owner's or Applicant's behalf (hereafter collectively referred to as "Permittee") shall comply with all requirements set forth in Monterey Code Chapter 15.08 and the California Department of Water Resources California Well Standards Bulletins 74-81 and 74-90 and shall comply with all the conditions of approval of this permit.

2. The well shall be at least 100 feet from any septic tank; any portion of any leach field or animal enclosure; 50 feet from any sewer main, line or lateral; and 150 feet from any seepage pit. If type of absorption field is unknown, the distance shall be 150 feet.

3. Location of the well shall not prevent the installation, relocation or expansion of the septic system on any adjoining lot.

4. Water well permit shall be kept on site at all times while work is in progress.

5. The well shall be drilled in the approved location delineated on the attached map, **Exhibit A**. The well cannot be drilled in any other location without prior approval from Monterey County Health Department, Environmental Health Bureau (EHB) and receipt of an amended permit.

6. Notify the EHB at least 24 hours prior to moving on site.

7. Notify the EHB 24 hours prior to the time you expect to place any seal.

8. If the seal(s) cannot be witnessed by the EHB, a detailed, written description of the seal(s) shall be submitted to the EHB within ten days.

9. Surface construction features of the completed well shall be in accordance with the California Well Standards Bulletin 74-81 and Bulletin 74-90 Section 10.

10. The Owner and Applicant shall defend, indemnify and hold harmless the County and its officers, agents, and employees from and against any and all actions or claims of any description brought on account of approval of this permit or any injury or damages sustained by any person or property resulting from the issuance of the permit or the conduct of the activities authorized under said permit.

11. Issuance of this permit to construct a water well does not create, transfer, assign or acknowledge any legal rights to water associated with this property.

12. Issuance of this permit to construct a monitoring well does not guarantee that the well can be approved for domestic use.

13. A geologic log shall be performed and it shall be submitted to the EHB to review before the well is sealed. Interpretation of the geologic log shall be provided by the contractor indicating the best location(s) for sealing off poor quality water and the proposed seal depth. The exact location of sanitary and strata seals shall be approved by the EHB in consultation with any appropriate water management agency before the well is sealed. The permit applicant may request review of the approved seal depth by a 3rd party licensed hydrogeologist at the applicant's expense if the applicant disagrees with EHB's decision.

END

IN1229433 Paid 6/23/25

Well Permit # 25-000549 Exhibit A

PACIFIC SURVEYS

ELECTRIC LOG
GAMMA RAY

Job No. 33763

Company BRADLEY & SONS, INC.

Well M-GWL-1

Field SALINAS

County MONTEREY State CA

File No.

Location:
NEAR 242 SAN BENACIO RD.
GPS 36.5539102 -121.6940771

Other Services:
CAL/BHV

Sec.		Twp.		Rge.				
Permanent Datum	G.L.				Elevation above perm. datum		Elevation	K.B.
Log Measured From	G.L.	0'						D.F.
Drilling Measured From	G.L.							G.L.
Date						8/1/25		
Run Number						ONE		
Depth Driller						785'		
Depth Logger						783'		
Bottom Logged Interval						783'		
Top Log Interval						30'		
Casing Driller						N/A		
Casing Logger						N/A		
Bit Size						10.625"		
Type Fluid in Hole						BENTONITE		
Density / Viscosity						N/A		
pH / Fluid Loss						N/A		
Source of Sample						PIT		
Rm @ Meas. Temp						4.47 @ 79.3F		
Rmf @ Meas. Temp						4.20 @ 79.3F		
Rmc @ Meas. Temp						N/A		
Source of Rmf / Rmc						MEASURED		
Rm @ BHT						N/A		
Time Circulation Stopped						15:30		
Time Logger on Bottom						17:20		
Max. Recorded Temperature						N/A		
Equipment Number						PS-8		
Location						FNO		
Recorded By						FARRELL		
Witnessed By						---		

<<< Fold Here >>>

Comments

RSN, RLN Corr.

Calibration Report

Database File 33763.db
Dataset Pathname elog
Dataset Creation Fri Aug 01 17:24:43 2025

ELOG Calibration Report

Serial: D4
Model: DTQ

Shop Calibration Performed: Tue May 28 10:57:48 2024
Before Survey Verification Performed: Tue May 28 10:58:07 2024
After Survey Verification Performed: Tue May 28 10:58:23 2024

Shop Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	1.091	51.320		0.500	50.000	Ohm-m	0.985	-0.575
Long	4.067	205.814		2.000	200.000	Ohm-m	0.981	-1.991
IEE	15.880	4023.880	counts	0.017	4.404	A		
VSN	135.940	4574.820	counts	2.593	87.259	V		
VLN	125.940	1190.980	counts	2.402	22.716	V		

Before Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	773.857	101.205		761.940	101.194	Ohm-m	0.982	1.780
Long	2875.540	105.273		2823.560	105.376	Ohm-m	0.981	2.082
IEE	15.900	4163.860	counts	0.017	4.557	A		
VSN	138.240	4734.500	counts	2.637	90.305	V		
VLN	128.420	1231.200	counts	2.449	23.484	V		

After Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	781.827	101.216		773.857	101.205	Ohm-m	0.988	1.173
Long	2896.480	105.271		2875.540	105.273	Ohm-m	0.992	0.792
IEE	15.640	4170.640	counts	0.017	4.564	A		
VSN	137.380	4742.740	counts	2.620	90.462	V		
VLN	127.240	1233.180	counts	2.427	23.521	V		

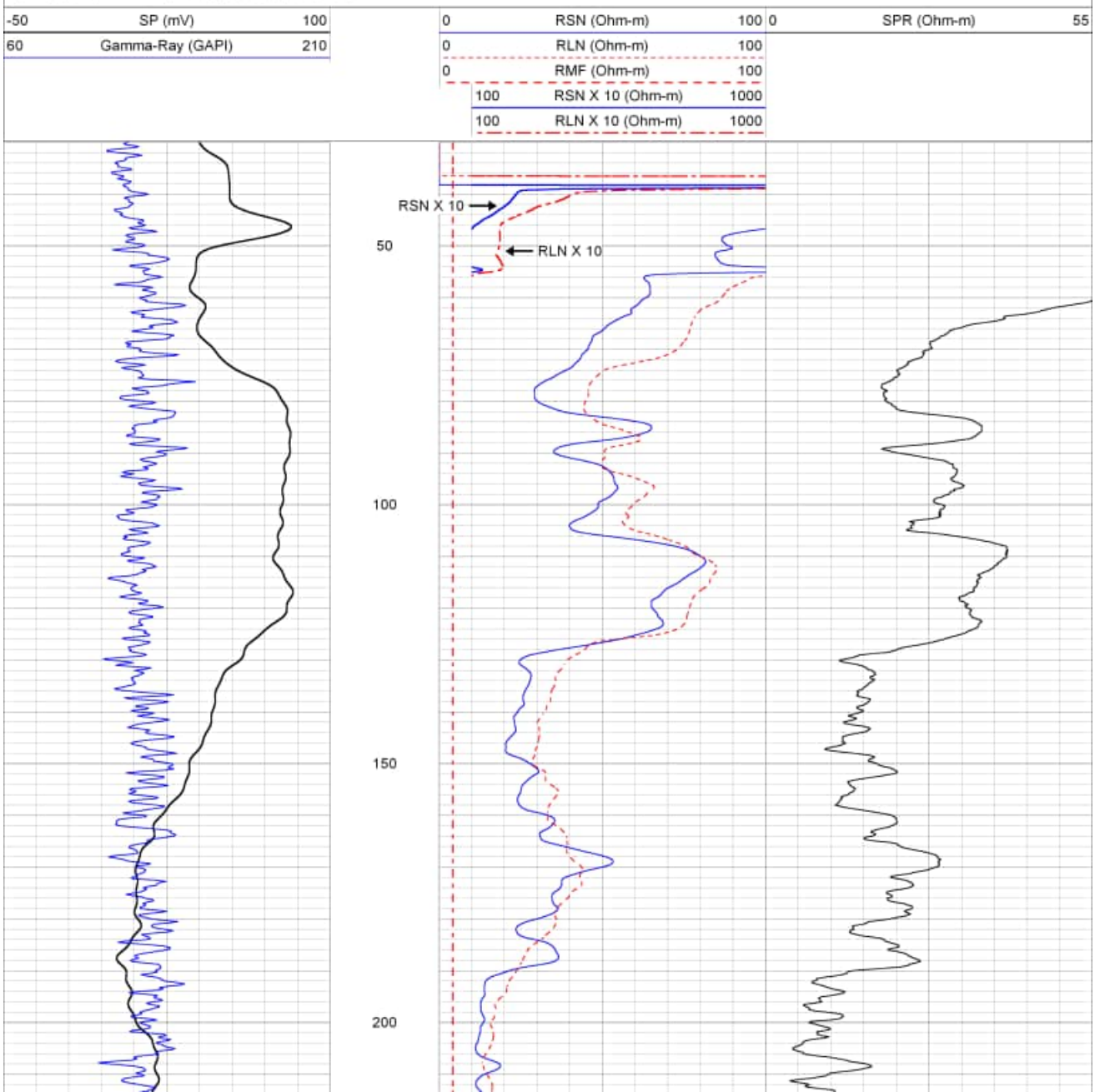
After Survey Verification compared to Before Survey Calibration

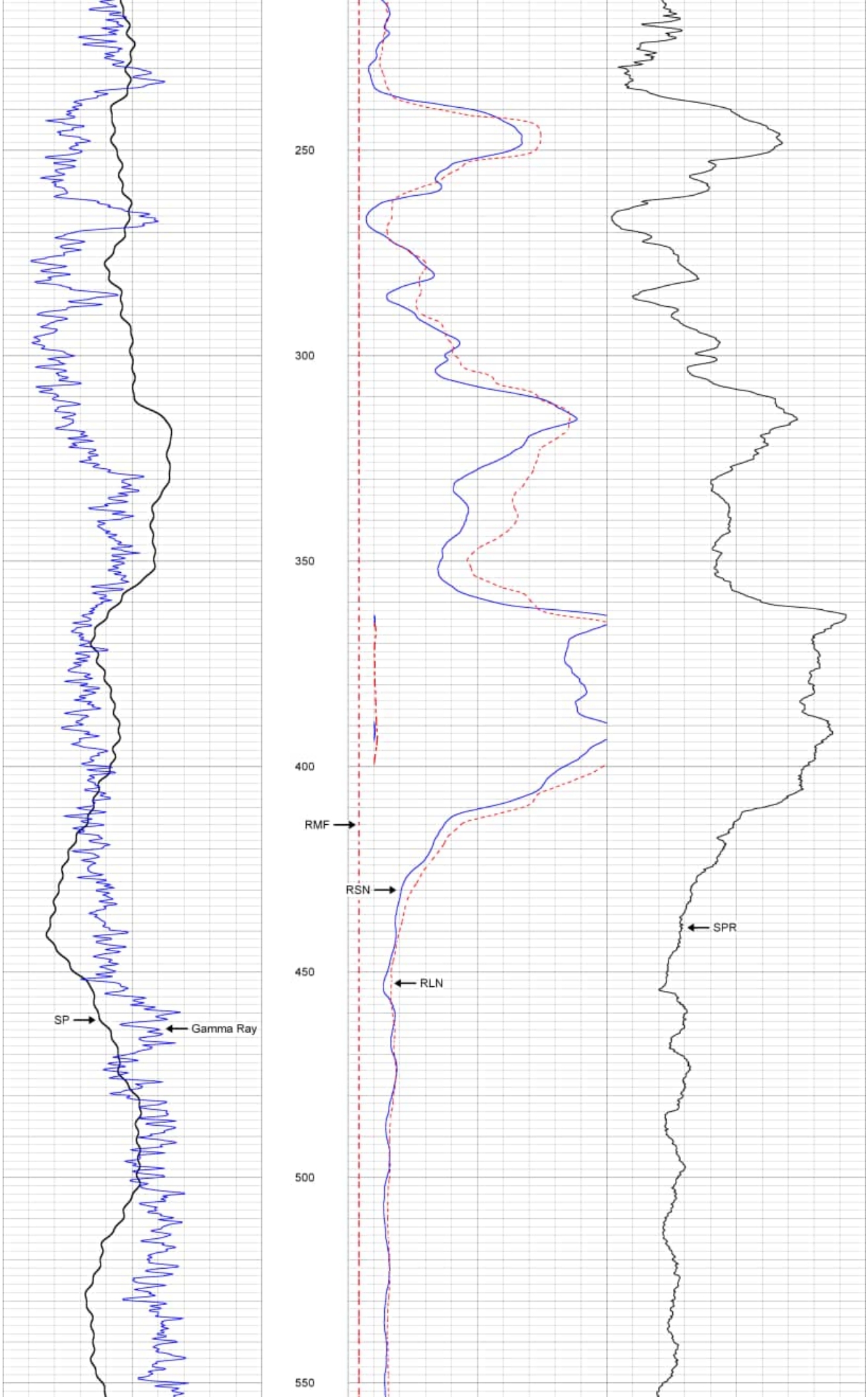
	Zero			Cal		
	Before	After		Before	After	
Short	761.940	773.857	Ohm-m	101.194	101.205	Ohm-m
Long	2823.560	2875.540	Ohm-m	105.376	105.273	Ohm-m

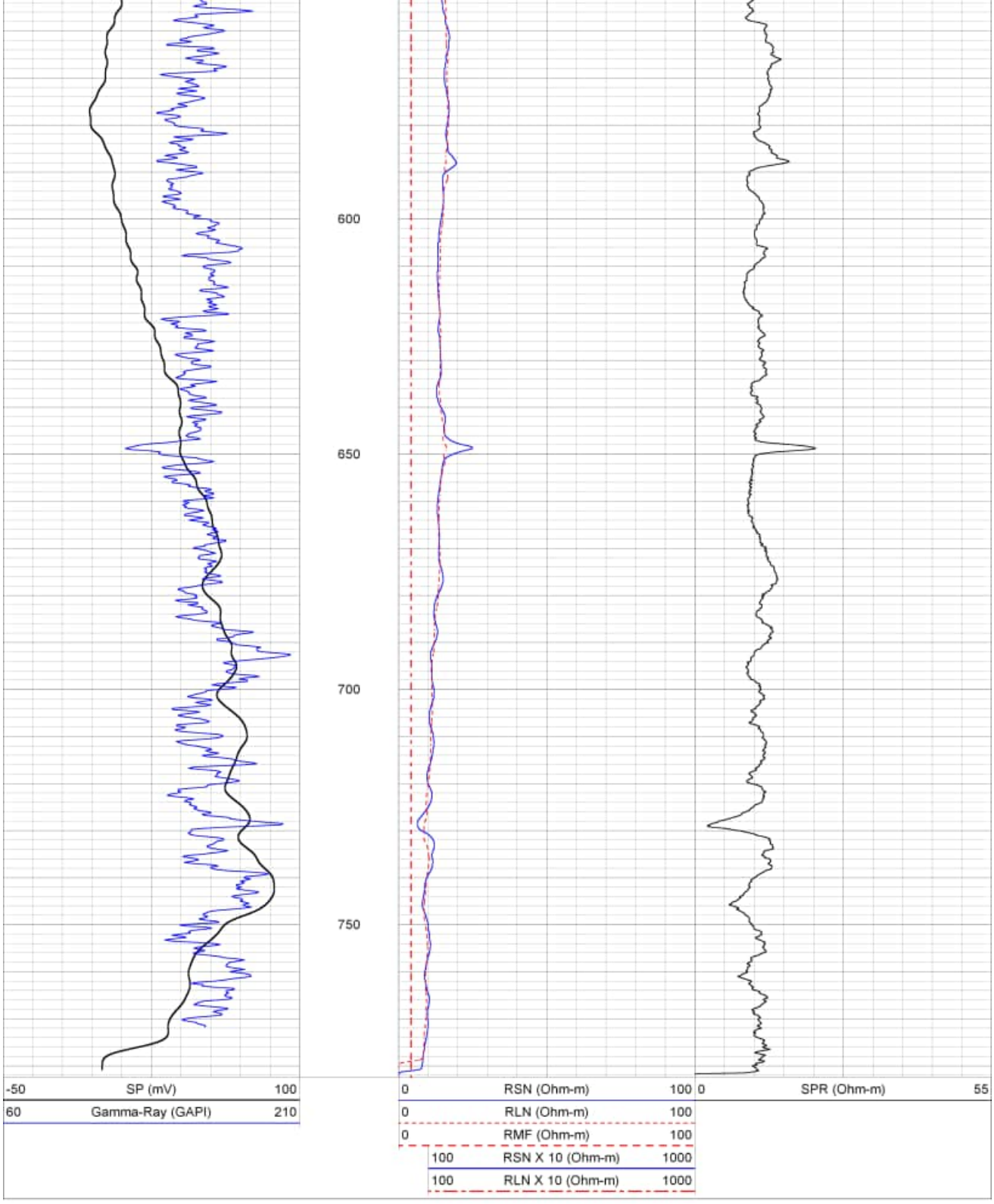
Gamma Ray Calibration Report

Serial Number:	D4	
Tool Model:	ELOG	
Performed:	Tue May 28 10:57:23 2024	
Calibrator Value:	162.0	GAPI
Background Reading:	101.7	cps
Calibrator Reading:	326.7	cps
Sensitivity:	0.7200	GAPI/cps

Database File	33763.db
Dataset Pathname	EL1
Presentation Format	elog_cwa
Dataset Creation	Fri Aug 01 17:55:29 2025
Charted by	Depth in Feet scaled 1:240




250
300
350
400
450
500
550
RMF
RSN
RLN
SP
Gamma Ray
SPR



Log Variables

DatabaseC:\ProgramData\Warrior\Data\33763.db
Dataset field/well/run1/EL1/_vars_

Top - Bottom

BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	PERFS	RM_MEAS_R Ohm-m	RM_MEAS_T degF	RMF Ohm-m	RSH Ohm-m	SPSHIFT mV
10.625	63.37	5.5	0	No	4.47	79.3	4.2	20	0

SRFTEMP degF	TDEPTH ft	TempGrad degF/ft
53.7	783	0.01235

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
PERFS : Perforation Flag
RM_MEAS_R : Mud Resistivity Measured
RM_MEAS_T : Mud Temperature Measured
RMF : Resistivity of Mud Filtrate
RSH : Resistivity of Shale
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
TDEPTH : Total Depth
TempGrad : Temperature Gradient

Filter Report

Filter Report

Database File 33763.db
Dataset Pathname EL1
Dataset Creation Fri Aug 01 17:55:29 2025

Filter Name	Filter Type	Filter Length
		(ft)
LSPD	Gaussian	12.00
LTEN	Gaussian	6.00
LSPDRT	None	
IEE	None	
VSN	None	
VLN	None	
SP	Gaussian	9.00
RSN	Gaussian	2.00
RLN	Gaussian	3.00
SPR	Gaussian	1.00
GR	Gaussian	2.00
HVOLT	Gaussian	1.00
INCL	Square	2.00
AZI	Square	2.00
ROLL	Square	2.00
MAG ROLL	Square	2.00
ACC TOTAL	Square	2.00
MTEMP	Square	2.00

PACIFIC SURVEYS

CALIPER
BOREHOLE VOLUMES

Job No. 33763

File No.

Company BRADLEY & SONS, INC.

Well M-GWL-1

Field SALINAS

County MONTEREY State CA

Location:
NEAR 242 SAN BENACIO RD.
GPS 36.5539102 -121.6940771

Other Services:
ELOG/GR

Sec.	Twp.	Rge.			
Permanent Datum	G.L.		Elevation above perm. datum		Elevation
Log Measured From	G.L.	0'		K.B.	
Drilling Measured From	G.L.			D.F.	
				G.L.	

Date	8/1/25
Run Number	ONE
Depth Driller	785'
Depth Logger	783'
Bottom Logged Interval	780'
Top Log Interval	0'
Type Caliper	3-ARM
Type Fluid in Hole	BENTONITE
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
pH/Fluid Loss	N/A
Time Well Ready	17:00
Time Logger on Bottom	18:00
Equipment Number	PS-8
Location	FNO
Recorded By	FARRELL
Witnessed By	—

Borehole Record

Run Number	Bit	From	To
ONE	10.625"	0'	785'

Gravel Feed/Tubing Schedule

Type	From	To

Casing Schedule

	Size	Wgt/Ft	Top	Bottom
Surface String				
Production String	4" ID PVC	N/A	0'	780'
Production String				
Production String				
Production String				

<<< Fold Here >>>

Comments

SCREENED INTERVAL PROPOSED FROM 740' - 780'

Calibration Report

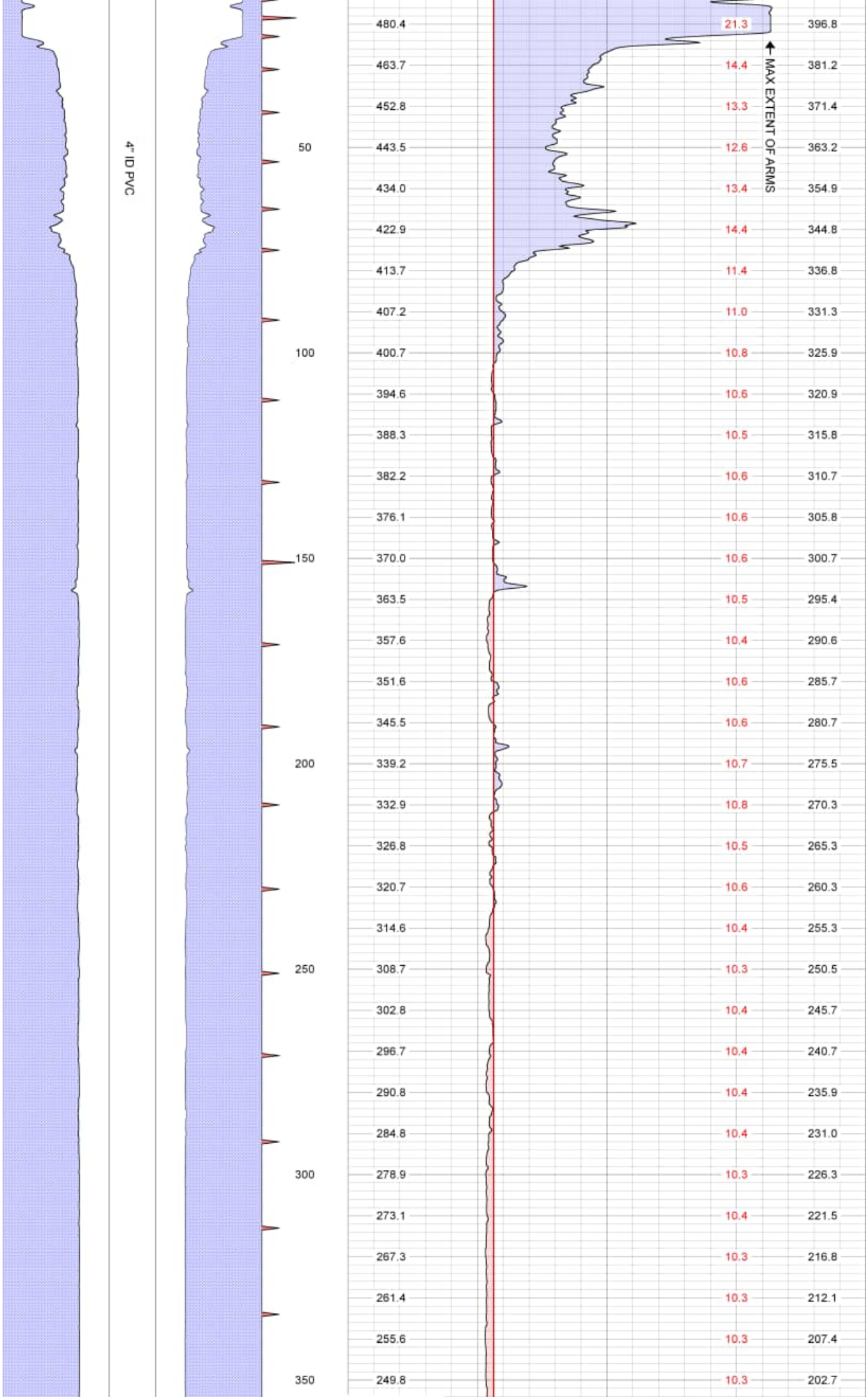
Database File 33763.db
Dataset Pathname CALIPER
Dataset Creation Fri Aug 01 18:45:39 2025

XY Caliper Calibration Report

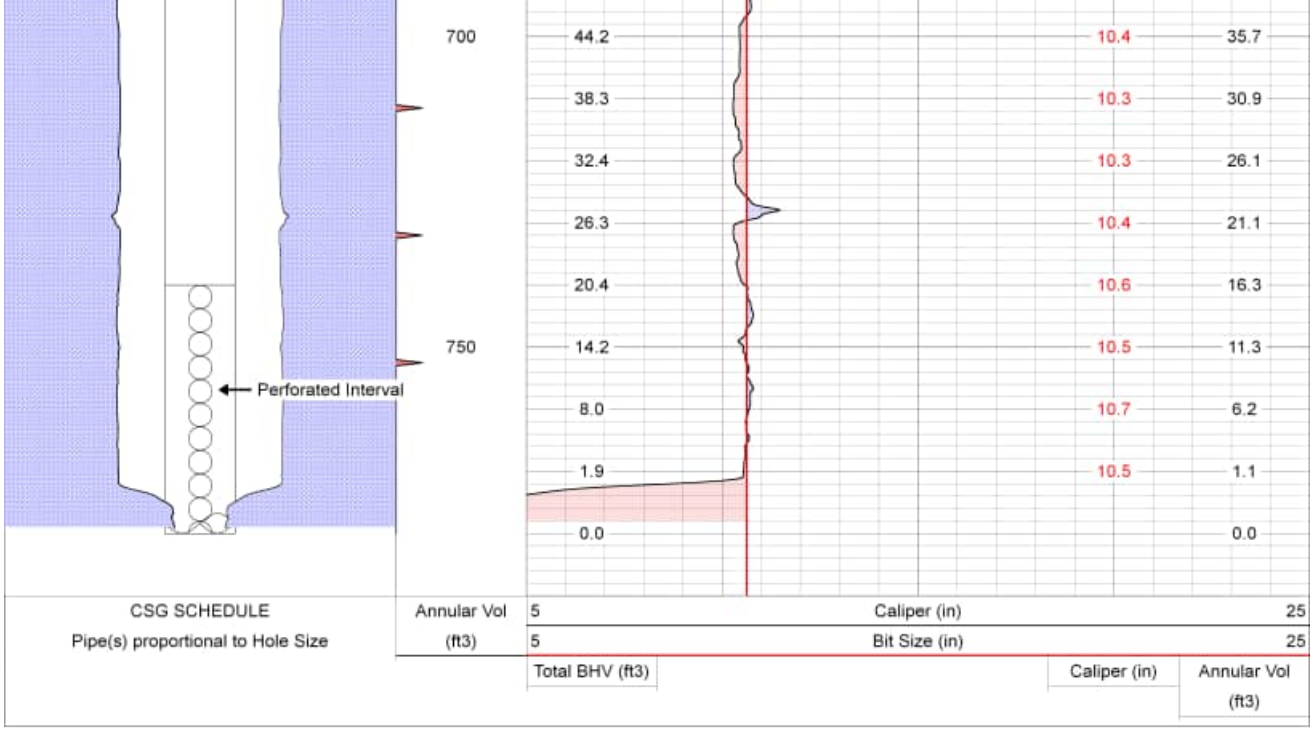
Serial Number/Model: Cal-4 Short-Comprobe
Performed: Thu Jul 31 13:26:41 2025

	Ring		X Caliper		Y Caliper	
1:	2.50	in	554.13	cps	544.13	cps
2:	8.00	in	1082.24	cps	1082.24	cps
3:	14.00	in	1622.72	cps	1622.72	cps
4:	20.00	in	2190.07	cps	2190.07	cps
5:		in		cps		cps
6:		in		cps		cps
7:		in		cps		cps
8:		in		cps		cps
9:		in		cps		cps
10:		in		cps		cps

Database File 33763.db
Dataset Pathname CALIPER
Presentation Format xyc_gph_final
Dataset Creation Fri Aug 01 18:45:39 2025
Charted by Depth in Feet scaled 1:240

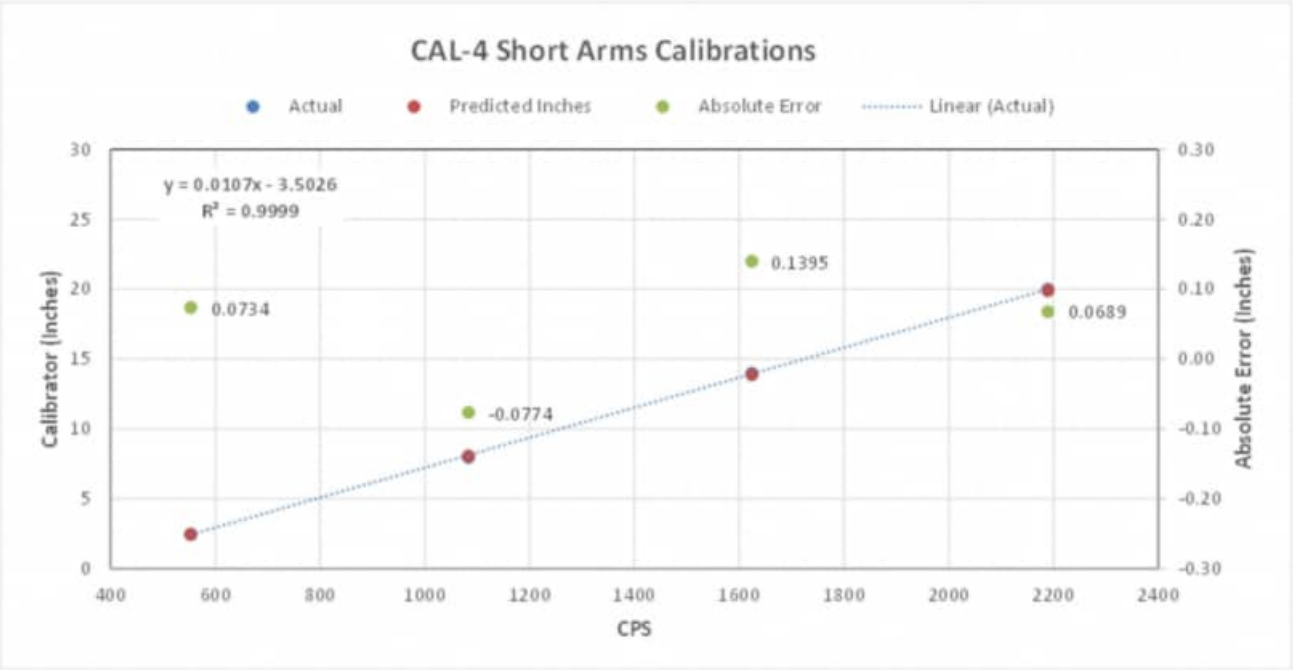

4" ID PVC
MAX EXTENT OF ARMS
50
100
150
200
250
300
350
480.4 21.3 396.8
463.7 14.4 381.2
452.8 13.3 371.4
443.5 12.6 363.2
434.0 13.4 354.9
422.9 14.4 344.8
413.7 11.4 336.8
407.2 11.0 331.3
400.7 10.8 325.9
394.6 10.6 320.9
388.3 10.5 315.8
382.2 10.6 310.7
376.1 10.6 305.8
370.0 10.6 300.7
363.5 10.5 295.4
357.6 10.4 290.6
351.6 10.6 285.7
345.5 10.6 280.7
339.2 10.7 275.5
332.9 10.8 270.3
326.8 10.5 265.3
320.7 10.6 260.3
314.6 10.4 255.3
308.7 10.3 250.5
302.8 10.4 245.7
296.7 10.4 240.7
290.8 10.4 235.9
284.8 10.4 231.0
278.9 10.3 226.3
273.1 10.4 221.5
267.3 10.3 216.8
261.4 10.3 212.1
255.6 10.3 207.4
249.8 10.3 202.7


Annular Vol (100 ft^3)
Caliper (in)
Bit Size
Caliper
Annular Vol
Total BHV
400
450
500
550
600
650
244.0 10.3 197.9
238.1 10.4 193.2
232.3 10.3 188.5
226.5 10.2 183.8
220.8 179.2
215.1 10.2 174.6
209.4 10.3 169.9
203.6 10.3 165.3
197.8 10.2 160.6
192.1 10.3 156.0
186.3 10.3 151.3
180.5 10.3 146.6
174.7 10.3 141.9
168.8 10.3 137.2
163.1 10.3 132.5
157.3 10.3 127.8
151.4 10.3 123.1
145.7 10.2 118.4
140.0 10.3 113.8
134.2 10.4 109.1
128.0 10.3 104.0
122.2 10.3 99.4
116.4 10.3 94.7
110.4 10.4 89.7
104.5 10.4 85.0
98.6 10.4 80.2
92.6 10.5 75.2
86.7 10.3 70.4
80.5 11.1 65.3
74.1 10.2 60.1
68.2 10.6 55.2
62.2 10.4 50.4
56.3 10.5 45.6
50.3 10.5 40.7



CSG SCHEDULE	Annular Vol	5	Caliper (in)	25
Pipe(s) proportional to Hole Size	(ft3)	5	Bit Size (in)	25

Total BHV (ft3)	Caliper (in)	Annular Vol (ft3)



Log Variables

DatabaseC:\ProgramData\Warrior\Data\33763.db
Dataset field/well/run1/CALIPER/_vars_

Top - 780.00 ft

BOREID	BOTTEMP	CASEOD	CASETHCK	PERFS	RM_MEAS_R	RM_MEAS_T	RMF	RSH	SPSHIFT
in	degF	in	in		Ohm-m	degF	Ohm-m	Ohm-m	mV
10.625	63.37	4.5	0	No	4.47	79.3	4.2	20	0

SRFTEMP	TDEPTH	TempGrad
degF	ft	degF/ft
53.7	783	0.01235

780.00 ft - Bottom

BOREID	BOTTEMP	**CASEOD**	CASETHCK	PERFS	RM_MEAS_R	RM_MEAS_T	RMF	RSH	SPSHIFT
in	degF	**in**	in		Ohm-m	degF	Ohm-m	Ohm-m	mV
10.625	63.37	**0**	0	No	4.47	79.3	4.2	20	0

SRFTEMP	TDEPTH	TempGrad
degF	ft	degF/ft
53.7	783	0.01235

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
PERFS : Perforation Flag
RM_MEAS_R : Mud Resistivity Measured
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RSH : Resistivity of Shale
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TempGrad : Temperature Gradient

Filter Report

Database File 33763.db
Dataset Pathname CALIPER
Dataset Creation Fri Aug 01 18:45:39 2025

Filter Name	Filter Type	Filter Length
		(ft)
LSPD	Gaussian	12.00
LTEN	Gaussian	6.00
LSPDRT	None	
XCAL	Gaussian	2.00
YCAL	Gaussian	2.00
Radius	Gaussian	2.00

M-GWL-1		
Depth Top (feet bgs)	Depth Bottom (feet bgs)	Hydrogeologic Unit
0	130	Alluvial Deposits (Qal)
130	310	Paso Robles Formation (QTc)
310	430	Santa Margarita Sandstone (Tsm)
430	785	Monterey Formation (Tm)

M-GWL-1

From (ft bgs)	To (ft bgs)	Lithologic Description
0	10	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
10	20	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
20	30	Sand with gravel, yellowish brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
30	40	Sand with gravel, yellowish brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
40	50	Sand with gravel, yellowish brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
50	60	Sand with gravel, yellowish brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
60	70	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
70	80	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
80	90	Sand with clay, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
90	100	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
100	110	Gravel, yellowish brown, fine grained, well sorted, angular-subangular, abundant quartz and feldspars
110	120	Sand with gravel, yellowish brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
120	130	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
130	140	Sand, yellowish brown, fine-coarse grained, moderately poorly sorted, angular-subangular, abundant quartz and feldspars
140	150	Clayey sand, brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
150	160	Clayey sand, brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
160	170	Clayey sand, brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
170	180	Sandy clay, brown, soft

180	190	Clayey sand, brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
190	200	Clayey sand, brown, fine-coarse grained, poorly sorted, angular-subangular, abundant quartz and feldspars
200	210	Sandy clay, brown, soft
210	220	Sandy clay, brown, soft
220	230	Sandy clay, brown, soft
230	240	Clay, brown, soft
240	250	Clay, brown, soft
250	260	Sandy clay, brown, soft
260	270	Clay, brown, soft
270	280	Clay, brown, soft
280	290	Clay, brown, soft
290	300	Clay, brown, soft
300	310	Clay, brown, soft
310	320	Clay, brown, soft
320	330	Clay, brown, soft
330	340	Clay, brown, soft
340	350	Clay, brown, soft
350	360	Clay, brown, soft
360	370	Clay, brown, soft
370	380	Sandy clay, brown, soft
380	390	Sandy clay, brown, soft
390	400	Sandy clay, brown, soft
400	410	Sandy silt, light brown, fine sand, well sorted, trace coarse, well sorted, angular granitic fragments
410	420	Sandy silt, light brown, fine sand, well sorted, trace coarse, well sorted, angular granitic fragments
420	430	Sandy silt, light brown, coarse, well sorted, angular granitic fragments
430	440	Sandy silt, light brown, coarse, well sorted, angular granitic fragments
440	450	Sandy silt, brown, coarse, well sorted, angular granitic fragments, trace clay
450	460	Sandy silt, brown, coarse, well sorted, angular granitic fragments, trace clay
460	470	Sandy clay, dark brown, coarse, well sorted, angular granitic fragments
470	480	Sandy clay, dark brown, coarse, well sorted, angular granitic fragments
480	490	Sandy clay, dark brown, coarse, well sorted, angular granitic fragments
490	500	Sandy clay, dark brown, coarse, well sorted, angular granitic fragments
500	510	Sandy clay, brown, coarse, well sorted, angular granitic fragments
510	520	Sandy clay, grey, coarse, well sorted, angular granitic fragments
520	530	Sandy clay, grey, coarse, well sorted, angular granitic fragments

530	540	Sandy clay, grey, coarse, well sorted, angular granitic fragments
540	550	Sandy clay, grey, coarse, well sorted, angular granitic fragments
550	560	Sandy clay, grey, coarse, well sorted, angular granitic fragments
560	570	Sandy clay, grey, coarse, well sorted, angular granitic fragments
570	580	Sandy clay, grey, coarse, well sorted, angular granitic fragments
580	590	Sandy clay, grey, coarse, well sorted, angular granitic fragments
590	600	Sandy clay, grey, coarse, angular granitic fragments
600	610	Sandy clay, grey, coarse, angular granitic fragments
610	620	Sandy clay, grey, coarse, angular granitic fragments
620	630	Sandy clay, grey, coarse, angular granitic fragments
630	640	Sandy clay, grey, coarse, angular granitic fragments
640	650	Sandy clay, grey, coarse, angular granitic fragments
650	660	Sand, brown, fine grained, well sorted, with coarse, angular granitic fragments
660	670	Sand, brown, coarse, well sorted, angular granitic fragments
670	680	Sand, brown, coarse, well sorted, angular granitic fragments, with silt, trace very fine sand
680	690	Sand, brown, coarse, well sorted, angular granitic fragments
690	700	Silt, dark grey, trace very fine sand, and coarse, angular granitic fragments
700	710	Silt, dark grey, trace very fine sand
710	720	Silt, dark grey, trace very fine sand
720	730	Silt, dark grey, trace very fine sand
730	740	Silt, dark grey, trace very fine sand, clay, and medium-coarse, angular granitic fragments
740	750	Silt, dark grey, trace very fine sand, clay, and medium-coarse, angular granitic fragments
750	760	Silt, dark grey, trace very fine sand, clay, and medium-coarse, angular granitic fragments
760	770	Silt, dark grey, trace very fine sand, clay, and medium-coarse, angular granitic fragments, mildly consolidated
770	780	Silt, dark grey, trace very fine sand, clay, and medium-coarse, angular granitic fragments, mildly consolidated
780	790	Silt, dark grey, trace very fine sand, clay, and medium-coarse, angular granitic fragments, mildly consolidated


M-GWL-1
0 - 10
10 - 20
20 - 30
30 - 40
40 - 50
50 - 60
60 - 70
70 - 80
80 - 90
90 - 100
100 - 110
110 - 120
120 - 130
130 - 140
140 - 150
150 - 160
160 - 170
170 - 180
180 - 190
190 - 200
200 - 210
210 - 220
220 - 230
230 - 240
240 - 250
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330 - 340
340 - 350
350 - 360
360 - 370
370 - 380
380 - 390
390 - 400
400 - 410
410 - 420
420 - 430
430 - 440
440 - 450
450 - 460
460 - 470
470 - 480
480 - 490
490 - 500
500 - 510
510 - 520
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610 - 620
620 - 630
630 - 640
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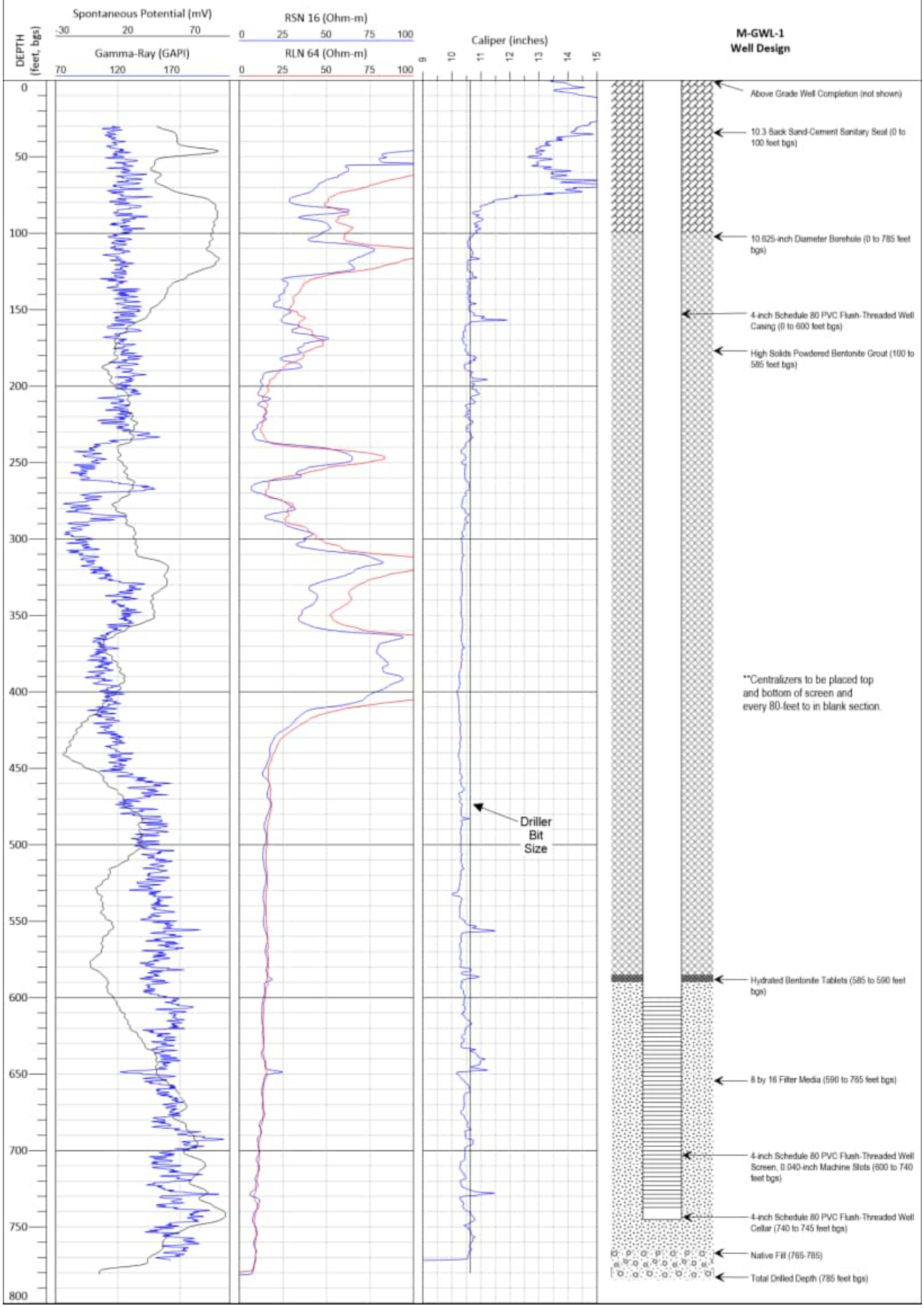
650 - 660
660 - 670
670 - 680
680 - 690
690 - 700
700 - 710
710 - 720
720 - 730
730 - 740
740 - 750
750 - 760
760 - 770
770 - 780
780 - 790
790 - 800

M-GWL-1 Well Design - FINAL FOR CONSTRUCTION

MONTGOMERY & ASSOCIATES
Water Resource Consultants

August 4, 2025

Client: Salinas Valley Basin GSA
Driller: Bradley & Son's, Inc.
Method: Direct Mud Rotary



State of California

Well Completion Report

Form DWR 188 Submitted 10/15/2025

WCR2025-010199

Owner's Well Number: M-GWL-1 **Date Work Began:** 07/22/2025 **Date Work Ended:** 08/08/2025

Local Permit Agency: Environmental Health Services of Monterey County **County:** Monterey

Secondary Permit Agency: **Permit Number:** 25-000549 **Permit Date:** 06/25/2025

Well Owner (must remain confidential pursuant to Water Code 13752)

Name: COUNTY ROAD EASEMENT

Address: PO BOX 1350

City: CARMEL VALLEY **State:** California **Zip:** 93924

Planned Use and Activity

Activity: New Production or Monitoring Well

Planned Use: Monitoring

Well Location

Address:

City: **Zip:**

Latitude: 36 Deg. 33 Min. 13.7484 Sec. N

Dec. Lat. : 36.553819

Vertical Datum:

Location Accuracy:

Longitude: -121 Deg. 41 Min. 38.3784 Sec. W

Dec. Long. : -121.693994

Horizontal Datum:

Location Determination Method:

APN: 0

Township: 16S **Range:** 02E

Section: 12 **BM:** Mount Diablo

Ground Surface Elevation:

Elevation Accuracy:

Elevation Determination Method:

Borehole Information

Orientation: Vertical **# of casings (Specify):** 1

Drilling Method: Direct Rotary **Drilling Fluid:** Bentonite

Total Depth of Boring: 785 Feet

Total Depth of Completed Well: 745 Feet

Water Level and Yield of Completed Well

Depth to first water: (Feet below surface)

Depth to Static Water Level: (Feet)

Date Measured:

Estimated Yield*: (GPM) **Test Type:**

Test Length*: (Hours) **Total Drawdown:** (Feet)

***May not be representative of a well's long term yield.**

Geologic Log - Free Form

Depth from Surface (Feet to Feet)		Description
0	20	TOP SOIL, SMALL MEDIUM GRAVEL, FINE SMALL SAND
20	40	FINE MEDIUM LARGE SAND, SILTY CLAY
40	60	FINE MEDIUM LARGE SAND, PEA GRAVEL, SILTY CLAY
60	80	SMALL MEDIUM GRAVEL, FINE MEDIUM SAND
80	100	SMALL MEDIUM GRAVEL, FINE SMALL SAND, SILTY CLAY
100	140	SMALL MEDIUM GRAVEL, FINE SAND, SOT SILTY BROWN CLAY

Depth from Surface (Feet to Feet)		Description
140	160	SMALL FINE MEDIUM SAND, PEA GRAVEL, SOFT MUSHY BROWN CLAY
160	200	FINE SMALL MEDIUM SAND, SOFT MUSHY CLAY, HARD STREAK SANDSTONE
200	220	FINE SMALL SAND, MUSHY BROWN CLAY, HARD STREAK SANDSTONE
220	240	HARD STICKY BROWN CLAY, SOFT MUSHY BROWN CLAY, FINE SMALL SAND
240	260	SOFT HARD STICKY CLAY, LARGE HARD STREAK SANDSONE
260	320	SOFT HARD STICKY BROWN CLAY, SMALL HARD STREAK
320	360	SOFT MUSHY BROWN CLAY, LARGE HARD STREAK SANDSTONE
360	400	SOFT TAN CLAY, FINE SAND, LARGE STREAK HARD SANDSTONE
400	420	HARD STREAK SANDSTONE
420	440	HARD STREAK SANDSTONE, SOFT BROWN CLAY
440	460	SOFT STICKY BROWN CLAY, SANDSTONE
460	480	DARK BROWN SILTY CLAY, SANDSTONE
480	520	DARK BROWN SILTY CLAY, HARD STREAK SANDSTONE
520	560	DARK BROWN SILTY CLAY, SANDSTONE
560	580	SOFT MUSHY DARK BROWN CLAY, COARSE SAND
580	600	SOFT MUSHY DARK BROWN CLAY, HARD STREAK SANDSTONE
600	640	SOFT MUSHY CLAY, COARSE SAND
640	660	MUSHY STICKY DARK BROWN CLAY, HARD STREAKS
660	680	MUSHY DARK BROWN CLAY, COARSE SAND
680	700	MUSHY DARK BROWN CLAY, COARSE SAND, HARD STREAK
700	720	MUSHY DARK BROWN CLAY, COARSE SAND
720	785	MUSHY DARK BROWN CLAY, HARD STICKY DARK BROWN CLAY
720	785	MUSHY DARK BROWN CLAY, HARD STICKY DARK BROWN CLAY
720	785	MUSHY DARK BROWN CLAY, HARD STICKY DARK BROWN CLAY

Casings

Casing #	Depth from Surface (Feet to Feet)		Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	600	Blank	PVC	Other	0.237	4			SCH 80
1	600	740	Screen	PVC	Other	0.237	4	Milled Slots	0.04	SCH 80
1	740	745	Blank	PVC	Other	0.237	4			SCH 80

Annular Material

Depth from Surface (Feet to Feet)		Fill	Fill Type Details	Filter Pack Size	Description
0	100	Cement	10.3 Sack Mix		CONCRETE
100	590	Bentonite	Low Solids		BENTONITE

Depth from Surface (Feet to Feet)		Fill	Fill Type Details	Filter Pack Size	Description
590	765	Filter Pack	Other Gravel Pack	#8	GRAVEL
590	765	Filter Pack	Other Gravel Pack	#8	GRAVEL
765	785	Other Fill	See description		NATIVE FILL

Other Observations:

Borehole Specifications

Depth from Surface (Feet to Feet)		Borehole Diameter (inches)
0	785	10.625

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

Name: BRADLEY & SONS INC
Person, Firm or Corporation

3625 SOUTH HIGHLAND	DEL REY	California	93616
Address	City	State	Zip

Signed: electronic signature received | 10/15/2025 | 414178
C-57 Licensed Water Well Contractor | Date Signed | License Number

DWR Use Only

CSG #	State Well Number			Site Code	Local Well Number		
36	33	13.75	**N**	-121	41	38.38	**W**
	Latitude Deg/Min/Sec				Longitude Deg/Min/Sec		

TRS:

APN:

Attachments

No Attachments

COUNTY OF MONTEREY

HOUSING & COMMUNITY DEVELOPMENT - ENGINEERING SERVICES
1441 Schilling Place, 2nd Floor-South, Salinas, CA 93901

ENCROACHMENT PERMIT 25EP0197

Notify the Department of Housing & Community Development - Engineering Services
at least 48 hours prior to starting any permit work, excluding weekends and legal holidays.
Contact by phone by calling 831-755-5025 or by email at encroachment@co.monterey.ca.us

APPLICATION DATE:	05/07/2025	**DISTRICT:**	5-All Districts
PERMIT ISSUE DATE:	05/16/2025	**ASSOCIATED CONSTRUCTION PERMIT:**	
PARCEL NO. (if any):	111-111-111-111	**UTILITY WORK ORDER:**	
PROJECT ADDRESS:	VARIOUS COUNTY ROADS		
LOCATION DESCRIPTION:	ECHO VALLEY CT, RANCHITA CANYON RD, HARE CANYON RD, CATTLEMEN RD, ELM AVE, ESPINOZA RD AND MISSION RD. REVISED TO INCLUDE CAMPHORA RD, HERBERT RD, ARROYO SECO RD, SAN BENANCIO RD AND SAN JUAN GRADE RD.		
PERMITTEE:	ROD BRADLEY		
ORGANIZATION:	BRADLEY & SON'S, INC.		
PERMITTEE ADDRESS:	3625 S. HIGHLAND AVENUE, DEL REY, CA 93616		
PERMITTEE PHONE:	559-441-1401		
PERMITTEE EMAIL:	rodb@bradleyandsonsdrilling.com		

In compliance with your request and subject to the existing County Encroachment Ordinance, and to all other terms, conditions, and restrictions written below, printed on or attached to any part of this permit, Permission is hereby granted to:

DRILLING TO INSTALL (8) FOUR INCH MONITORING WELLS TO MONITOR GROUND WATER LEVELS FOR THE SALINAS VALLEY BASIN PROJECT LOCATED ON VARIOUS COUNTY ROADS PER ATTACHED LOCATION MAPS.

In order for this encroachment permit to be acknowledged as complete, work shall be in accordance with the above mentioned plan, all pertinent sections of Chapter 14.04 of the Monterey County Code, together with any other applicable provisions of the Monterey County Code, the forms listed below, and other attachments:

Forms

Unless specified, no permit work or activity is to take place after: ***12/31/25***

CEQA Status:		**CEQA Section:**	**CEQA Class:**
Fees Assessed:	$2,328.70		

Copy: Permittee Job Site Inspector File District Superintendent Finance

Printed: 6/18/2025 2:07:07PM

“ENCROACHMENT” includes any structure or object of any kind or character placed, without authority of law, either in, on, under, or over any County highway.

GENERAL CONDITIONS FROM MONTEREY COUNTY CODE - CHAPTER 14.04

An ordinance to protect the County highways and works incidental thereto by regulating their excavation and encroachment.

Sec.14.04 .010 "County highway" means and includes all or any part of the entire width of right-of-way of any road, street, land, alley, way, place, or cul-de-sac maintained by the County and open to the use of the public for purposes of travel, whether or not such entire width is actually used for highway purposes, and whether or not it has been accepted into the County road system by resolution of the County Board of Supervisors. It also includes bridges, culverts, curbs, drains, ditches, and all works incidental to County highway construction, improvement, and maintenance.

Sec.14.04 .020 A - When satisfied an applicant’s right or necessity, the Public Works Director may issue to him or her, a writing permit, which shall not be transferable, authorizing him or her to do any of the following acts:
1. Make an opening or excavation for any purpose in any County highway;
2. Place, change, or renew an encroachment;
3. Construct, grade, or place any driveway within a County highway; but no driveway shall be located within any portion of the normal curve returns of any intersection;
4. Plant, remove, cut, cut down, injure or destroy any tree/shrub/plant/flower growing within any County highway. (Ord. 1162 § 6, 1960)

Sec.14.04 .070 A - This Chapter shall not be construed to prohibit any act for which a permit is required when the performance of such act is reasonably necessary for the preservation of life or property in an emergency. In all such cases, however, the person performing such act shall promptly notify the Public Works Director and shall apply for a permit therefor at the earliest practicable time thereafter, in any event not later than the next succeeding day during which the office of the Public Works Director is open.
B - Any person who violates any of the provisions of this Section is guilty of a misdemeanor. (Ord. 1162 § 11, 1960)

Sec.14.04 .100 The Public Works Director may, but is not required to, supervise any work done under any permit issued under the County, but no cost of supervision shall be charged by the Public Works Director to any public Agency. (Ord. 1162 § 11, 1960)

Sec.14.04 .110 A - Every permittee shall:
1. Notify the Public Works Director at least forty-eight (48) hours, exclusive of Saturdays, Sundays, and legal holidays, before starting any permit work;
2. Keep his or her permit, or a copy thereof, at the site of the permit work at all times when he or she is actually engaged in work thereat, and exhibit it to the Public Works Director, or his or her representative or any peace officer, upon demand;
3. Promptly remove all refuse, debris, equipment, and excess material from the site of the permit work upon its completion, and leave the premises in as presentable a condition as before the work started;
4. Place and maintain suitable warning lights, signs, barriers, devices, or flagmen, which be the types specified in Section 21406 of the California Vehicle Code;
5. Deliver to the Public Works Director, upon his or her demand, after the completion of any permit work, a plan or drawing showing locations and details of permitted encroachments and connections, if any, to existing structures where such encroachments and connections differ substantially from any plats and diagrams submitted with the application for a permit;
6. In every case where he or she has disturbed the existing surface of a County highway, replace, repair or restore such highway in accordance with the terms of his or her permit. In case his or her permit contains no such terms, then he or she shall do such replacing, repairing, or restoring at his or her own expense promptly upon completion of his or her permit work, in a good and workmanlike manner as directed by the applicable provisions of this Chapter, to as good condition as before the permit work started; provided, however, that if the surface which was disturbed was a bituminous-surfaced roadway, such surface shall be replaced, repaired or restored with not less than one and one-half inches, compacted in thickness, of asphaltic concrete surfacing, over a minimum of six inches, compacted, in depth, of aggregate base material of a type approved by the Public Works Director;

7. Comply with all of the terms and conditions of his or her permit;
8. Comply with all construction standards and methods specified in this Chapter;
9. Store, place or deposit no material within five feet (5') from the edge of the pavement or traveled way or within the shoulder line, where the shoulders are wider than five feet (5'), of any County highway, without the prior approval of the Public Works Director;
10. Diligently pursue the permit work in such a way as not to cause an unreasonable interference or inconvenience to the traveling public.

Sec.14.04 .120 A - Unless the permit provides otherwise: All permit work shall conform to the following specifications as may be designated by the permit:
1. The Standard Specifications of the Department of Public Works of the State of California;
2. The Special Provisions for Encroachment Work, on file in the office of the Public Works Director.

Sec.14.04 .125 Indemnity and hold harmless: an applicant shall agree to indemnify, defend, and save harmless the County, its officers, agents and employees, from and against any and all claims and losses whatsoever accruing or resulting to any and all persons, firms or corporations, and public and private property in connection with the encroachment or the conduct of the special event, unless arising out of the sole negligence or willful misconduct of the County. (Ord. 3889, 1996)

Sec.14.04.160 The Public works Director may, in the manner provided in this section, require and enforce the removal of any of the things authorized by Subsection A of this Section, when, in his or her opinion, any of said things are so placed or done as to constitute a traffic hazard, or to interfere with normal highway maintenance, or otherwise to violate any of the conditions under which said things are authorized. (Ord. 3889, 1996; Ord. § 7, 1960)

MEASURED AT:
SALINAS READY MIX PLANT
1351 Harkins Road, Salinas, CA 93901
1-877-READYMIX

DON CHAPIN COMPANY

DELIVERY TICKET
WEIGHTMASTER CERTIFICATE

54118

PRELIMINARY NOTICE IN ACCORDANCE WITH SEC. 1193 CALIF. CODE OF CIVIL PROCEDURE: TO WHOM IT MAY CONCERN:
You are hereby notified that we have furnished labor, service, equipment or material of the following general description, to the below named customer.

SOLD TO: 1365
BRADLEY & SONS INC
PREVIOUS TRUCK:. 100000

SHIP TO:
240 San Benancio Rd
Salinas

PO#:. PW 525055

TIME	MIX NO.	LOAD SIZE	YARDS ORDERED	MAP PG.	TRUCK #	DRIVER	TICKET #
10:13 AM	SS103	9.00	9.00		1024	Nestor Guzman	208074
DATE	PLANT	LOAD #	YARDS DEL.	BATCH #	WATER TRIM	USE	SLUMP REQ. 'ST.
08/12/25	02	1	9.00		-12.00 gl		7.00 in

WARNING: Aggregate, Sand, Ready Mixed Concrete, and Precast Concrete products contain naturally occurring crystalline silica and other chemicals known to the State of California to cause cancer and or reproductive harm. Equipment used to handle, manufacture, transport, and place these products generate diesel fumes known to the State of California to cause cancer and or reproductive harm. Exposure to some or all of these chemicals occurs during product handling, manufacturing, transport, delivery, placing, and related construction activities. Prolonged exposure to and repeated inhalation of crystalline silica and or diesel fumes can cause progressive lung disease such as silicosis and some researchers have reported the exposure may cause lung cancer. To reduce your exposure to diesel fumes and crystalline silica, work in a well ventilated area and work with approved safety equipment such as dust and particle masks that are specifically designed to filter out microscopic particles and fumes. Always familiarize yourself with the hazards of the materials and equipment you are using and follow the precautions indicated on the product labels, Material Safety Sheets, and your health and safety training program. For more information, go to www.P65Warnings.ca.gov.

WARNING: IRRITATING TO THE SKIN AND EYES; Contains Portland Cement. Wear Rubber Boots and Gloves. PROLONGED CONTACT MAY CAUSE BURNS. Avoid contact with Eyes and prolonged contact with the Skin. In case of contact with Eyes or Skin, flush thoroughly with water. If irritation persists, get medical attention. KEEP CHILDREN AWAY.

NOTICE: READ OTHER SIDE BEFORE SIGNING

CUSTOMER HAS RECEIVED AND REVIEWED THIS DELIVERY TICKET/TERMS AND CONDITIONS. CUSTOMER AGREES TO THE TERMS AND CONDITIONS STATED HEREIN, INCLUDING ALL OF THE TERMS AND CONDITIONS STATED ON THE REVERSE SIDE.

By signing below, you are confirming the load was received in good order and per the Ticket. Multiple Tickets do not require multiple signatures (see reverse).

By signing below, you also acknowledge and agree to the PROPERTY DAMAGE RELEASE OF LIABILITY as set forth on the reverse of this Ticket.

Load Received By: X _____

Additional water added to this concrete will reduce its strength, and may cause excessive cracking. Any water added is at customer's own risk and will only be added as ordered by customer.

H_2O ADDED BY REQUEST _____ GAL.

WATER ADD AUTHORIZED BY: X _____

QUANTITY		CODE	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
9.00	yd	SS103	10.3 SK SAND SLU		
9.00	ea	TRANS	TRANSPORTATION		
1.00	ea	FUEL2	FUEL SURCHARGE		
1.00	ea	ENV	ENVIRONMENTAL FEE		

LEFT PLANT	ARRIVE JOB	START UNLOAD	5 MINUTES PER YARD FREE UNLOADING TIME ALLOWED. ADDITIONAL UNLOADING TIME CHARGED AT CURRENT PREVAILING RATES.	
1025	1050			
FINISH UNLOAD	LEAVE JOB	ARRIVE PLANT	STAND BY MINUTES	CYLINDER TEST TAKEN
				☐ YES ☐ NO

SUBTOTAL:

PREV:.

TOTAL:

Material	Design Qty	Required	Batched	% Var	% Moisture	Actual	Wat
CONSAND	1821 lb	17223 lb	17120 lb	-0.60%	5.09% M	99 gl	
TYPEII	968.0 lb	8712.0 lb	8720.0 lb	0.09%			
WATER1	77.00 gl	485.04 gl	485.00 gl	-0.01%		485.00 gl	

Actual
Num Batches: 1
Design W/C: 0.664 Water/Cement: 0.663 T
Slump: 7.00 in Water in Truck: 0.0 gl
Actual W/C Ratio: 0.559 Actual Water: 584 gl

Manual 10:07:38
Design 693.0 gl Actual 584.4 gl To Add: 108.6 gl
Adjust Water: 0.0 gl / Load Trim Water: -12.0 gl / yd3
Batched Cement: 8720 lb Allowable Water: 109 gl

Martin Renteria

WEIGHTMASTER CERTIFICATE THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

THE DON CHAPIN CO. INC. BY X _____ DEPUTY WEIGHTMASTER
Wet signed copy to office

DNCP-54 09/17

DATE	WORK DESCRIPTION
4/23/2025	Stake Borehole Location.
5/12/2025	Underground Utility Locating.
7/22/2025	Hand clear M-GWL-1 borehole. Advance M-GWL-1 borehole to a depth of 120 feet bgs.
7/23/2025	Advance M-GWL-1 borehole to a depth of 240 feet bgs.
7/24/2025	Advance M-GWL-1 borehole to 360 feet bgs.
7/25/2025	Advance M-GWL-1 borehole to 420 feet bgs.
7/28/2025	Condition M-GWL-1 borehole after sitting over the weekend and circulate on bottom (420 feet bgs).
7/29/2025	Advance M-GWL-1 borehole to 560 feet bgs.
7/30/2025	Advance M-GWL-1 borehole to 660 feet bgs.
7/31/2025	Advance M-GWL-1 borehole to 730 feet bgs.
8/1/2025	Advance M-GWL-1 borehole to 785 feet bgs. Conduct geophysical and caliper logs.
8/4/2025	Condition M-GWL-1 borehole after sitting over the weekend and circulate at 300 feet bgs.
8/5/2025	Conduct clean-out pass to 500 feet bgs. Install 41.2 feet of temporary conductor casing at M-GWL-1.
8/6/2025	Conduct clean-out pass to 785 feet bgs.
8/7/2025	Install casing/screen, filter pack, and bentonite transition seal at M-GWL-1.
8/8/2025	Install high solids bentonite grout seal at M-GWL-1.
8/11/2025	No work.
8/12/2025	Pour sanitary seal at M-GWL-1.
8/13/2025	No work.
8/14/2025	No work.
8/15/2025	Open-ended airlifting at M-GWL-1.
8/18/2025	Open-ended airlifting at M-GWL-1.
8/19/2025	Conduct airlift swabbing at M-GWL-1.
8/20/2025	Conduct airlift swabbing at M-GWL-1.
9/24/2025	Collect groundwater sample at M-GWL-1.

MONTGOMERY & ASSOCIATES

Appendix B

Land Surveyor Data Sheet

SVBGSA WELLS #3 As Built W Ground Elev

PT. NO.	Northing	Easting	Elevation (1988)	Ground Elevation	Description
100	2143386.176	5785484.851	49.152	46.93	ES-1B
101	2143339.514	5785453.585	49.073	46.89	ES-1A
102	2143433.251	5785515.392	49.343	47.17	ES-1C
103	2169108.721	5796779.013	220.647	218.64	ES-ISW-1
104	2180073.712	5803560.013	312.522	310.60	L-GWL-1
105	2192892.418	5791617.502	471.552	469.74	L-GWL-4
112	2053365.58	5857570.531	143.364	141.90	F-ISW-3
114	2034677.035	5864869.398	245.026	242.95	F-DA-1
118	2095848.684	5770486.157	669.759	668.02	M-GWL-1
120	1908613.104	5993453.752	407.143	404.80	UV-ISW-2
122	2014098.945	5913164.884	228.547	226.70	F-ISW-2
124	1996101.956	5878555.914	481.16	479.13	F-ISW-1
2	1846551.58	6045419.634	900.975	898.94	UV-GWL-3
11	1816230.088	6099192.531	1312.161	1309.91	UV-GWL-2

CONTROL COORDINATES

81	2136535.538	5789485.777	64.472		SLN5 CSRC
85	2014851.145	5897511.395	277.704		GRN5 CSRC
717	1939583.648	6006901.895	1416.209		P288 CSRC GPS ONLY
3203	2263882.585	5814126.894	222.997		Gilroy Smartnet
3213	2106278.84	5733722.35	282.847		Monterey Smartnet
3295	1694942.35	6069103.238	980.461		Atascadero Smartnet

Coordinates are NAD 83 (2011) California State Plane Coordinates, Zone 4

Reference Frame: CSRN Epoch 2025.00 NAD83(2011)

Elevations are NAVD 1988

Ground elevations are on top of the concrete pad at each well.

Elevation is at the top of casing on the north side.

MONTGOMERY & ASSOCIATES

Appendix C

Laboratory Report

MONTEREY COUNTY HEALTH DEPARTMENT

Consolidated Chemistry Laboratory
1270 Natividad Road Salinas, CA 93906
Phone (831)755-4516 Fax (831)755-4652
ELAP Certification Number 1395

Analytical Report

Montgomery & Associates
201 Hoffman Ave. Suite 9
Monterey, CA 93940

Attn: Abby Ostovar

 Monday, October 6, 2025

Lab Number: **AC98625** **Client Code:** **MONTGOMERY**

Sample Site SAN BENANCIO RD - M-GWL-1
Source Code
Other ID

Collection Date/Time 09/24/2025 12:00
Submittal Date/Time 09/24/2025 13:34
Sample Collector GRANICHER H

Sample Comments: Ground Water. Receiving temperature 1.6 ºC.

Analyte	Method	Unit	Result	MCL	DLR	PQL	Analysis Start Date Time
adjusted Sodium Adsorption Ratio	UC Davis1993		**10.6**		N/A		10/05/2025 10:50
Agriculture-Conductivity	SM2510B	dS/m	**1.68**		N/A	.1	09/25/2025 09:49
Arsenic (As)	EPA200.8 REV 5.4	ug/L	**5**	10*	2	0.5	09/27/2025 11:30
Bicarbonate Alkalinity (as HCO3)	Calculated	mg/L	**547.8**		N/A	1.0	09/24/2025 13:40
Boron (B)	EPA200.8 REV 5.4	ug/L	**130**	1000 NL	100	50	09/27/2025 11:30
Calcium (Ca)	EPA200.7	mg/L	**56**		N/A	1.0	10/04/2025 13:00
Carbonate Alkalinity (as CO3)	Calculated	mg/L	**<1**		N/A	1.0	09/24/2025 13:40
Cl (Chloride)	EPA300.0	mg/L	**104**	250**	N/A	1	09/24/2025 15:31
Conductivity @ 25C	SM2510 B-2011	umho/cm	**1680**	900**	N/A	4	09/25/2025 09:49
Hardness	SM2340 B-2011	mg/L	**210**		N/A	1.7	10/05/2025 10:33
Iron	EPA200.7	ug/L	**365**	300**	100	100	10/04/2025 13:00
Magnesium (Mg)	EPA200.7	mg/L	**17**		N/A	0.1	10/04/2025 13:00
Manganese (Mn)	EPA200.7	ug/L	**330**	50**	20	1	10/04/2025 13:00
Nitrate Nitrogen	EPA300.0	mg/L	**<0.2**	10	0.4	0.2	09/24/2025 15:31
Nitrite as nitrogen	SM4500 NO2 B-2011	mg/L	**<0.05**	1.0*	0.4	0.05	09/24/2025 14:15
NO3 (Nitrate)	EPA300.0	mg/L	**<1**	45*	2.0	1	09/24/2025 15:31
pH (Laboratory)	SM4500H+ B-2011	pH	**6.8**	6.5-8.5**	N/A	0.1	09/24/2025 13:40
Potassium (K)	EPA200.7	mg/L	**13**		N/A	0.1	10/04/2025 13:00
SO4 (Sulfate)	EPA300.0	mg/L	**247**	250**	0.5	1	09/24/2025 15:31
Sodium (Na)	EPA200.7	mg/L	**273**		N/A	1	10/04/2025 13:00
Sodium Adsorption Ratio (SAR)	L.V. Wilcox		**8.09**		N/A	N/A	10/05/2025 10:50
Total Alkalinity (as CaCO3)	SM2320 B-2011	mg/L	**449**		N/A	2	09/24/2025 13:40

AC98625 10/6/25 9:29

mg/L : Milligrams per liter (=ppm) ug/L : Micrograms per liter (=ppb) * : Primary Standards
MCL: Maximum Contaminant Level DLR: Detection Limit for Reporting PQL: Practical Reporting Level ** : Secondary Standards
NL: Notification Level ND : Not Detected N/A : Not Applicable *** : Action Level

Total Dissolved Solids (TDS)	SM2540 C-2015	mg/L	**993**	500**	N/A	5	09/25/2025 09:36

Qualifier(s) / Notes:
pH: The recommended holding time for this analysis is only 15 minutes. The sample was analyzed as soon as it was possible but it was received and analyzed past holding time.

Report approved by 

Donna Ferguson, Ph.D., P.H.M.
Laboratory Director

AC98625 10/6/25 9:29

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