



**MONTGOMERY
& ASSOCIATES**

Water Resource Consultants

May 27, 2025

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

Prepared for:



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- Appendix A. Well Permits, Geophysical, Caliper, and Lithologic Logs, Cuttings Photos, As-Built Diagrams, Well Completion Reports, Encroachment Permits, and Project Chronology
- Appendix B. Land Surveyor Data Sheets
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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 4 monitoring wells installed in the Monterey Subbasin Corral de Tierra Area. Monitoring wells M-ISW-1; M-GWL-2; M-GWL-3; and M-GWL-4 were installed by SVBGSA to fill data gaps identified in the approved Monterey Subbasin Groundwater Sustainability Plan (GSP). Monitoring well installation activities were funded by the Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Round 2 Implementation Grant.

The locations of M-ISW-1; M-GWL-2; M-GWL-3; and M-GWL-4 are shown on Figure 1. This report summarizes the well installation activities that occurred from August 2024 to March 2025.

1.1 Background

The GSP established monitoring well networks to assess groundwater levels and interconnected surface water in the Monterey Subbasin Corral de Tierra Area. Based on GSP review, data gaps were identified within these networks. Initially, SVBGSA attempted to fill data gaps using existing wells in the Subbasin monitored by Monterey County Water Resources Agency (MCWRA) or other agencies. Re-evaluation of the monitoring networks indicated additional wells were needed. Installation of new monitoring wells was recommended to address lack of groundwater level data in areas with substantial groundwater withdrawal, and in an area near the lower reaches of the El Toro Creek where groundwater has been recorded within 20 feet of land surface.

1.2 Hydrogeologic Setting

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

In 2024, M&A reviewed new data to update the hydrogeologic conceptual model (HCM) of the Monterey Subbasin (M&A, 2025). The bedrock unit in the Corral de Tierra area is the Monterey Formation, which rises to the land surface midway between San Benancio Road and the intersection of Highway 68 and River Road. The groundwater basin on the northeastern side of that rise is hydraulically associated with the aquifers of the 180/400 Subbasin. Based on the updated HCM, only the portion of the Corral de Tierra Area to the southwest of the rise is considered the El Toro Primary Aquifer System.

1.3 Well Locations and Objectives

The 4 new monitoring wells were installed to address the HCM data gaps identified in the GSP. Monitoring wells M-GWL-2, M-GWL-3, and M-GWL-4 were installed to fill data gaps in the groundwater level monitoring network. The wells were constructed with screened intervals in transmissive sediments of the El Toro Primary Aquifer System and in the portion of the Paso Robles Formation associated with the 180/400 Subbasin to obtain representative groundwater levels. Monitoring well M-ISW-1 was installed to fill a data gap in the interconnected surface water monitoring network. M-ISW-1 was installed near an inactive stream gage adjacent Toro Creek to assess the depletion of interconnected surface water.

M-GWL-2 was installed on the southwest side of CR-G17 (River Road) southeast of the intersection with Riverview Court and is not representative of the El Toro Primary Aquifer System. M-GWL-3 was installed on the southwest side of San Benancio Road, south of the intersection with Deer Run Lane. M-GWL-4 was installed on the east side of Corral de Tierra Road, north of the intersection with Markham Lane. M-ISW-1 was installed on the south side of Portola Drive, east of the intersection with Creekside Terrace.

1.4 Field Program Chronology

The following is a generalized chronological summary of key field program events:

1. August 8 – 16, 2024: Drill, construct, and develop M-ISW-1
2. August 19 – September 5, 2024: Drill, construct, and develop M-GWL-2
3. September 9 – 17, 2024: Drill, construct, and develop M-GWL-3
4. September 23 – October 15, 2024: Drill, construct, and develop M-GWL-4
5. January 7 – 10 2025: Conduct groundwater sampling at M-GWL-2 and M-GWL-4
6. January 16 – 17, 2025: Conduct pneumatic slug testing at M-GWL-2 and M-GWL-4
7. March 6, 2025: Install dedicated datalogging pressure transducers at M-GWL-2, M-GWL-4, and M-ISW-1

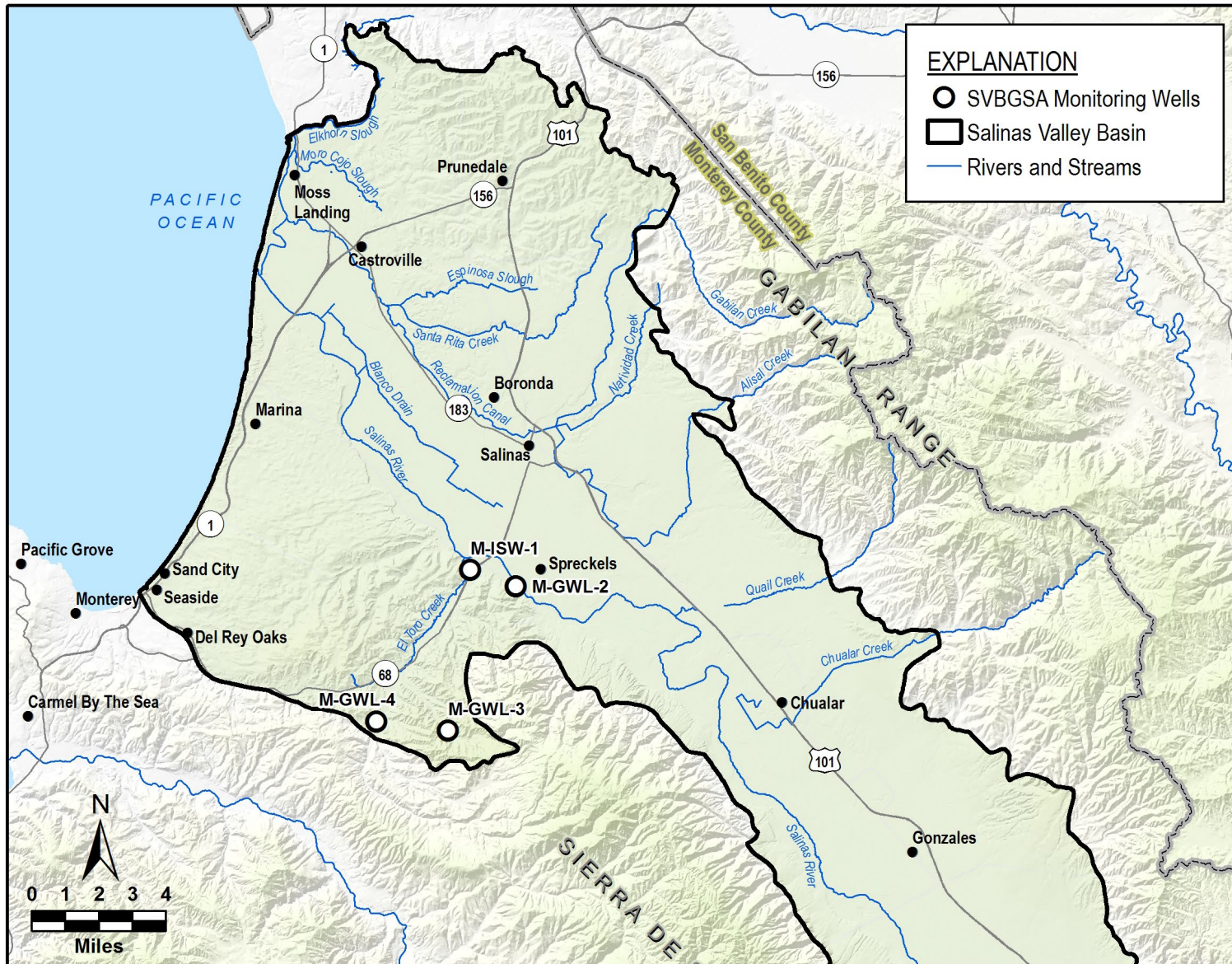


Figure 1. Monitoring Well Locations

2 MONITORING WELL INSTALLATION

This section describes monitoring well drilling, construction, and development activities. Well installation activities were completed in accordance with M&A's *Technical Specifications, Salinas Valley Basin Groundwater Sustainability Agency Monterey Subbasin Monitoring Well Construction and Development* (M&A, 2024).

Well installation activities involved the following parties:

- Montgomery & Associates (M&A) – Contracted by SVBGSA for planning, field construction management services, groundwater quality sampling, pneumatic slug testing, and reporting of well installation activities
 - Subtronic Corporation (Subtronic) – Contracted by M&A for underground utility locating services at the monitoring well sites prior to drilling operations
- Parks Water Resources, LLC. (Parks) of Zamora, California, a licensed C-57 well driller – Contracted by SVBGSA for monitoring well drilling (mud rotary methods), construction, and development
 - PeneCore Drilling (PeneCore) of Woodland, California, a licensed C-57 well driller – Subcontracted by Parks for monitoring well drilling (hollow stem auger method), construction, and development
 - Stewart Well Logging Service (Stewart) – Contracted by Parks for geophysical and caliper logging services
- Whitson Engineers (Whitson), a land surveyor licensed in the state of California – Contracted by SVBGSA for surveying rights-of-way and surveying monitoring well locations and elevations

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 Parks, PeneCore, and Stewart.

2.1 Drilling and Construction

Monitoring wells M-GWL-2; M-GWL-3; M-GWL-4; and M-ISW-1 were 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). Copies of monitoring well construction permits obtained from the Monterey County Environmental Health Bureau are provided in Appendix A.

2.1.1 Direct Rotary Drilling

Drilling, well construction, and development of new monitoring wells M-GWL-2, M-GWL-3, and M-GWL-4 were conducted by Parks. The 10.625-inch diameter boreholes were advanced by direct rotary drilling methods using a GEFCO 50K drill rig. During drilling, a bentonite-based drilling fluid was used to maintain borehole stability. Following drilling activities at each location, drill cuttings and drilling fluids generated during drilling were removed from the sites for proper disposal.

During direct rotary drilling, Parks used a 10.625-inch diameter mill tooth bit, button bit, and drag bit and collected samples of drill cuttings off the shaker every 10 feet of vertical drilling. An M&A hydrogeologist maintained lithologic logs 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.

After reaching total depth on each of the pilot boreholes, Stewart conducted downhole geophysical surveys that included natural gamma radiation, spontaneous potential, short and long normal resistivities, and single point resistance. Results of the geophysical surveys are provided in Appendix A. Following the ream pass, Stewart conducted a caliper survey to measure the borehole's diameter and shape, results of which are included in Appendix A.

2.1.1.1 Well Design

M&A and Stewart 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 each borehole is included in Appendix A.

2.1.1.2 Well Construction

Monitoring wells M-GWL-2, M-GWL-3, and M-GWL-4 were constructed with nominal 4-inch diameter (3.8-inch inner diameter and 4.5-inch outer diameter), flush threaded, Schedule 80 poly vinyl-chloride (PVC) well casing and screen, with horizontal machine-cut 0.040-inch slots. The wells were completed with a 5-foot cellar with a 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 at each location, annular materials were placed from the bottom to the top of the borehole using a tremie pipe. From bottom to top, annular materials included hydrated bentonite tablets, 8 x 16 gradation filter media (provided by SRI Supreme), hydrated bentonite tablets, high solids powdered bentonite grout, and neat cement with 2% bentonite.

Placement of the annular seal at each location was approved by a Monterey County Environmental Health Bureau inspector who was present to witness placement of all annular seals. Well schematics for M-GWL-2, M-GWL-3, and M-GWL-4 are provided in Appendix A. Table 1 summarizes the as-built construction details for these monitoring wells.

Table 1. Well Construction Summary

	M-ISW-1	M-GWL-2	M-GWL-3	M-GWL-4
Total Drilled Depth (feet)	75	600	340	600
Borehole Diameter (inches)	8	10.625	10.625	10.625
Completed Depth ^a (feet)	70	545	330	395
Casing Diameter (inches)	2 (nominal)	4 (nominal)	4 (nominal)	4 (nominal)
Casing Material	Schedule 80 PVC	Schedule 80 PVC	Schedule 80 PVC	Schedule 80 PVC
Screened Interval (feet)	15-65	490-540	300-325	350-390
Filter Pack Material	8 x 16	8 x 16	8 x 16	8 x 16
Depth of Annular Seal (feet)	10	50	50	50
Static Water Level ^b (feet btoc)	N/A	60.52	N/A	190.48

Notes:

btoc – below top of casing

^aCompleted depth is defined as the bottom of the casing.

^bStatic water levels were measured on December 5, 2024.

2.1.2 Hollow Stem Auger Drilling

Drilling and well construction of new monitoring well M-ISW-1 was conducted by PeneCore. The 8-inch diameter borehole was advanced by the hollow-stem auger method using a Geoprobe 8040DT drill rig. Following drilling activities, drill cuttings generated during drilling were removed from the site for proper disposal.

During hollow-stem auger drilling, PeneCore used an 8-inch auger bit and collected samples of the formation every 10 feet of vertical drilling using a split-spoon sampler. An M&A hydrogeologist maintained lithologic logs 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.

2.1.2.1 Well Design

M&A collected lithologic data used to support well design. The interpreted lithology of each borehole is included in Appendix A.

2.1.2.2 Well Construction

Monitoring well M-ISW-1 was constructed with nominal 2-inch diameter (1.9-inch inner diameter and 2.4-inch outer diameter), flush threaded, Schedule 80 PVC well casing and screen, with horizontal machine-cut 0.040-inch slots. The well was completed with a 5-foot cellar and a stainless-steel threaded end cap.

Following casing installation at each location, 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), hydrated bentonite tablets, and neat cement. Placement of the annular seal at M-ISW-1 was approved by a Monterey County Environmental Health Bureau inspector who was present to witness the placement of the annular seal.

The well schematic for M-ISW-1 is provided in Appendix A. As-built construction details are summarized in Table 1.

2.2 Well Development

Following construction, Parks completed well development at M-GWL-2 and M-GWL-4 after allowing a minimum of 24 hours for the sanitary seal to cure. Parks did not conduct well development at M-GWL-3 because saturated material was not encountered at that location from ground surface to a depth of 340 feet below ground surface (bgs). Initial development consisted of open-ended airlifting. Using a 1-inch airline and the well casing as an eductor pipe, airlifting was completed from the top of the well to the bottom until the discharge was free of drilling fluid and purge water was visibly clear. Fill generated during this process was removed from the bottom of the well by lowering the airline into the cellar section.

Following open-ended airlifting, M-GWL-2 and M-GWL-4 were further developed by swabbing while simultaneously airlifting. This process was completed from the top of the well screens to the bottom of the well using a 5-foot dual-swab tool composed of a perforated pipe equipped with two 4-inch diameter rubber flanges on either end. Swabbing and simultaneous airlifting was generally completed in 5-foot intervals until the discharge water became visibly clear.

Following construction, PeneCore did not conduct well development at M-ISW-1 because shallow groundwater was not encountered during drilling. Because M-ISW-1 was a dry well when it was constructed, there was no shallow groundwater interconnected to the surface water at El Toro Creek. El Toro Creek was observed to also be dry at the time of well construction. Therefore, during the summer of 2024 there was no potential for depletion of interconnected surface water at the M-ISW-1 location. The relationship between shallow groundwater and the

surface water at El Toro Creek will continue to be monitored to assess any potential for future depletions of interconnected surface water, especially during periods of high winter flows.

2.3 Well Completion

As requested by MCWRA, each monitoring well was completed with a standpipe monument—each protected using 3 traffic bollards—and locking cover to prevent tampering. Figure 2 shows the M-GWL-2 surface completion as an example. The State of California Well Completion Reports for each well are provided in Attachment A.



Figure 2. Standpipe Monument

2.4 Monitoring Well Surveying

Following installation of the surface completions, Whitson Engineers surveyed the location, land surface elevation, and top of casing reference point elevation at each monitoring well. Survey information is summarized in Table 2, and land surveyor data reports are provided in Appendix B.

Table 2. Monitoring Well Surveyed Elevations

Well	California State Plane Zone IV, NAD 83		Land Surface Elevation NAVD 88 (feet)	Measuring Point Elevation ^a NAVD 88 (feet)	Approximate Elevation at Top of Screen NAVD 88 (feet)	Approximate Elevation at Bottom of Screen NAVD 88 (feet)	Approximate Elevation of Groundwater Surface NAVD 88 (feet)
	X Coordinate (feet)	Y Coordinate (feet)					
M-ISW-1	5773987.33	2121098.85	62.66	65.54	47.66	-2.34	N/A
M-GWL-2	5781136.20	2118587.22	61.92	63.86	-428.08	-478.08	3.34
M-GWL-3	5770514.31	2095820.89	668.75	670.69	368.75	343.75	N/A
M-GWL-4	5759221.82	2097357.31	379.95	381.61	29.95	-10.05	191.13

Notes:

NAVD = North American Vertical Datum

^aMeasuring 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, groundwater sampling and aquifer testing was conducted at monitoring wells M-GWL-2 and M-GWL-4. Additionally, M-GWL-2, M-GWL-4, and M-ISW-1 were equipped with pressure transducers to monitor changes in groundwater elevations over time. Sampling, testing, and equipping activities are summarized in the following sections.

3.1 Groundwater Sampling

From January 7 to January 9, 2025, groundwater samples were collected from M-GWL-2 and M-GWL-4 for laboratory analysis. M-ISW-1 and M-GWL-3 were not sampled because they are screened in zones that are currently unsaturated.

3.1.1 Sampling Methods

Groundwater samples were collected by M&A in coordination with Parks using the standard purge method. Prior to sample collection, Parks removed at least 3 casing volumes of groundwater at each well using a submersible pump.

Following collection, samples were delivered to the Monterey County Health Department Laboratory for irrigation suitability, arsenic, iron, and manganese analysis.

3.1.2 Results

A copy of the laboratory report is provided in Appendix C. Groundwater quality results are summarized in Table 1. As shown in Table 3, the sample from M-GWL-2 was reported above the secondary maximum contaminant level (MCL) for conductivity, manganese, and total dissolved solids (TDS). The sample from M-GWL-4 was reported above the secondary MCL for conductivity and TDS.

Table 1. Water Quality Summary

Analyte	M-GWL-2	M-GWL-4	State MCL	Secondary MCL	Units
Arsenic	2	6	10		ug/L
Boron	0.21	0.17			mg/L
Calcium	176	132			mg/L
Chloride	108	194		250	mg/L
Conductivity @ 25°C	1,570	1,520		900	umho/cm
Hardness	2,690	449			mg/L
Iron	<100	<100		300	ug/L
Magnesium	546	29			mg/L
Manganese	66	34		50	ug/L
Nitrate as NO3	<1	8.8	45		mg/L
pH	6.7	6.5			pH
Potassium	5.1	3.9			mg/L
Sulfate	205	168		250	mg/L
Sodium	84	126			mg/L
Total Alkalinity as CaCO3	467	290			mg/L
Total Dissolved Solids	1,000	933		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 font exceed MCL.

Groundwater samples were collected at M-GWL-2 and M-GWL-4 to establish baseline water quality and collect information in the data gap areas.

3.2 Pneumatic Slug Testing

From January 16 to January 17, 2025, pneumatic slug testing was conducted at groundwater level monitoring wells M-GWL-2 and M-GWL-4; however, M-ISW-1 and M-GWL-3 were not tested because they are screened in zones that are currently unsaturated. Pneumatic slug testing was conducted to refine aquifer properties in the groundwater model.

3.2.1 Testing Procedure

Prior to pneumatic slug testing, monitoring wells M-GWL-2 and M-GWL-4 were left undisturbed for at least 2 days following groundwater sampling activities. Pneumatic slug testing was conducted by applying air pressure to the sealed monitoring wells to lower the groundwater

level in the wells. Testing comprised the pressurization and instantaneous depressurization of the water column in the monitoring wells, displacing a known volume of water in each well and measuring the imposed fluctuation (rise and oscillation) of the groundwater level.

Each monitoring well was equipped with a wellhead manifold and a datalogging pressure transducer to measure water level response during testing. The dataloggers were programmed to record water levels at a rate of 1 reading per second. A minimum of 6 rising head pneumatic slug tests were conducted at each well to verify that the data were repeatable. Slugs of different air pressure were used at each location for comparative analysis. Monitoring of rising head continued until the water level recovered to within approximately 99% of the initial static water level.

3.2.2 Pneumatic Slug Test Results

Water level recovery data for rising head tests were analyzed to estimate hydraulic conductivity (K) using the aquifer test analytical software AQTESOLV (HydroSOLVE, 2015). The KGS method (Hyder *et al.*, 1994) was used to analyze the observed water level response at both wells. The water level response at M-GWL-2 and M-GWL-4 were both overdamped so the KGS analytical method was used. The overdamped response is characterized by increasing groundwater levels that do not oscillate. This response dictates the use of the KGS method because a good fit cannot be obtained using a physically plausible storage estimate and both wells are partially penetrating.

For pneumatic slug tests, displacement (i.e., change in water level in the well) at a given time t during the test (H_t) is normalized by the initial displacement (H_0) as follows:

$$\text{normalized head} = H_t/H_0$$

The normalized head was plotted against time and matched against type curves of known horizontal K. Horizontal K was also estimated using a straight-line method (Hvorslev, 1951) to compare to the values estimated using type curves and to validate the results. Analytical results are presented as horizontal K in units of feet per day (ft/day). The horizontal K values from the slug tests at each well are considered representative of the aquifer near the well at the depth of their screened intervals.

Table 4 summarizes the estimated horizontal K values for each analytical method and the arithmetic mean of values from both analytical methods. Graphs of observed water level response and the selected type curve for analysis are provided in Appendix D. M-GWL-2 is not representative of the El Toro Primary Aquifer System as it is located north of where the Monterey Formation rises to land surface midway between San Benancio Road and the intersection of Highway 68 and River Road.

Table 2. Summary of Estimated Hydraulic Conductivity from Pneumatic Slug Testing Analyses

Well ID	Analytical Method	K (ft/day)	Analytical Method	K (ft/day)	Kavg (ft/day)
M-GWL-2	KGS	4.6	Hvorslev	5.3	4.9
M-GWL-4	KGS	20.6	Hvorslev	19.0	19.8

3.3 Well Equipping

On March 6, 2025, monitoring wells M-ISW-1, M-GWL-2, and M-GWL-4 were equipped with In-Situ Level TROLL 500 datalogging pressure transducers to continuously measure groundwater levels. The pressure transducers were suspended in the wells using vented direct data cables.

The dedicated monitoring equipment was installed in each well based on static groundwater levels and depths of screened intervals. In the groundwater level monitoring network wells M-GWL-2 and M-GWL-4, the pressure transducers were placed approximately 200 feet below the static water level measured at each location. In the interconnected surface water monitoring network well M-ISW-1, the pressure transducer was placed approximately 65 feet below top of casing, at the bottom of the screened interval. Table 5 summarizes pressure transducer specifications and depths.

Table 3. Transducer Specifications

Monitoring Well	Screened Interval (feet btoc)	Static Groundwater Level (feet btoc)	Transducer Depth (feet btoc)	Range (ft H ₂ O)	Transducer Model
M-GWL-2	490-540	60.52	261	692	Level TROLL 500
M-GWL-4	350-390	190.48	390	692	Level TROLL 500
M-ISW-1	15-65	N/A	65	692	Level TROLL 500

btoc – below top of casing

ft H₂O - feet of Water Column

4 REFERENCES

Hyder, Z., J.J. Butler, Jr., C.D. McElwee and W. Liu, 1994. Slug tests in partially penetrating wells, *Water Resources Research*, vol. 30, no. 11, pp. 2945-2957.

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5 ACRONYMS & ABBREVIATIONS

bgs	below ground surface
btoc	below top of casing
DWR	Department of Water Resources
ft/day	feet per day
ft H ₂ O	feet of Water Column
GSP	Groundwater Sustainability Plan
HCM	hydrogeologic conceptual model
M&A	Montgomery & Associates
MCL	maximum contaminant level
MCWRA	Monterey County Water Resources Agency
mg/L	milligrams per liter
NAVD	North American Vertical Datum
Parks	Parks Water Resources
PeneCore	PeneCore Drilling
PVC	polyvinyl chloride
SGM	Sustainable Groundwater Management
Stewart	Stewart Well Logging Services
Subtronic	Subtronic Corporation
SVBGSA	Salinas Valley Basin Groundwater Sustainability Agency
TDS	total dissolved solids
ug/L	micrograms per liter
umhos/cm	micromhos per centimeter
Whitson	Whitson Engineering

Appendix A

**Well Permits, Geophysical, Caliper, and Lithologic Logs,
Cuttings Photos, As-Built Diagrams, Well Completion
Reports, Encroachment Permits, 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: #25-000011 (90-FT)

ISSUANCE DATE: 7/27/2024

SITE LOCATION: Portola Site 4

EXPIRATION DATE: 7/27/2025

Lat: 36.623500° N; Long: -121.684608°W

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: (831) 277-1807

CITY: Carmel Valley

DRILLING CONTRACTOR: Parks Water Resources LICENSE: 1113206

ISSUED BY: CHRISTIE VO

Christie T. Vo, REHS

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.

Well permit #25-000011

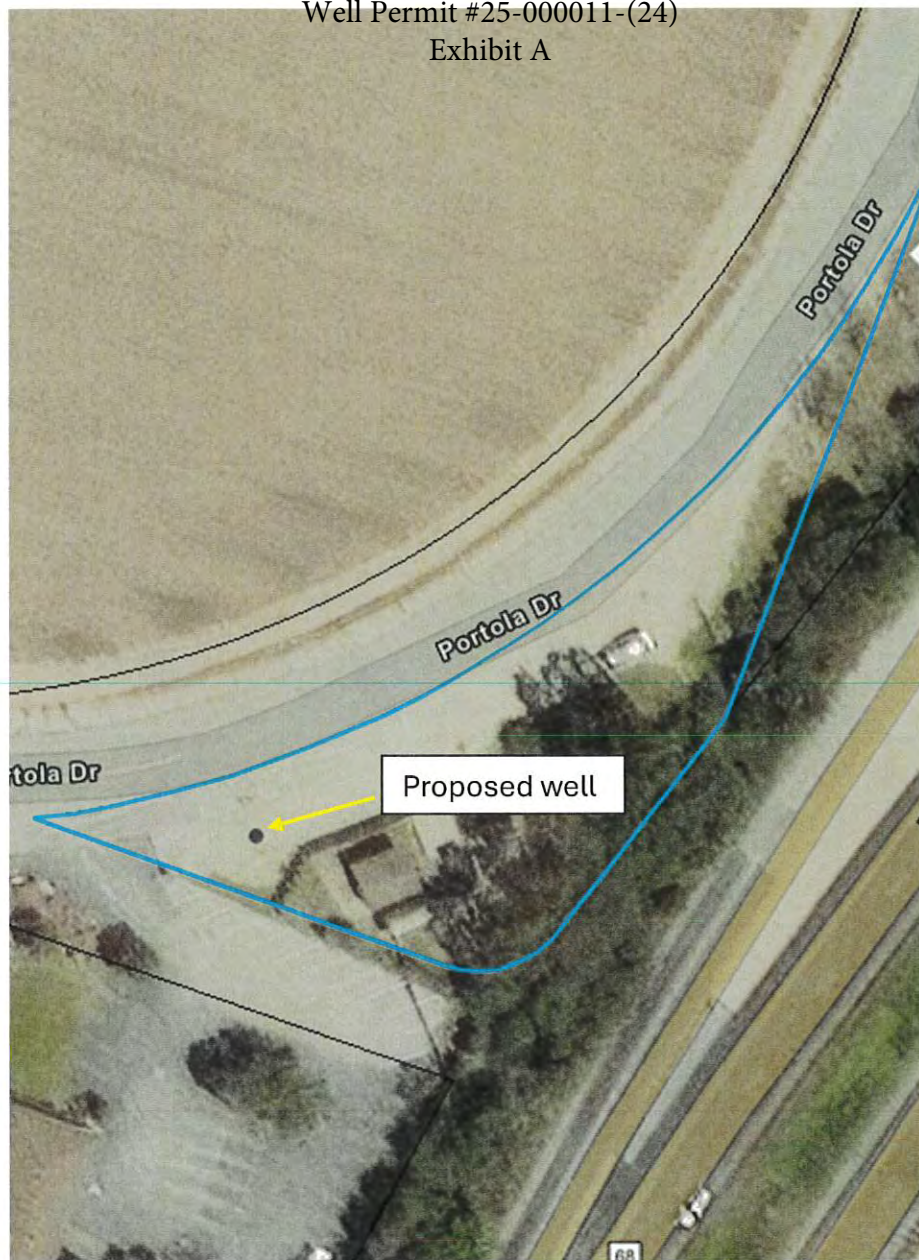
Owner: County Road Easement

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

IN1211271 Paid 7/25/2024

Well Permit #25-000011-(24)
Exhibit A



SVBGSA – Monterey Subbasin

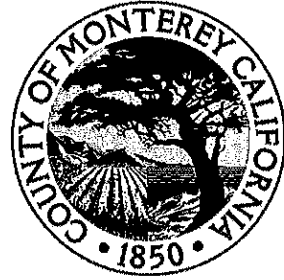
18987 Portola Dr.

Northwest side of State Route 68(Monterey
Salinas Hwy) west of the intersection
Reservation Rd. – G17

GPS 36.623500, -121.684608

MONTEREY COUNTY

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



MONITORING WELL CONSTRUCTION PERMIT

WELL PERMIT: #25-000012 (600-FT)

ISSUANCE DATE: 7/27/2024

SITE LOCATION: River Road Site 5

EXPIRATION DATE: 7/27/2025

Lat: 36.617071° N; Long: -121.659948°W

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: (831) 277-1807

CITY: Carmel Valley

DRILLING CONTRACTOR: Parks Water Resources LICENSE: 1113206

ISSUED BY: CHRISTIE VO

Christie T. Vo, REHS

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

IN1211272 Paid 7/25/2024



SVBGSA – Monterey Subbasin

Southwest side of CR-G17(River Road)
Southeast of the intersection with
Riverview Court

GPS 36.617071, -121.659948

MONTEREY COUNTY

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



MONITORING WELL CONSTRUCTION PERMIT

WELL PERMIT: #25-000013 (600-FT)

ISSUANCE DATE: 7/27/2024

SITE LOCATION: San Benancio Site 6

EXPIRATION DATE: 7/27/2025

Lat: 36.553944° N; Long: -121.694162°W

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: (831) 277-1807

CITY: Carmel Valley

DRILLING CONTRACTOR: Parks Water Resources LICENSE: 1113206

ISSUED BY: CHRISTIE VO

Christie T. Vo, REHS

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.

Well permit #25-000013

Owner: County Road Easement

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

IN1211273 Paid 7/25/2024



SVBGSA – Monterey Subbasin

County right-of-way on the
Southwest side of San Benancio
Road, South of the intersection with
Deer Run Lane

GPS 36.553944, -121.694162

MONTEREY COUNTY

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



MONITORING WELL CONSTRUCTION PERMIT

WELL PERMIT: #25-000010 (300-FT)

ISSUANCE DATE: 7/27/2024

SITE LOCATION: Corral de Tierra Site 7

EXPIRATION DATE: 7/27/2025

Lat: 36.557112° N; Long: -121.732590°W

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: (831) 277-1807

CITY: Carmel Valley

DRILLING CONTRACTOR: Parks Water Resources LICENSE: 1113206

ISSUED BY: CHRISTIE VO

Christie T. Vo, REHS

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.

Well permit #25-000010

Owner: County Road Easement

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.
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END

IN1211269 Paid 7/25/2024



SVBGSA – Monterey Subbasin

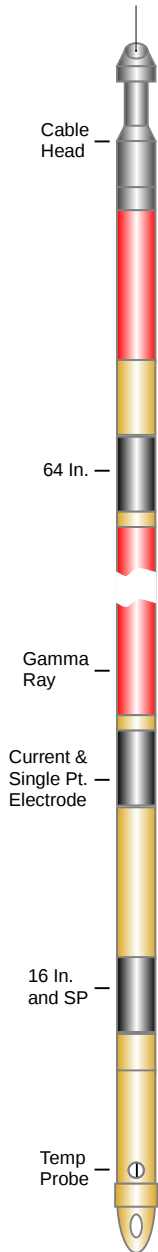
County right -of-way on the East side of
Corral De Tierra Road, North of the
intersection with Markham Lane

GPS 36.557112, -121.732590

		ELECTRIC - GAMMA RAY-TEMPERATURE LOG	
Stewart Well Logging Service			
Filing No. 9100,8601	COMPANY <u>Parks Water Resources</u> WELL <u>M-GWL-2</u> FIELD <u>Salinas</u> STATE <u>California</u> COUNTY <u>Monterey</u> LOCATION: _____		
Job No. 1787	SEC: _____ TWP: _____ RGE: _____ LAT.: <u>36.6171539</u> LONG.: <u>-121.6601304</u>		OTHER SERVICES: None
Permanent Datum: <u>Ground Level</u> Elev.: <u>65</u> Ft. Elevs.: K.B. _____ Ft. Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. _____ Ft. Drilling Measured From: <u>Ground Level</u> G.L. <u>65</u> Ft.			
Run	One		
Date	Aug 21, 2024		
Depth-Driller	600	Ft	Ft
Depth-Logger	594	Ft	Ft
Top Logged Interval	9	Ft	Ft
Btm Logged Interval	594	Ft	Ft
Casing-Driller	In @	Ft	In @ Ft
Casing - Logger In@Ft	In @	Ft	In @ Ft
Bit Size	8-1/2	In @ 594 Ft	In @ Ft
Time On Bottom	1541		
Type Fluid in Hole	Bentonite		
Density	Viscosity		
pH	Fluid Loss	ml	ml
Source of Sample	Lift Pump		
Rm @ Mea. Temp	8.4	@ 75 °F	@ °F
Rmf @ Mea. Temp	8.3	@ 75 °F	@ °F
Rmc @ Mea. Temp	5.9	@ °F	@ °F
Source Rmf	Maes		
Rm @ BHT	88	@ °F	@ °F
Time Since Circ.	1.5	Hr	Hr
Max. Rec. Temp.	88	°F	°F
Van No.	Location	SWLS-1	
Recorded By	Paschke		
Witnessed By	T. Parks		

This Eagle Plot Heading Conforms To API RP 31A

ELECTRIC - GAMMA RAY-TEMPERATURE LOG TOOL



SPONTANEOUS POTENTIAL LOGS:

SP Logs record potentials or voltages developed between the borehole fluid and the surrounding formation and are representations of lithology and water quality. Recording of SP logs are limited to water-filled or mud-filled open holes.

NORMAL RESISTIVITY LOGS:

Normal Resistivity Logs record the electrical resistivity of the borehole environment with lower resistivities indicative of clays and higher resistivities being sands and gravels. Normal resistivity logs are affected by bed thickness, Borehole diameter and borehole fluid.

SINGLE POINT RESISTIVITY LOGS:

Single Point Resistivity Logs record the electrical resistance from points within the borehole to an electrical ground at land surface. Single-point resistance logs are useful in the determination of lithology, water quality, and location of fracture zones.

GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

TEMPERATURE LOGS:

Temperature Logs record the water temperature in the borehole. Temperature logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient.

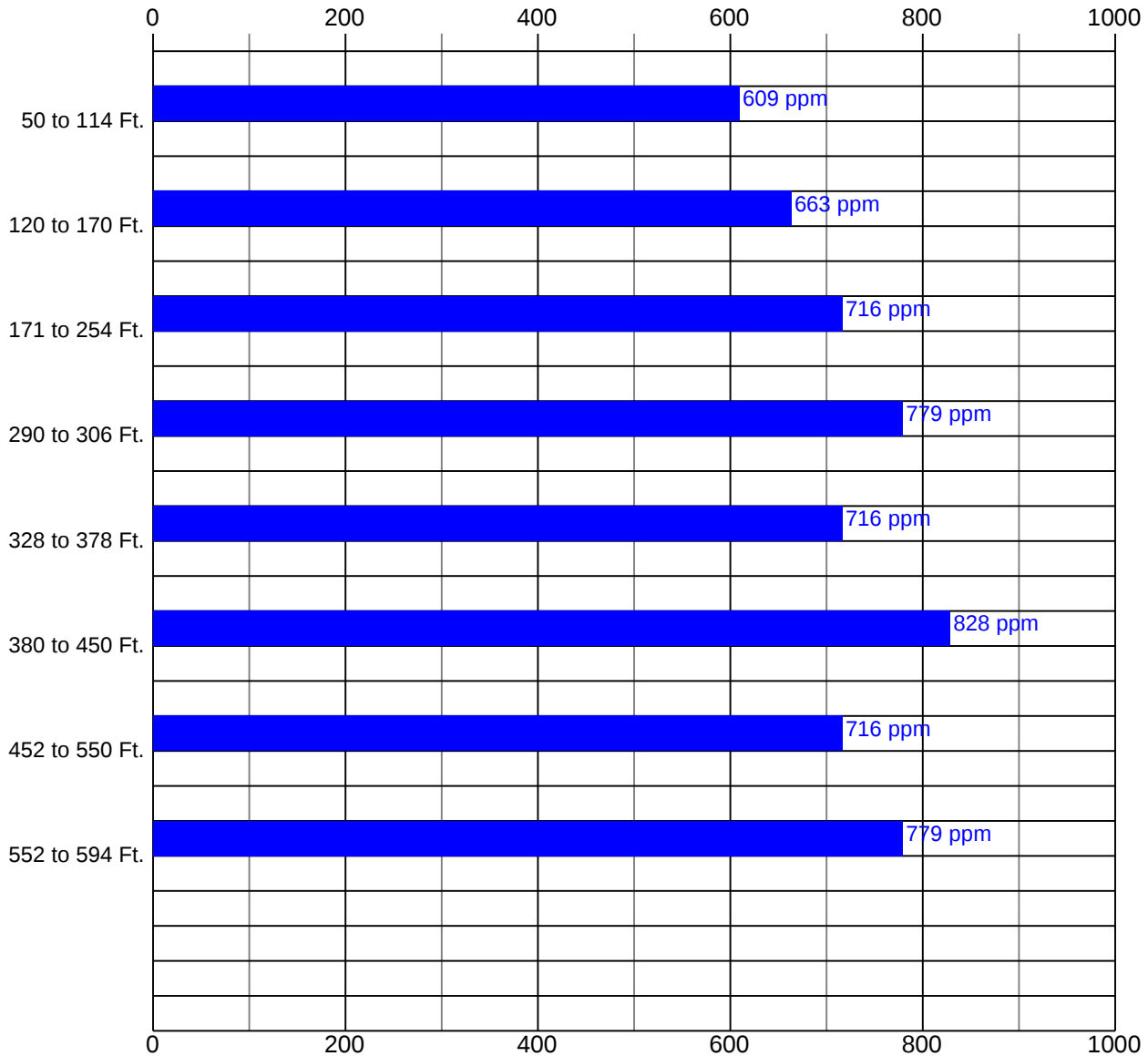
ELECTRIC LOG SPECIFICATIONS:

Diameter	1.73 Inches
Length	8.37 Feet
Weight	21.7 Lbs.
Max. Temp	158° F
Resist. Range	0 - 10,000 ohm-m
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

TOTAL DISSOLVED SOLIDS

* NaCl 

Parts Per Million - ppm



TDS Classes

Class 1: Excellent to Good – Less than 700 ppm

Class 2: Good to Injurious – 700 to 2000 ppm

Class 3: Injurious to Poor – More than 2000 ppm

NaCl = Sodium Chloride

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

REMARKS

Consulting Company:

S.P Shift Due To Sonde Pulling Tight

Consulting Company: E.L. Montgomery

Parks Water Resources
M-GWL-2
Aug 21, 2024

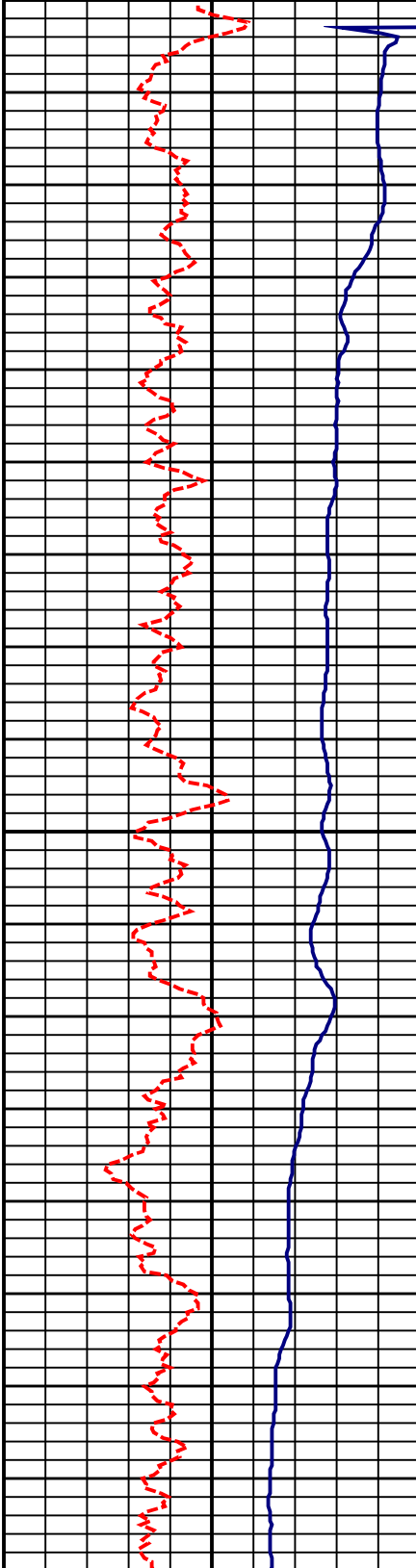
Mult. Pages
5"/100'

DEPTHS
(Feet)

< - S.P. (10 mV/div) S.P. + >

Gamma Ray(api)

0 200



50'

100'

150'

181'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000

64 Inch Normal (ohmm²/m) 100

100 16 Inch Normal (ohmm²/m) x10 1000

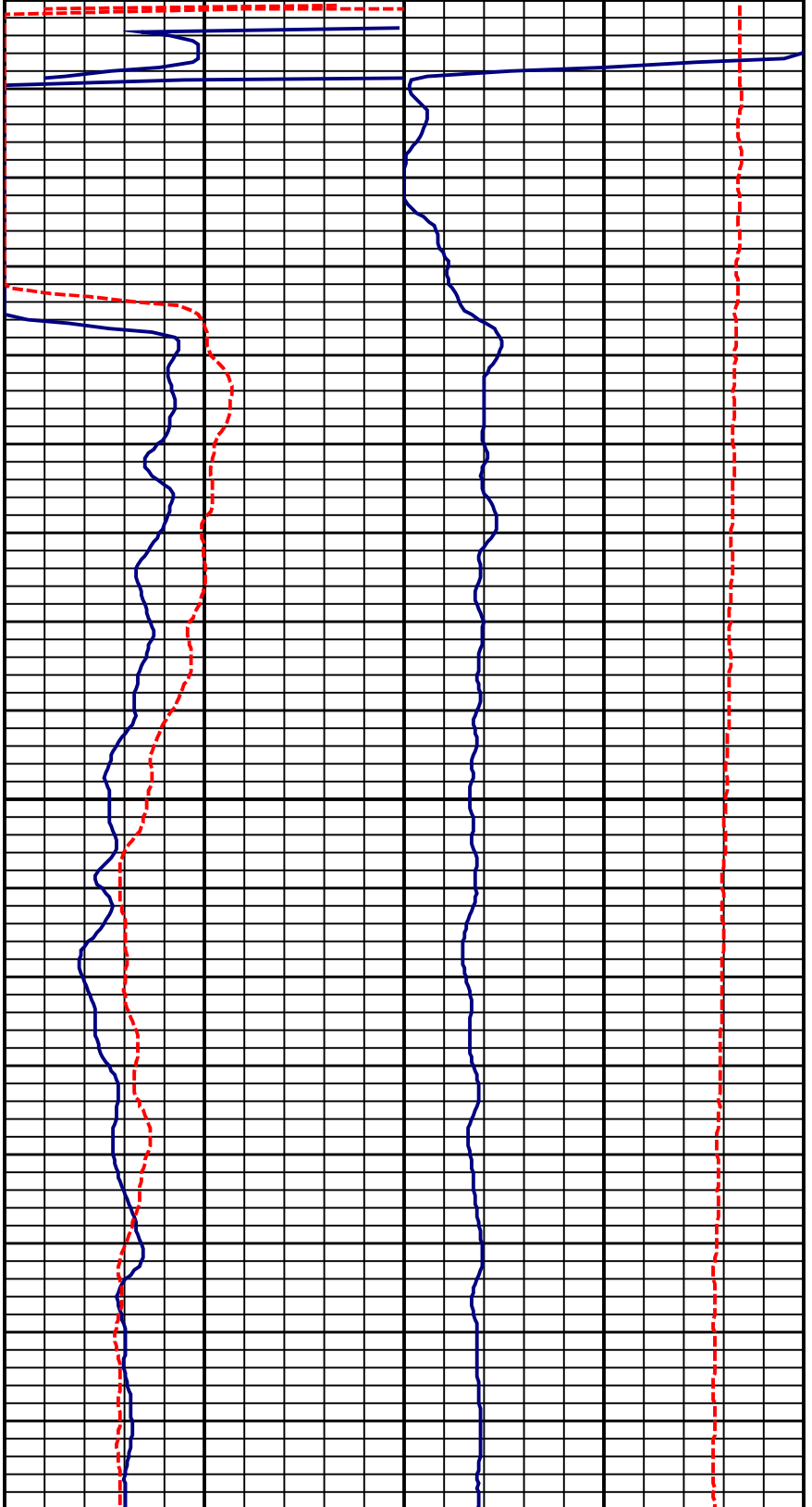
16 Inch Normal (ohmm²/m) 100

Single Point(ohms)

100

Temperature (°F)

90



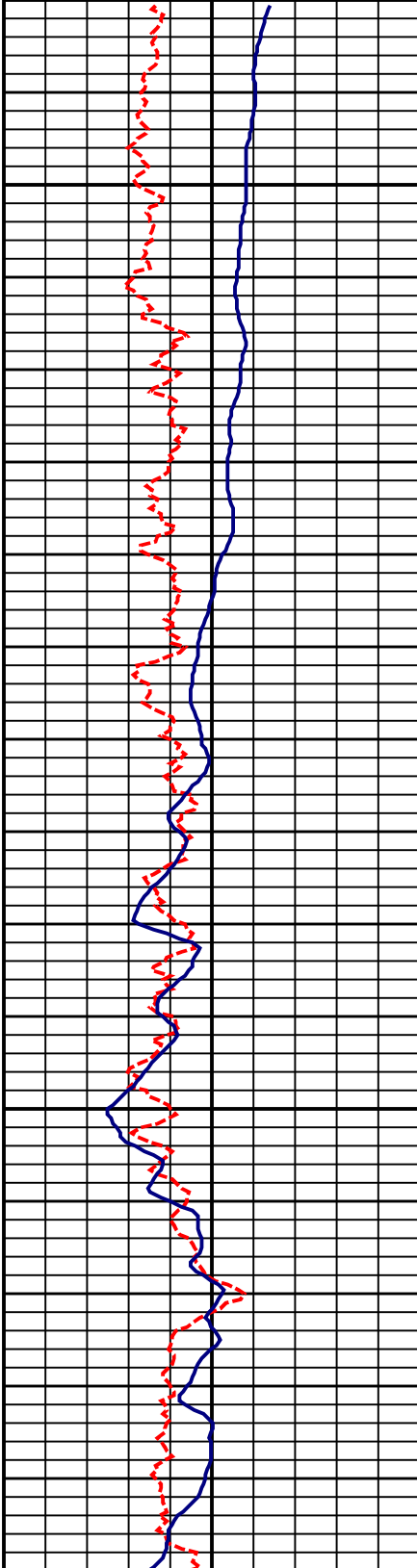
Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

< - S.P. (10 mV/div) S.P. + >

0 Gamma Ray(api) 200



181'

200'

250'

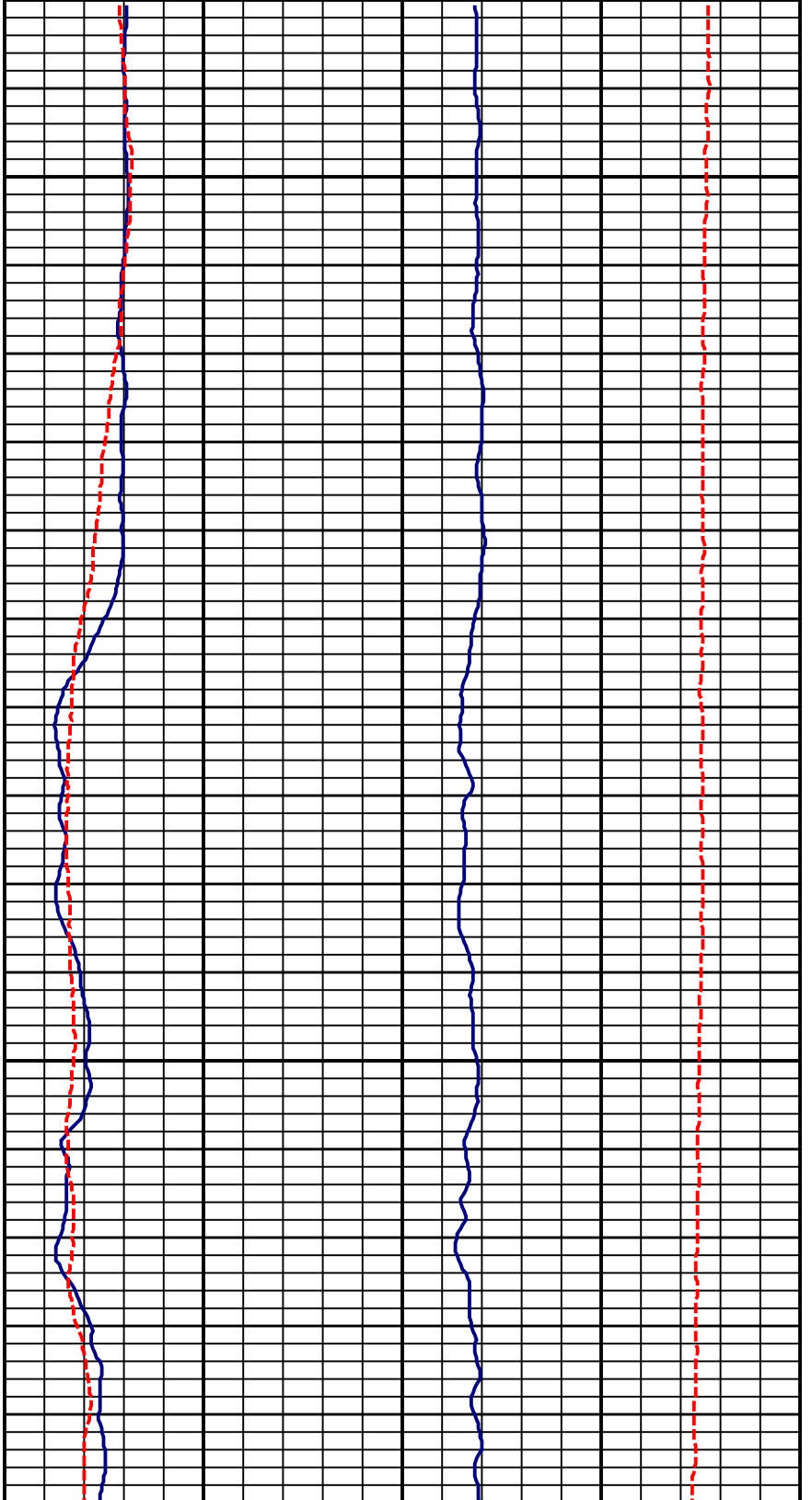
300'

350'

381'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
0 64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 0
0 16 Inch Normal (ohmm²/m) 100 80 Single Point(ohms) 100
0 16 Inch Normal (ohmm²/m) 100 80 Temperature (°F) 90



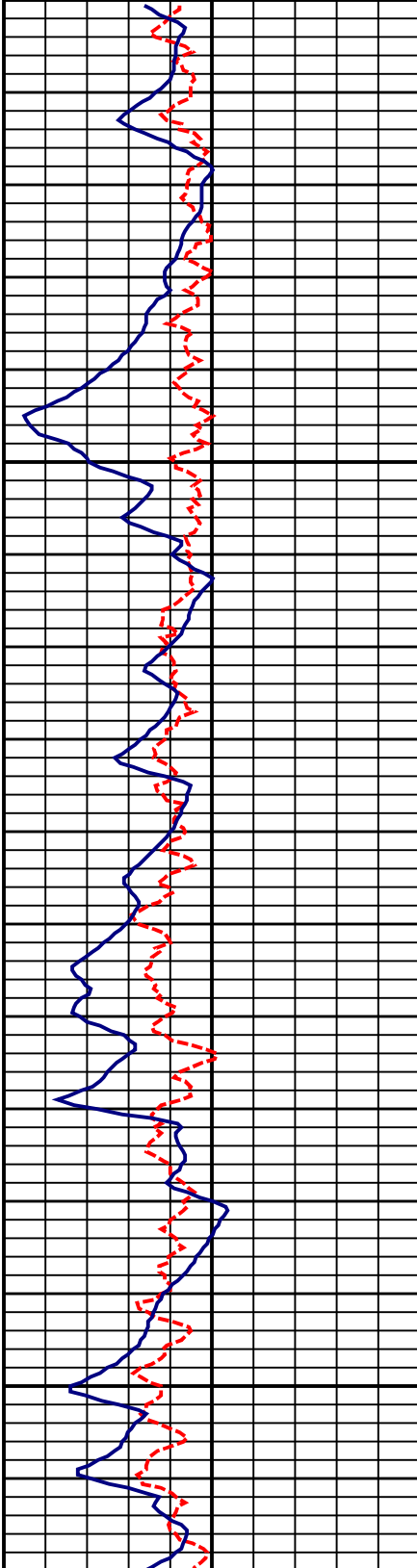
Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

< - S.P. (10 mV/div) S.P. + >

0 Gamma Ray(api) 200



351'

400'

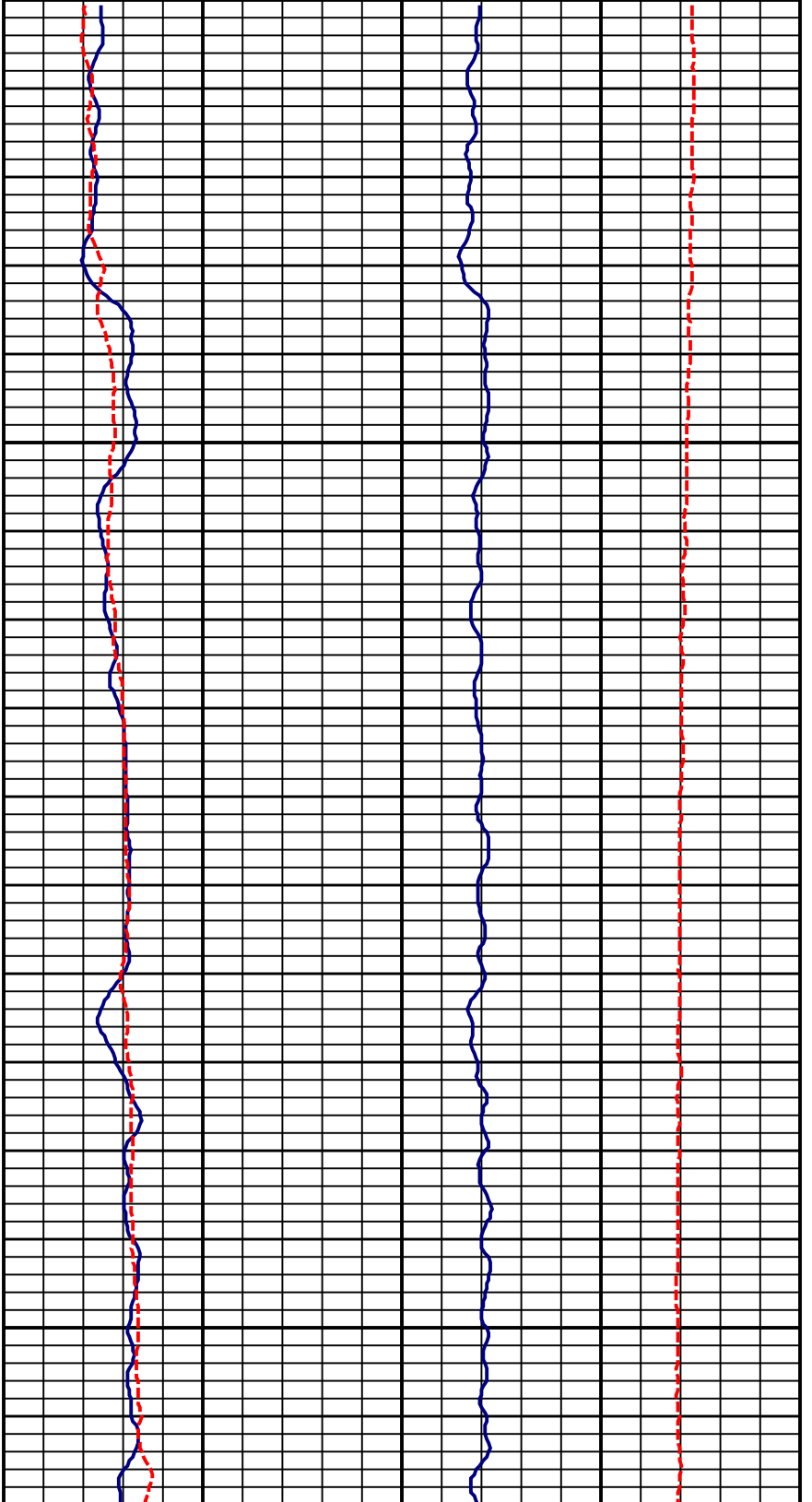
450'

500'

521'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100	64 Inch Normal (ohmm ² /m) x10	1000
0	64 Inch Normal (ohmm ² /m)	100
100	16 Inch Normal (ohmm ² /m) x10	1000
0	16 Inch Normal (ohmm ² /m)	100
80	Single Point(ohms)	100
80	Temperature (°F)	90



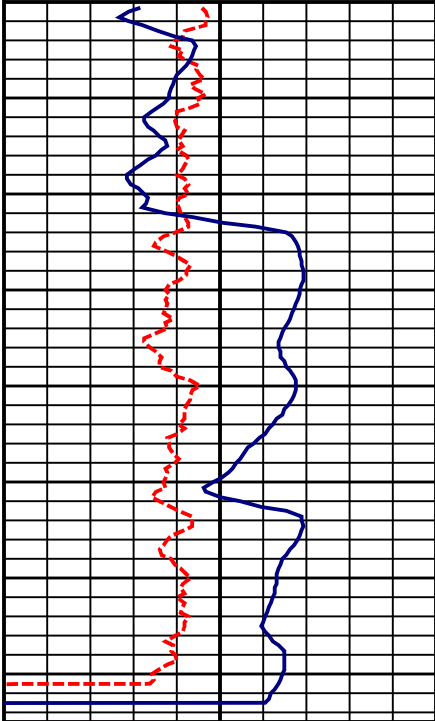
Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

< - S.P. (10 mV/div) S.P. + >

0 Gamma Ray(api) 200



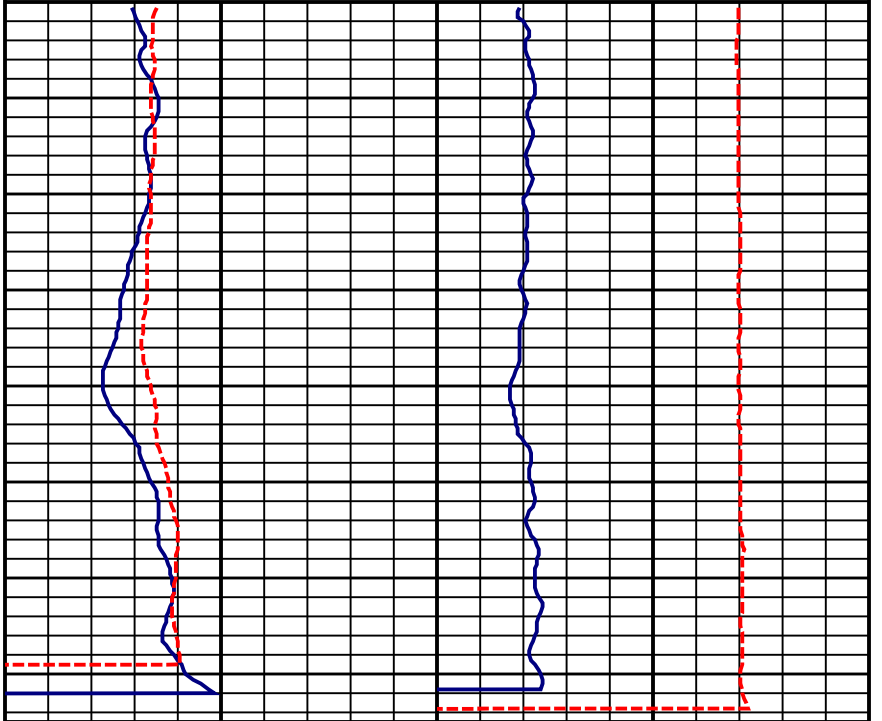
521'

550'

Log Depth 594'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

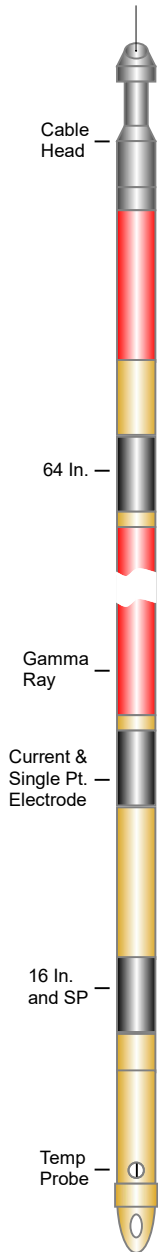
100 64 Inch Normal (ohmm²/m) x10 1000
0 64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 0 Single Point(ohms) 100
0 16 Inch Normal (ohmm²/m) 100 80 Temperature (°F) 90



		ELECTRIC - GAMMA RAY-TEMPERATURE LOG	
Stewart Well Logging Service			
Phone: (530)908-6928 · Email: STEWARTWELLOGGING@GMAIL.COM			
Filing No.	COMPANY <u>Parks Water Resources</u> WELL <u>M-GWL-3 Corral De Tierra</u> FIELD <u>Salinas</u> STATE <u>California</u> COUNTY <u>Monterey</u>		
	LOCATION: <u>Corral De Tierra Rd. & Markham Ln.</u>		OTHER SERVICES: <u>None</u>
Job No. 1846	SEC: <u>10</u> TWP: <u>16S</u> RGE: <u>02E</u> LAT.: <u>36.5571423</u> LONG.: <u>-121.7325379</u>		
Permanent Datum: <u>Ground Level</u> Elev.: <u>389</u> Ft. Elevs.: K.B. <u> </u> Ft. Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. <u> </u> Ft. Drilling Measured From: <u>Ground Level</u> G.L. <u>389</u> Ft.			
Run	One		
Date	Sep 25, 2024		
Depth-Driller	600	Ft	Ft
Depth-Logger	600	Ft	Ft
Top Logged Interval	10	Ft	Ft
Btm Logged Interval	600	Ft	Ft
Casing-Driller	In @	Ft	In @ Ft
Casing - Logger In@Ft	In @	Ft	In @ Ft
Bit Size	8.75	In @ 600	Ft
Time On Bottom	1545		
Type Fluid in Hole	Bentonite		
Density	Viscosity		
pH	Fluid Loss		
Source of Sample	Lift Pump		
Rm @ Mea. Temp	8.3	@ 75	°F
Rmf @ Mea. Temp	8.2	@ 75	°F
Rmc @ Mea. Temp	5.8	@	°F
Source Rmf	Rmc	Meas.	
Rm @ BHT	82	@	°F
Time Since Circ.	1	Hr	Hr
Max. Rec. Temp.	82.5	°F	°F
Van No.	Location	SWLS-2 WOODLAND	
Recorded By	Stewart		
Witnessed By	T.Parks		

This Eagle Plot Heading Conforms To API RP 31A

ELECTRIC - GAMMA RAY-TEMPERATURE LOG TOOL



SPONTANEOUS POTENTIAL LOGS:

SP Logs record potentials or voltages developed between the borehole fluid and the surrounding formation and are representations of lithology and water quality. Recording of SP logs are limited to water-filled or mud-filled open holes.

NORMAL RESISTIVITY LOGS:

Normal Resistivity Logs record the electrical resistivity of the borehole environment with lower resistivities indicative of clays and higher resistivities being sands and gravels. Normal resistivity logs are affected by bed thickness, Borehole diameter and borehole fluid.

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GAMMA RAY LOGS:

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TEMPERATURE LOGS:

Temperature Logs record the water temperature in the borehole. Temperature logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient.

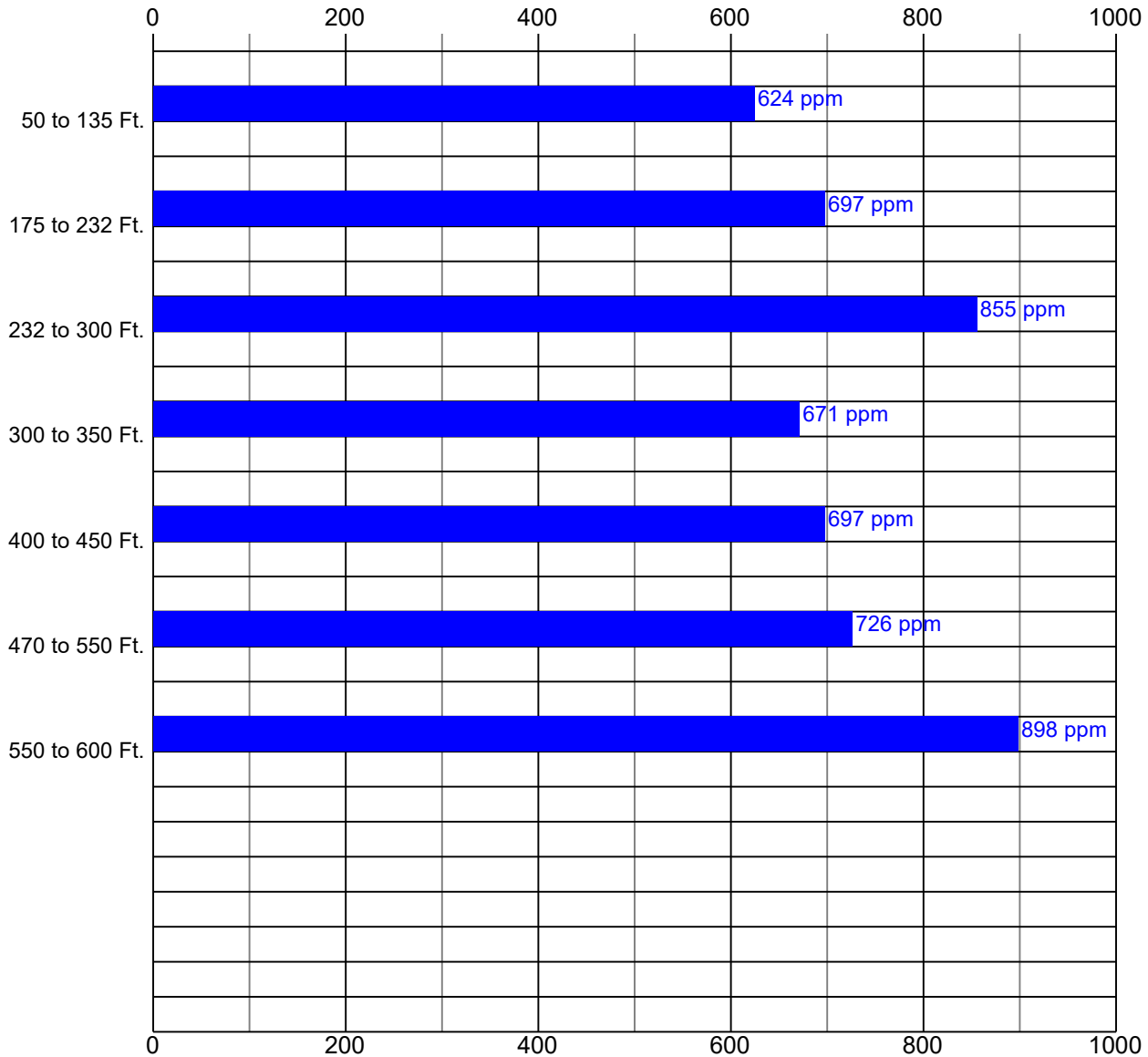
ELECTRIC LOG SPECIFICATIONS:

Diameter	1.73 Inches
Length	8.37 Feet
Weight	21.7 Lbs.
Max. Temp	158° F
Resist. Range	0 - 10,000 ohm-m
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

TOTAL DISSOLVED SOLIDS

* NaCl 

Parts Per Million - ppm



TDS Classes

Class 1: Excellent to Good – Less than 700 ppm

Class 2: Good to Injurious – 700 to 2000 ppm

Class 3: Injurious to Poor – More than 2000 ppm

NaCl = Sodium Chloride

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

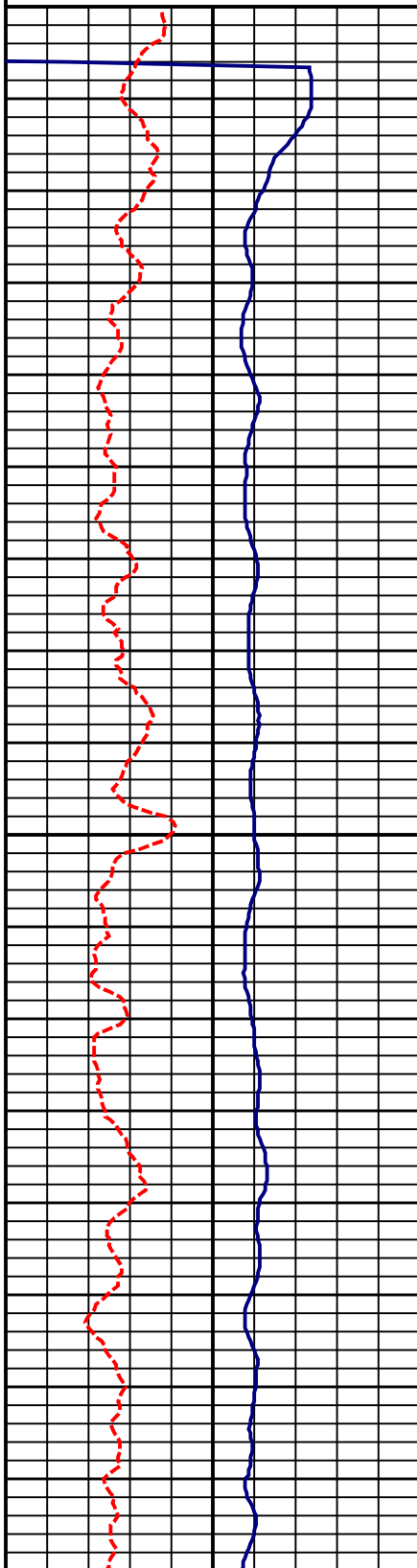
REMARKS

Parks Water Resources
M-GWL-3 Corral De Tierra
Sep 25, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >



50'

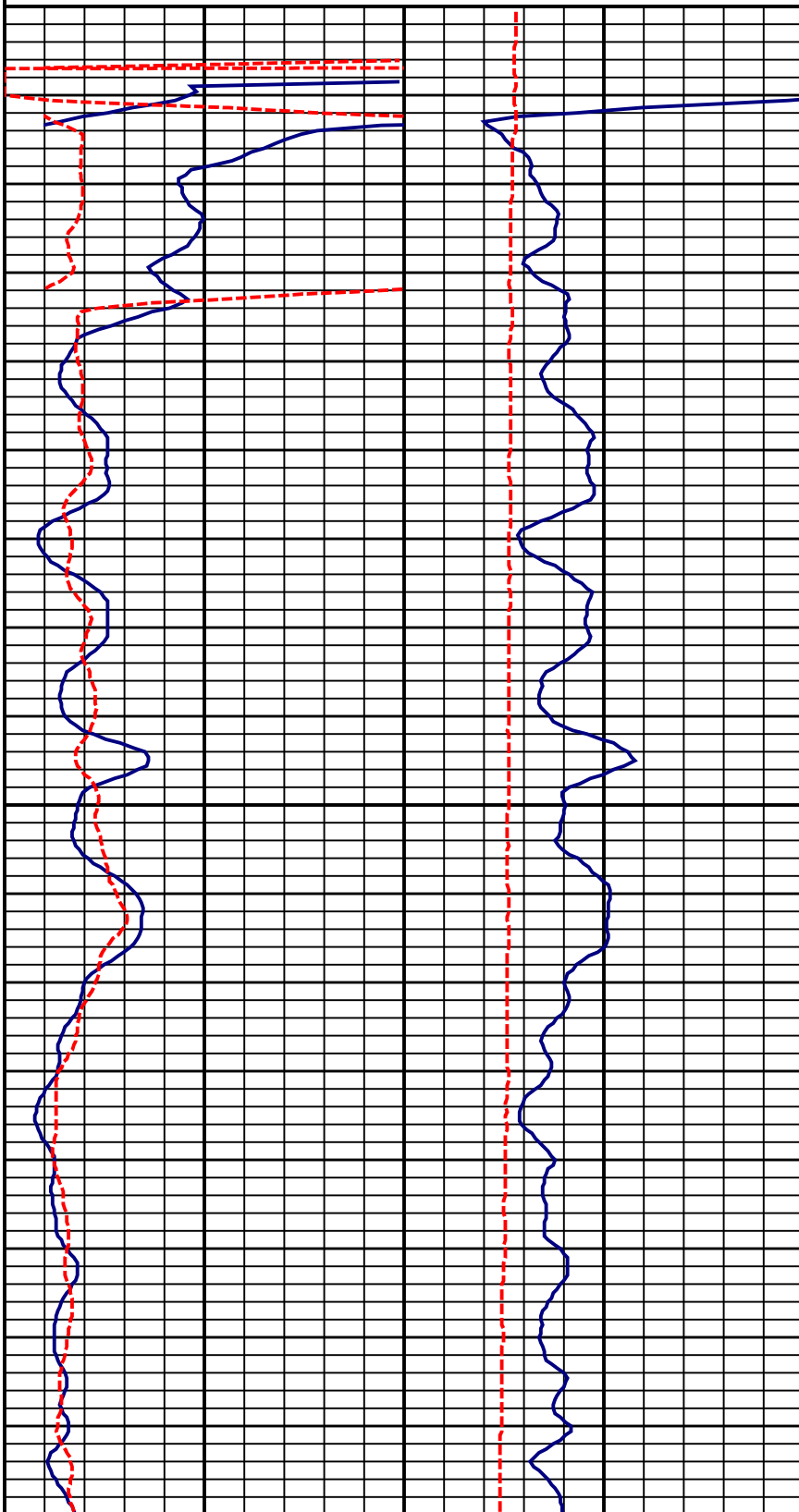
100'

150'

181'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 80
16 Inch Normal (ohmm²/m) 100 0
Temperature (°F) 90
Single Point(ohms) 50

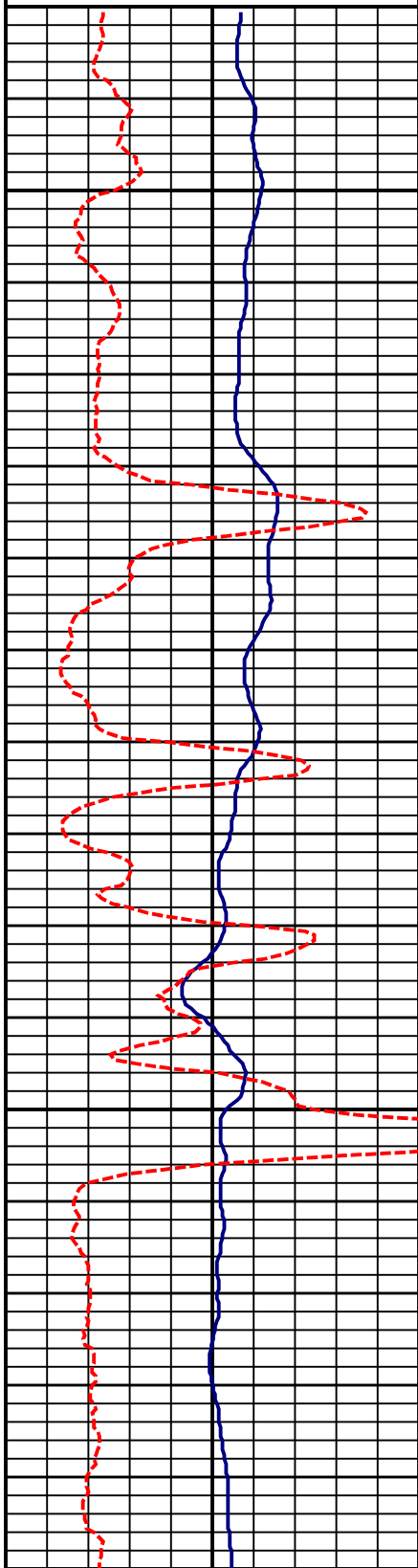


Parks Water Resources
M-GWL-3 Corral De Tierra
Sep 25, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 200
Gamma Ray(api)
< - S.P. (10 mV/div) S.P. + >



181'

200'

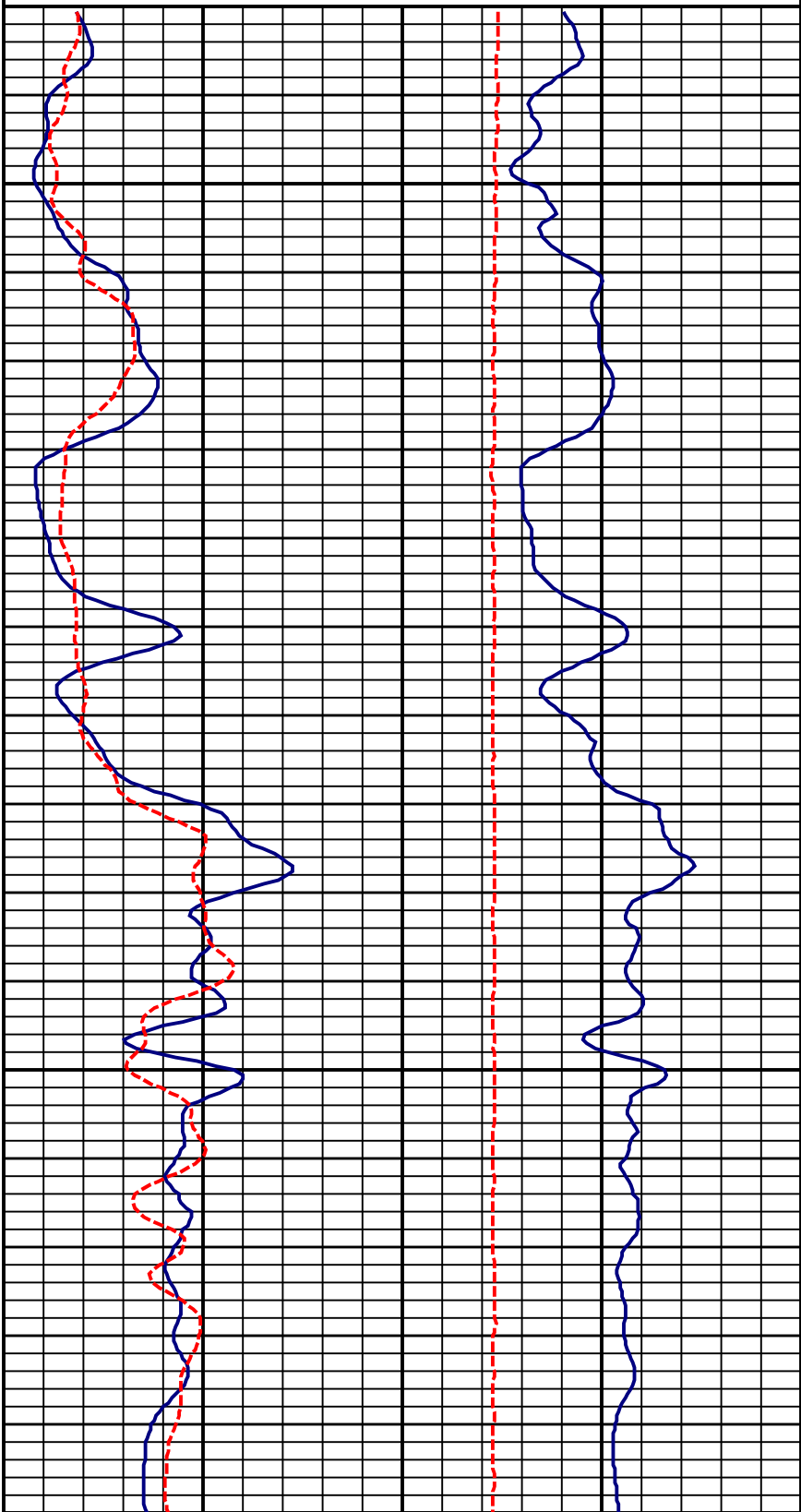
250'

300'

350'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 80
16 Inch Normal (ohmm²/m) 100 0
Temperature (°F) 90
Single Point(ohms) 50



Parks Water Resources
M-GWL-3 Corral De Tierra
Sep 25, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >

351'

400'

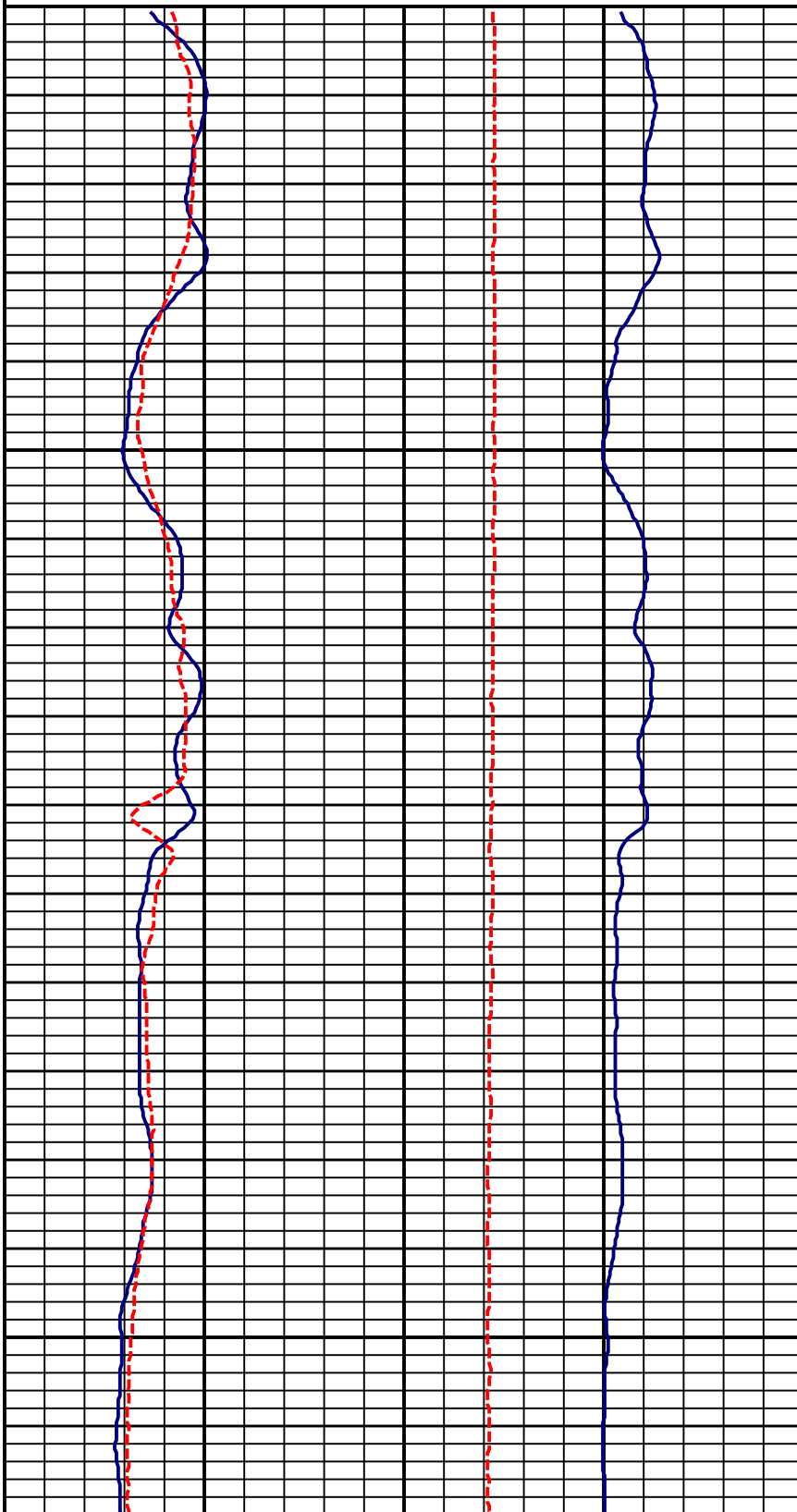
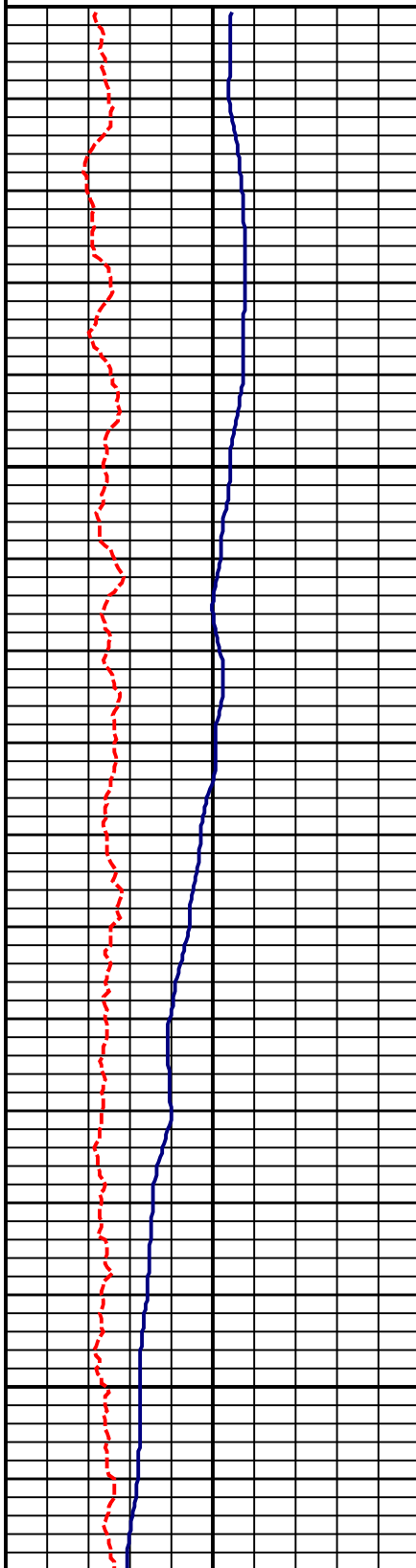
450'

500'

521'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 80 Temperature (°F) 90
16 Inch Normal (ohmm²/m) 100 0 Single Point(ohms) 50



Parks Water Resources
M-GWL-3 Corral De Tierra
Sep 25, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >

521'

550'

Log Depth 599.5'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000

0 64 Inch Normal (ohmm²/m) 100

100 16 Inch Normal (ohmm²/m) x10 1000 80

0 16 Inch Normal (ohmm²/m) 100 0

Temperature (°F)

Single Point(ohms)

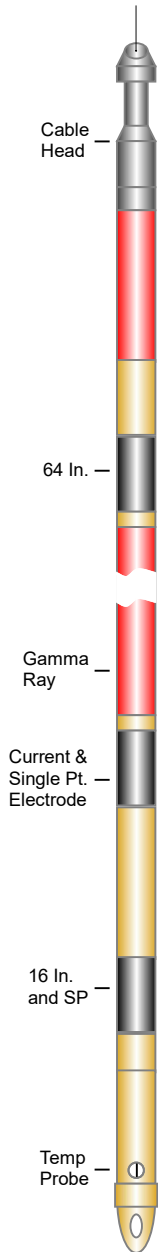
90

50

		ELECTRIC - GAMMA RAY-TEMPERATURE LOG	
Stewart Well Logging Service			
Phone: (530)908-6928 Email: STEWARTWELLOGGING@GMAIL.COM			
Filing No.	COMPANY <u>Parks Water Resources</u>		
	WELL <u>M-GWL-4 San Benancio</u>		
	FIELD <u>Salinas</u>		
	STATE <u>California</u> COUNTY <u>Monterey</u>		
	LOCATION: <u>255 San Benancio Rd.</u>		OTHER SERVICES: <u>X-Y Caliper</u>
Job No. 1830	SEC: <u>12</u> TWP: <u>16S</u> RGE: <u>02E</u> LAT.: <u>36.5538294</u> LONG.: <u>-121.6940174</u>		
Permanent Datum: <u>Ground Level</u> Elev.: <u>655</u> Ft. Elevs.: K.B. <u> </u> Ft.			
Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. <u> </u> Ft.			
Drilling Measured From: <u>Ground Level</u> G.L. <u>655</u> Ft.			
Run	One		
Date	Sep 11, 2024		
Depth-Driller	340	Ft	
Depth-Logger	340	Ft	
Top Logged Interval	10	Ft	
Btm Logged Interval	340	Ft	
Casing-Driller	In @	Ft	
Casing - Logger In@Ft	In @	Ft	
Bit Size	10-5/8 In @ 340	Ft	
Time On Bottom	1640		
Type Fluid in Hole	Bentonite		
Density	Viscosity		
pH	Fluid Loss		
Source of Sample	Lift Pump		
Rm @ Mea. Temp	8.9 @ 75	°F	
Rmf @ Mea. Temp	8.8 @ 75	°F	
Rmc @ Mea. Temp	6.3 @	°F	
Source Rmf	Meas.		
Rm @ BHT	93 @	°F	
Time Since Circ.	1	Hr	
Max. Rec. Temp.	94	°F	
Van No.	Location	SWLS-2 WOODLAND	
Recorded By	Stewart		
Witnessed By	T.Parks		

This Eagle Plot Heading Conforms To API RP 31A

ELECTRIC - GAMMA RAY-TEMPERATURE LOG TOOL



SPONTANEOUS POTENTIAL LOGS:

SP Logs record potentials or voltages developed between the borehole fluid and the surrounding formation and are representations of lithology and water quality. Recording of SP logs are limited to water-filled or mud-filled open holes.

NORMAL RESISTIVITY LOGS:

Normal Resistivity Logs record the electrical resistivity of the borehole environment with lower resistivities indicative of clays and higher resistivities being sands and gravels. Normal resistivity logs are affected by bed thickness, Borehole diameter and borehole fluid.

SINGLE POINT RESISTIVITY LOGS:

Single Point Resistivity Logs record the electrical resistance from points within the borehole to an electrical ground at land surface. Single-point resistance logs are useful in the determination of lithology, water quality, and location of fracture zones.

GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

TEMPERATURE LOGS:

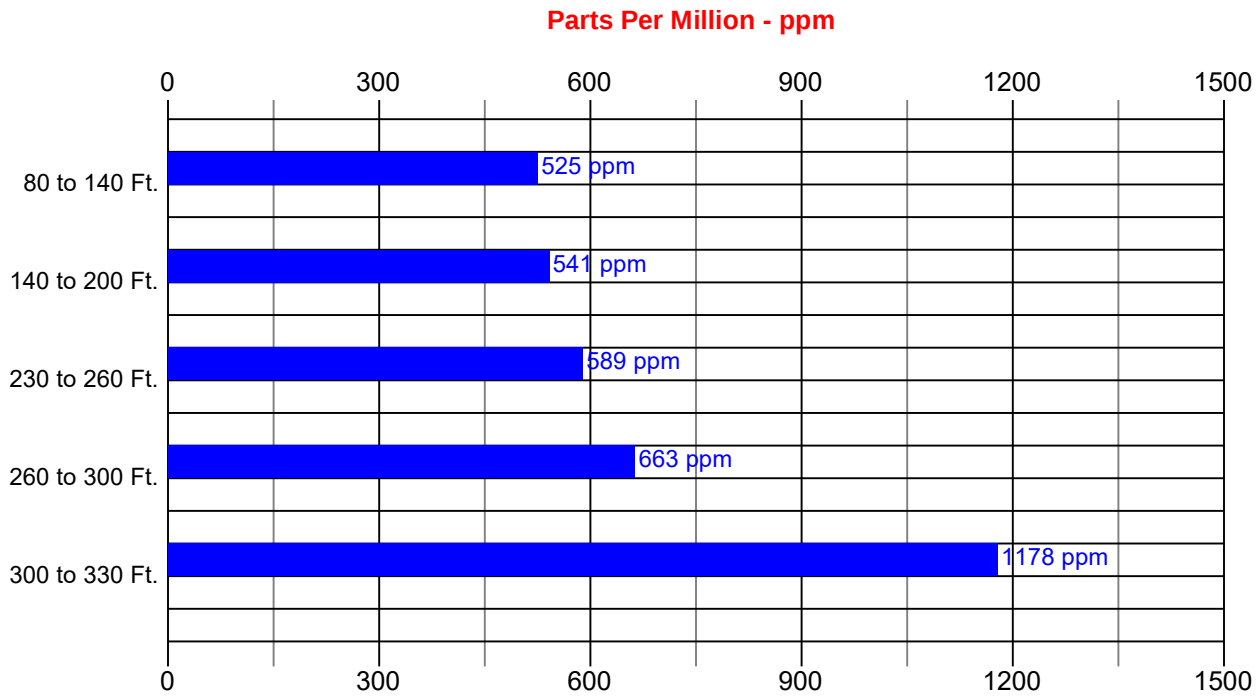
Temperature Logs record the water temperature in the borehole. Temperature logs are useful for delineating water-bearing zones and identifying vertical flow in the borehole between zones of differing hydraulic head penetrated by wells. Borehole flow between zones is indicated by temperature gradients that are less than the regional geothermal gradient.

ELECTRIC LOG SPECIFICATIONS:

Diameter	1.73 Inches
Length	8.37 Feet
Weight	21.7 Lbs.
Max. Temp	158° F
Resist. Range	0 - 10,000 ohm-m
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

TOTAL DISSOLVED SOLIDS

* NaCl 



TDS Classes

Class 1: Excellent to Good – Less than 700 ppm

Class 2: Good to Injurious – 700 to 2000 ppm

Class 3: Injurious to Poor – More than 2000 ppm

NaCl = Sodium Chloride

NOTICE

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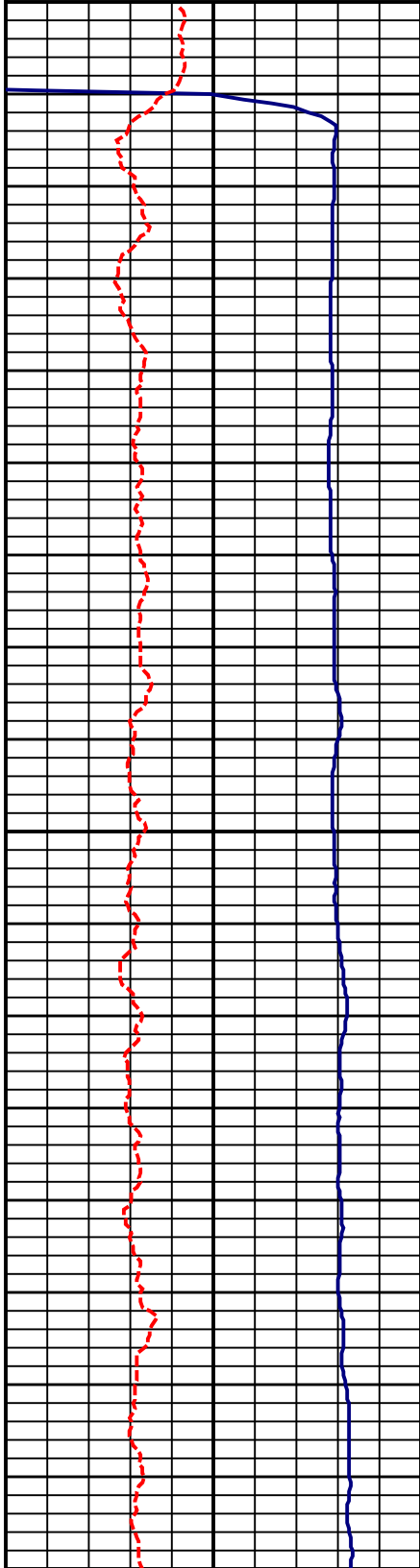
REMARKS

Parks Water Resources
M-GWL-4 San Benancio
Sep 11, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 200
Gamma Ray(api)
< - S.P. (10 mV/div) S.P. + >



50'

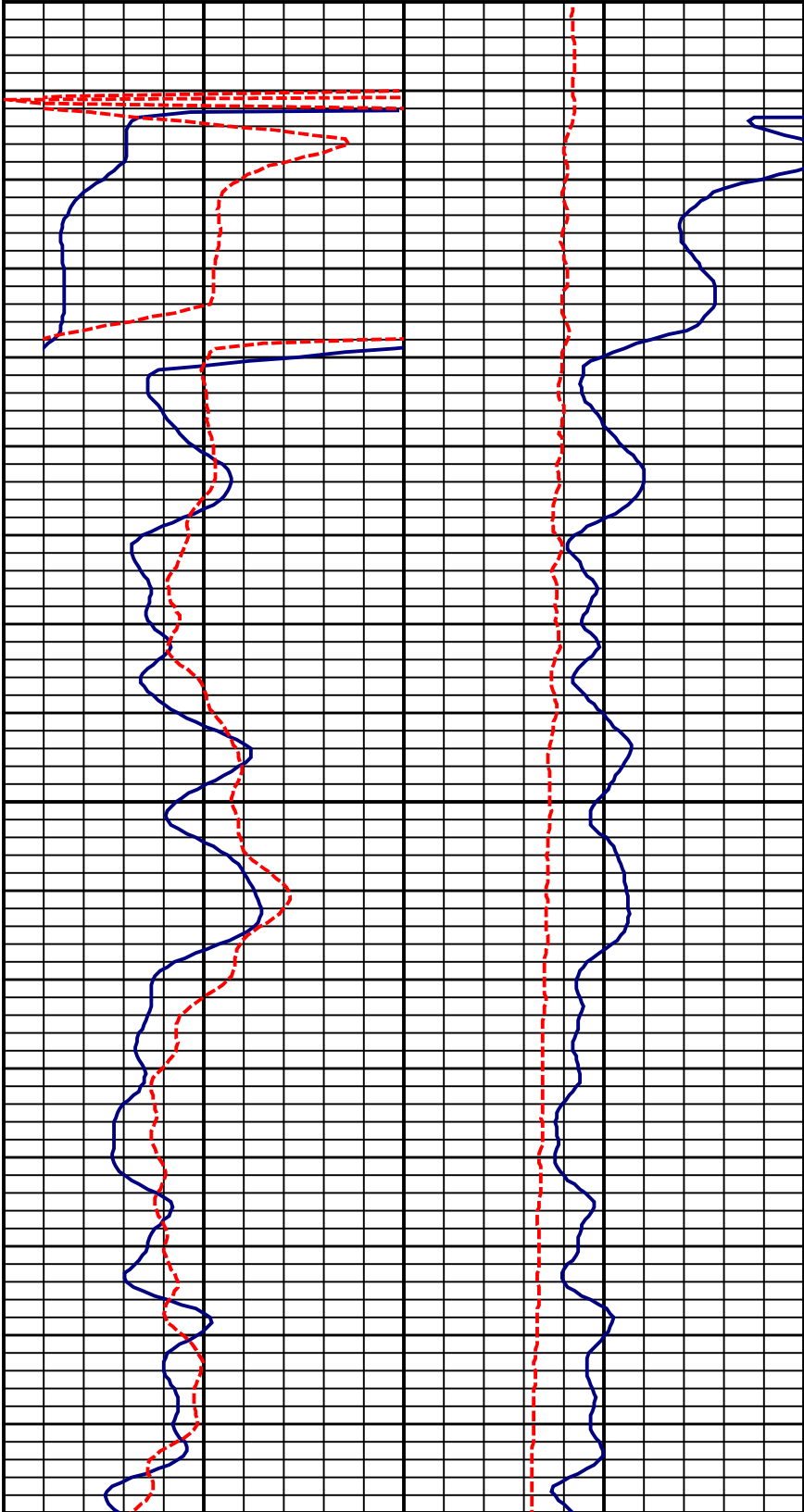
100'

150'

181'

ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 90
16 Inch Normal (ohmm²/m) 100 0
Temperature (°F) 100
Single Point(ohms) 50

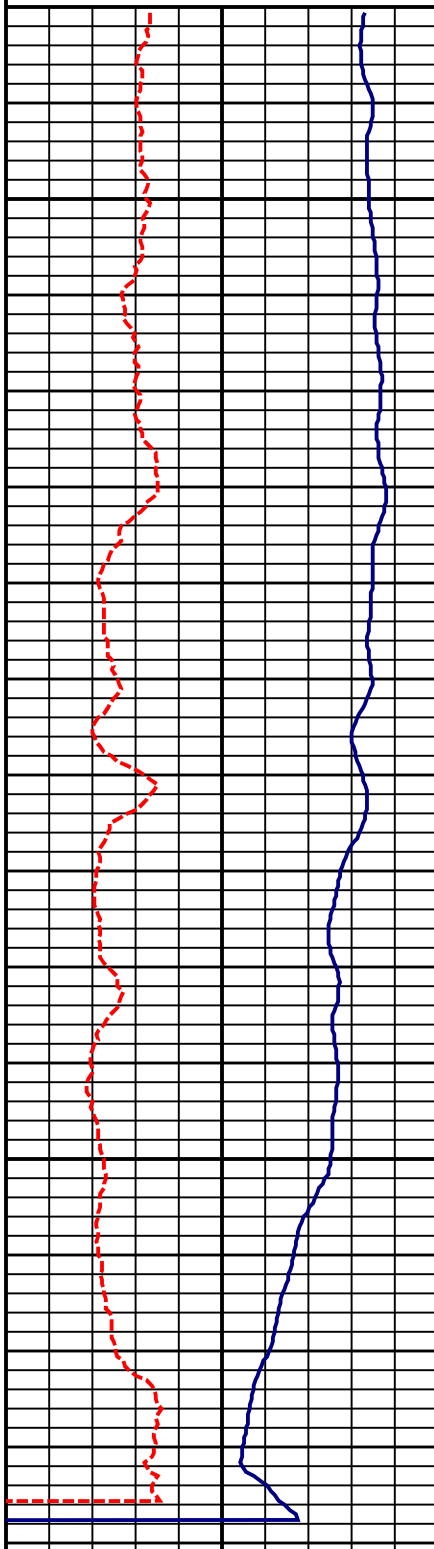


Parks Water Resources
M-GWL-4 San Benancio
Sep 11, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200
< - S.P. (10 mV/div) S.P. + >



181'

200'

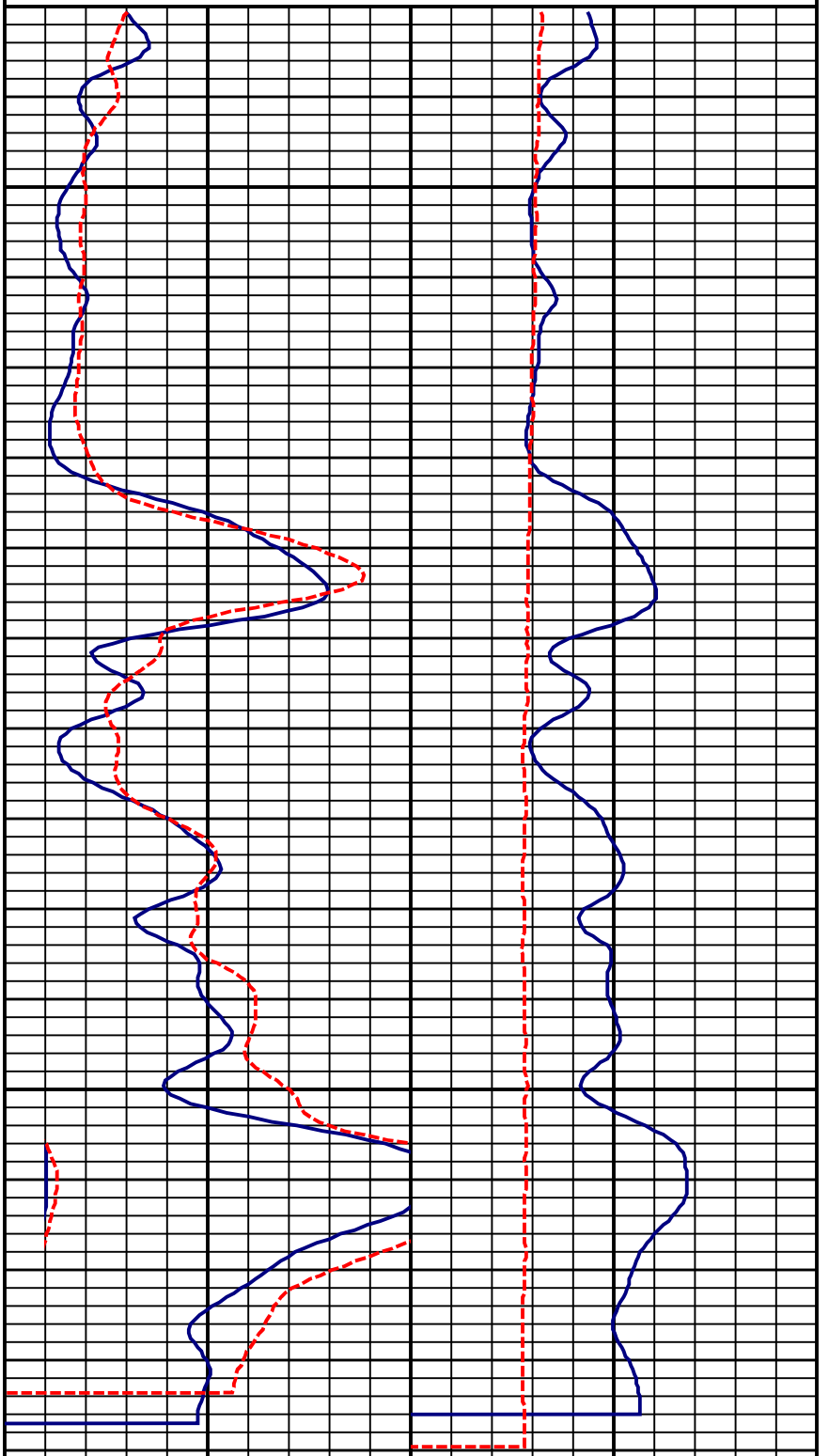
250'

300'

Log Depth 340'

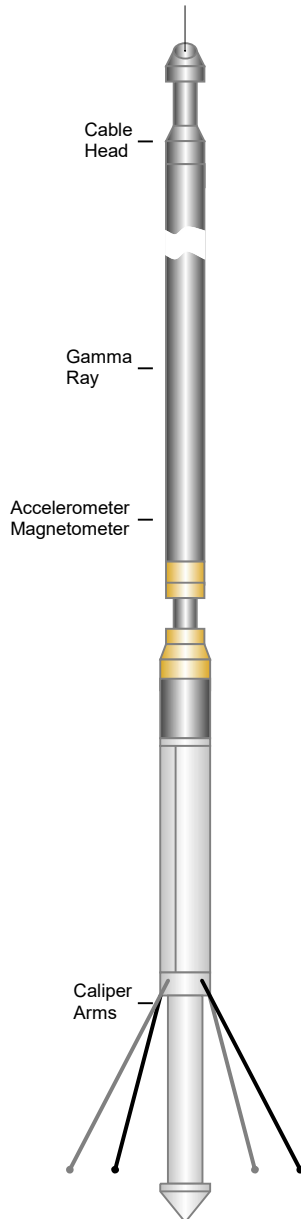
ELECTRIC - GAMMA RAY-TEMPERATURE LOG

100 64 Inch Normal (ohmm²/m) x10 1000
64 Inch Normal (ohmm²/m) 100
100 16 Inch Normal (ohmm²/m) x10 1000 90 Temperature (°F) 100
16 Inch Normal (ohmm²/m) 100 0 Single Point(ohms) 50



		4-ARM X-Y CALIPER LOG					
Stewart Well Logging Service							
Phone: (530)908-6928 Email: STEWARTWELLOGGING@GMAIL.COM							
Filing No.	COMPANY Parks Water Resources WELL M-GWL-2 FIELD Salinas STATE California COUNTY Monterey LOCATION: _____ OTHER SERVICES: None						
9100,8601							
Job No. 1818							
SEC: <u>17</u> TWP: <u>15S</u> RGE: <u>03E</u> LAT.: <u>36.6171539</u> LONG.: <u>-121.6601304</u>							
Permanent Datum: <u>Ground Level</u> Elev.: <u>65</u> Ft. Elevs.: K.B. _____ Ft. Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. _____ Ft. Drilling Measured From: <u>Ground Level</u> G.L. <u>65</u> Ft.							
Date	Aug 21, 2024						
Type Log	Caliper						
Run	One						
Depth-Driller	560	Ft		Ft		Ft	Ft
Depth-Logger	560	Ft		Ft		Ft	Ft
Top Logged Interval	0	Ft		Ft		Ft	Ft
Btm Logged Interval	560	Ft		Ft		Ft	Ft
Type Fluid In Hole	Bentonite						
Fluid Level	0	Ft		Ft		Ft	Ft
Max Temp	88	°F		°F		°F	°F
Operating Rig Time	1.5	°Hr		°Hr		°Hr	°Hr
Van No.	Location	SWLS-1					
Recorded By	Stewart						
Witnessed By	T. Parks						
RUN	BOREHOLE RECORD				CASING RECORD		
NO.	BIT SIZE	FROM	TO	CASING SIZE	CASING TYPE	FROM	TO
1	11 In	0 Ft	560 Ft	4.5 In	PVC	0 Ft	545 Ft
2	In	Ft	Ft	In		Ft	Ft
3	In	Ft	Ft	In		Ft	Ft

4-ARM X-Y CALIPER LOG TOOL



GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

4 ARM CALIPER LOGS:

Caliper Logs provide a continuous measurement of the size and shape of a borehole along its depth and is commonly used to determine the annular hole volume of wells. The measurements that are recorded can be an important indicator of voids and swelling clay in the borehole. 4 Arm Caliper Logs measure the borehole on two perpendicular planes resulting in more accurate annular volumes when washouts occur during the drilling process.

MAGNETIC DEVIATION LOGS:

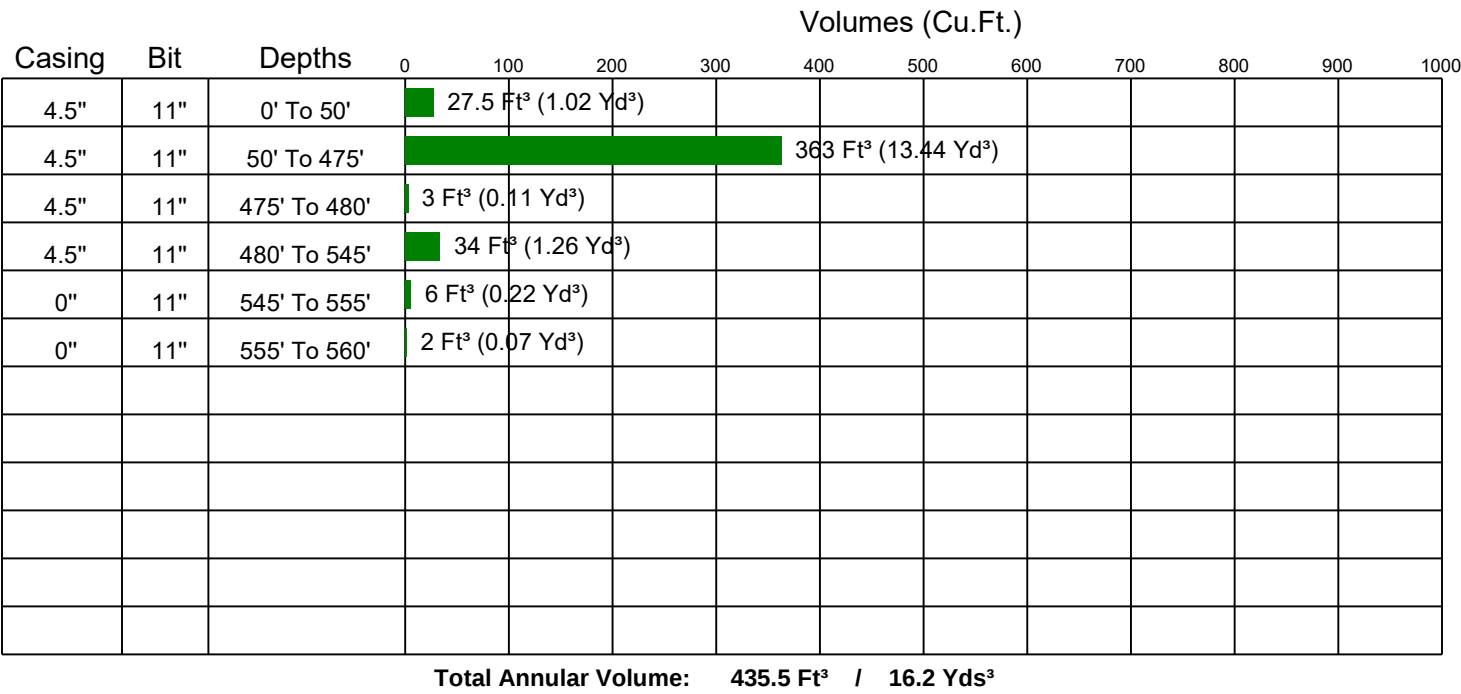
Magnetic logs are used to determine the inclination and direction of the well bore versus depth. With these three parameters, wellbore drift, bearing, and true vertical depth can be calculated based on any one of five API approved methodologies. The magnetic deviation will function in any non-magnetic wellbore with any type of wellbore fluid.

4 ARM CALIPER SPECIFICATIONS:

Diameter	2.36 Inches
Range	2.95 - 52 Inches
Length	11.5 Feet
Weight	88.18 Lbs.
Max. Temp	158° F
Inclination	0 to 180 Deg., +/- 0.5 Deg.
Azimuth	0 to 360 Deg., +/- 1.5 Deg.
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

VOLUME CALCULATIONS

Annular Volumes Graph



Annular Volumes Table

Casing	Bit	Depths	Feet³	Yards³
4.5"	11"	0' To 50'	27.5 Ft³	1.02 Yds³
4.5"	11"	50' To 475'	363 Ft³	13.44 Yds³
4.5"	11"	475' To 480'	3 Ft³	0.11 Yds³
4.5"	11"	480' To 545'	34 Ft³	1.26 Yds³
0"	11"	545' To 555'	6 Ft³	0.22 Yds³
0"	11"	555' To 560'	2 Ft³	0.07 Yds³
Total Annular Volume			435.5 Ft³	16.2 Yds³

NOTICE

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REMARKS

Consulting Company:

S.P Shift Due To Sonde Pulling Tight

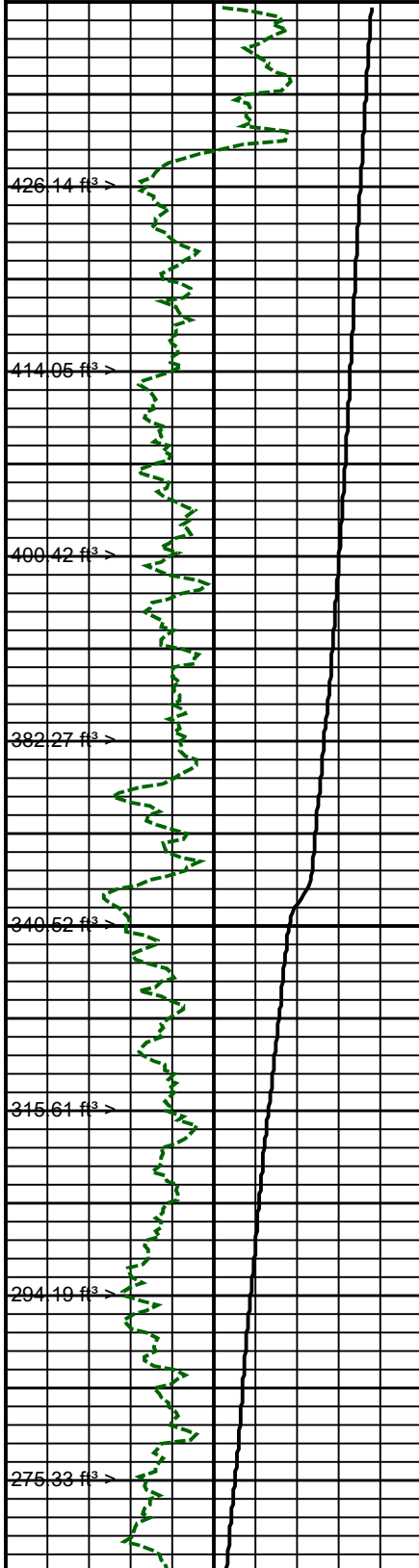
Consulting Company: E.L. Montgomery

Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500
0 Gamma Ray(api) 150



50'

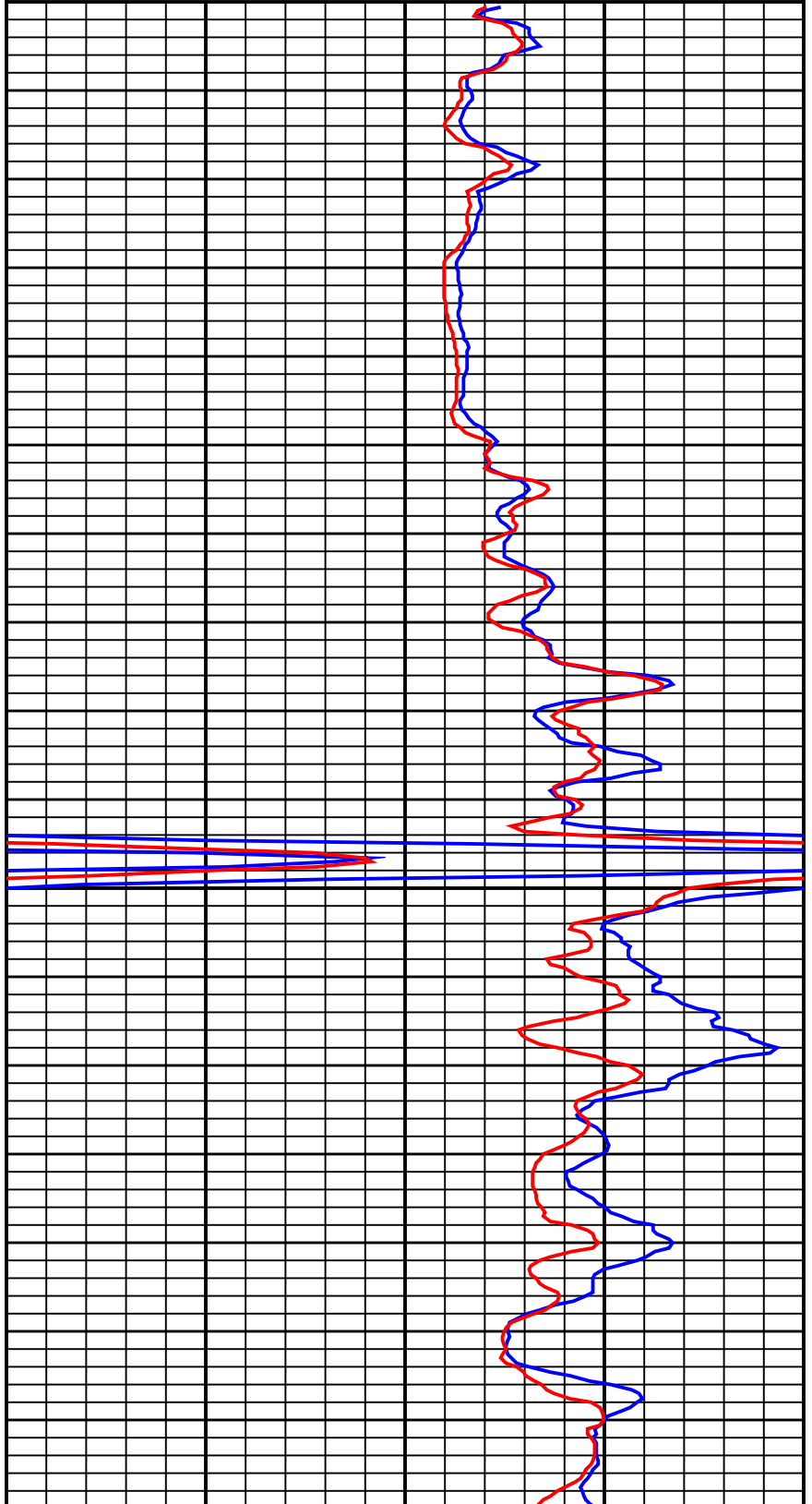
100'

150'

171'

4-ARM X-Y CALIPER LOG

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20

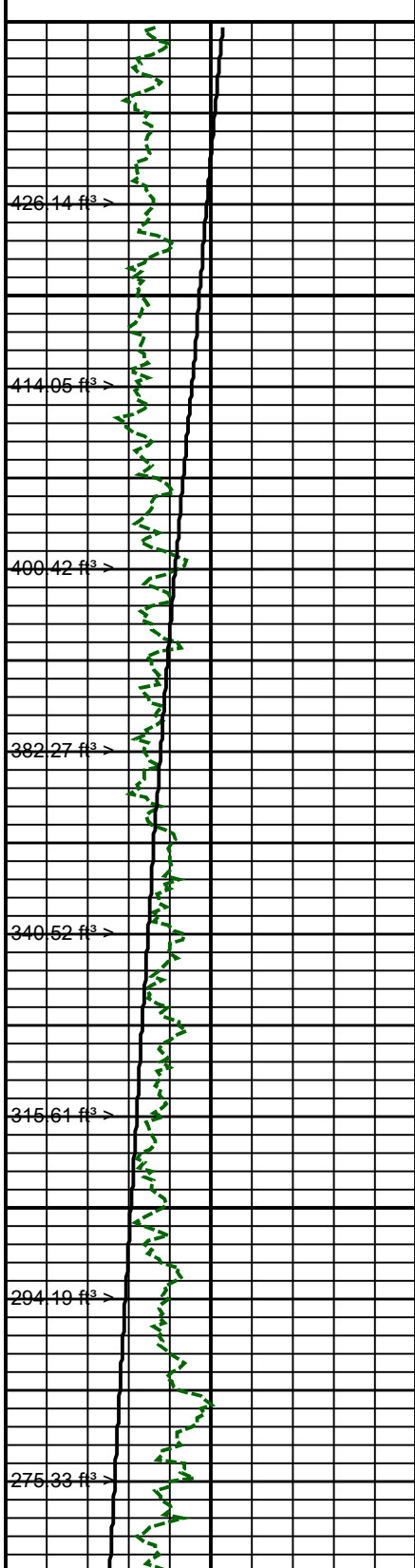


Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500
0 Gamma Ray(api) 150



171'

200'

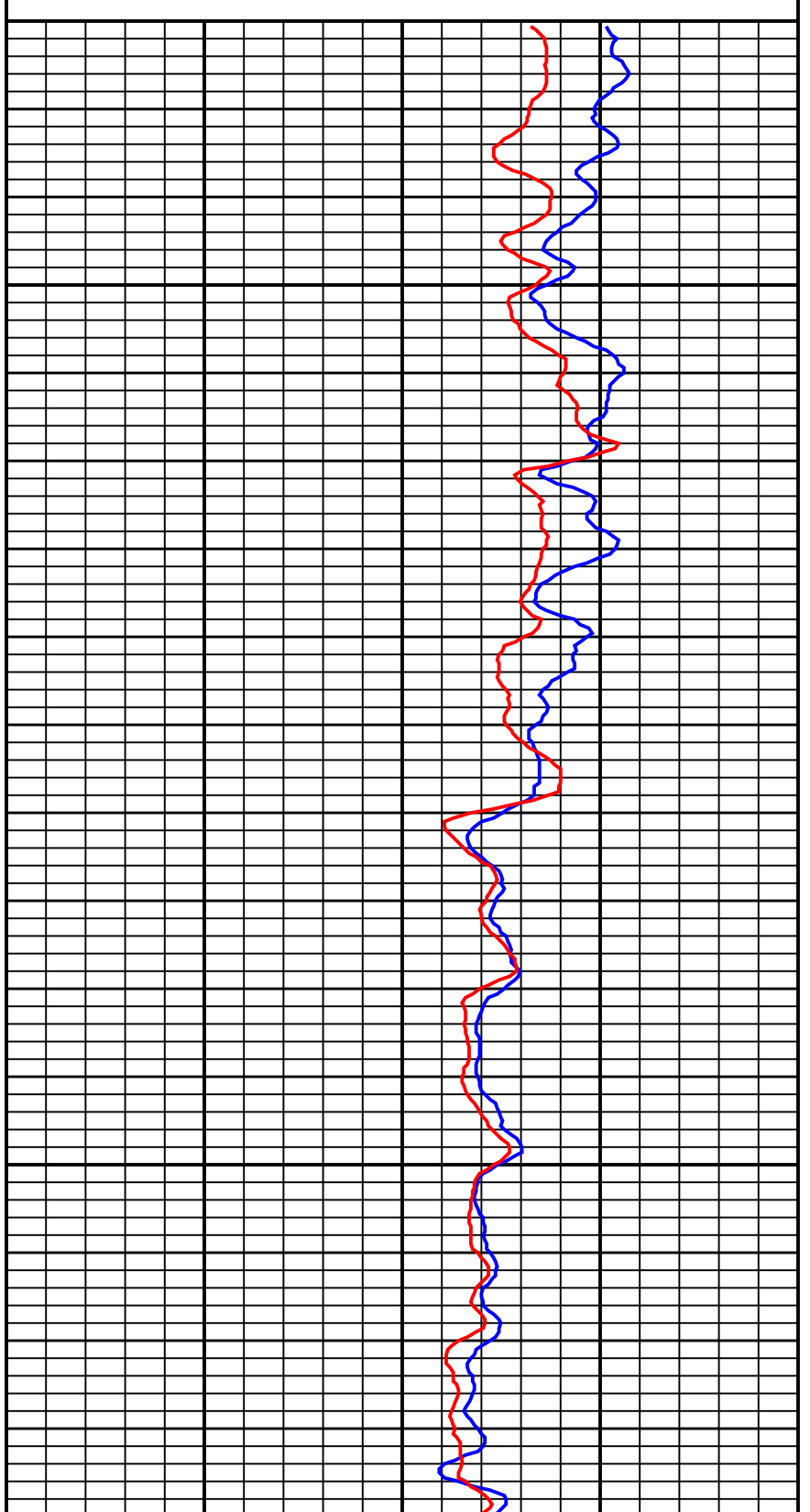
250'

300'

341'

4-ARM X-Y CALIPER LOG

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20

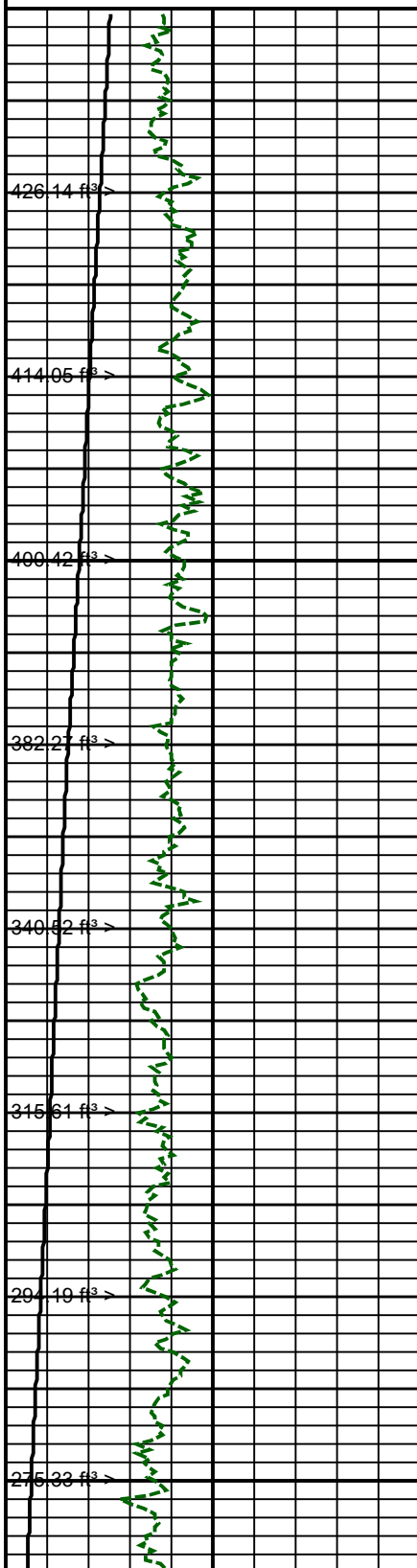


Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500
0 Gamma Ray(api) 150



341'

350'

400'

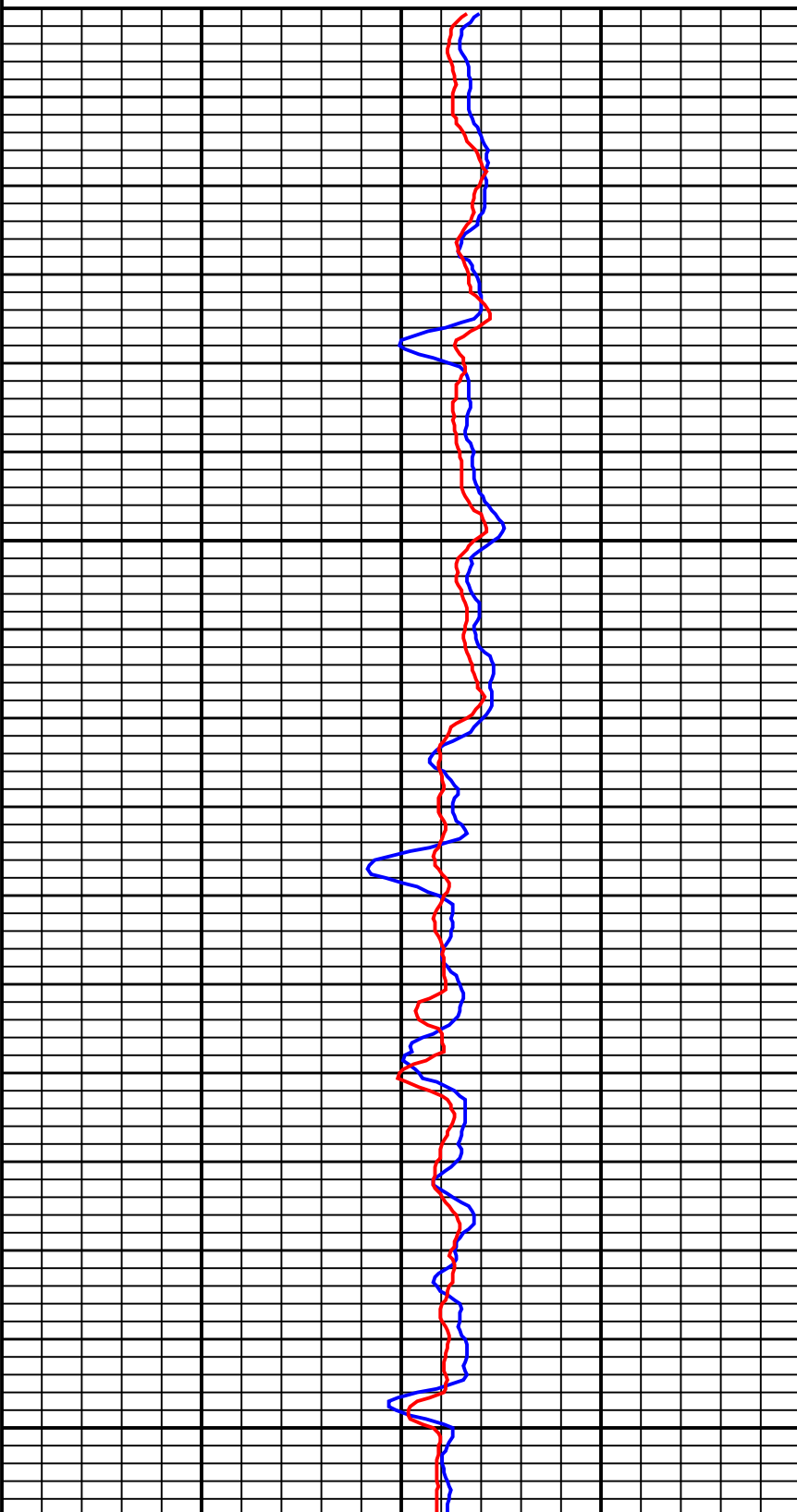
450'

500'

511'

4-ARM X-Y CALIPER LOG

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20



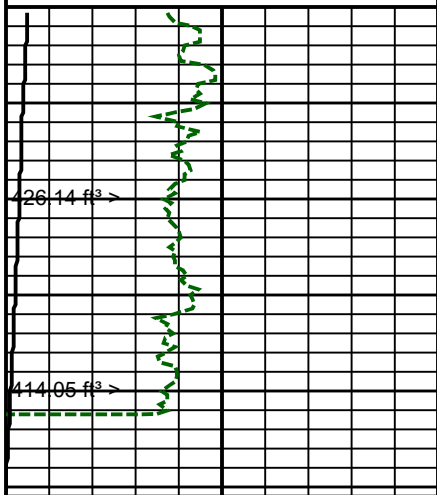
Parks Water Resources
M-GWL-2
Aug 21, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500

0 Gamma Ray(api) 150



511'

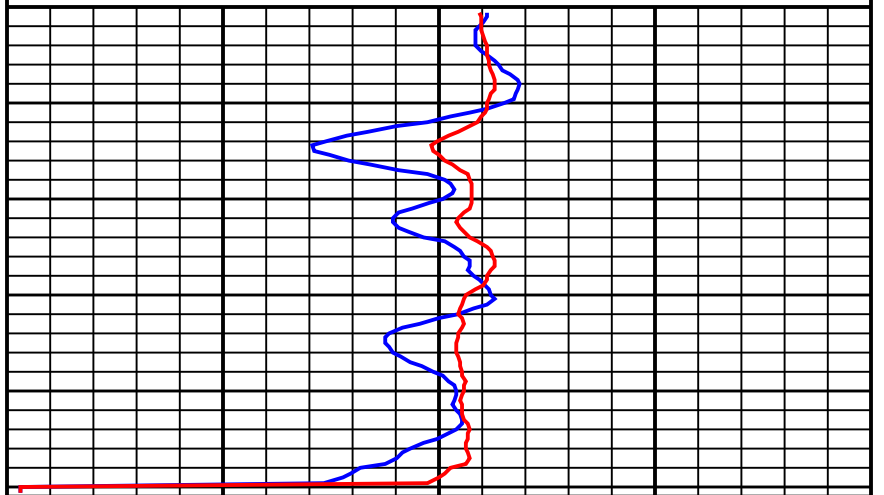
550'

Log Depth 560'

4-ARM X-Y CALIPER LOG

0 Y Axis Caliper(inches) 20

0 X Axis Caliper(inches) 20



4-ARM X-Y CALIPER LOG

Stewart Well Logging Service

· Phone: (530)908-6928 · Email: stewartwelllogging@gmail.com

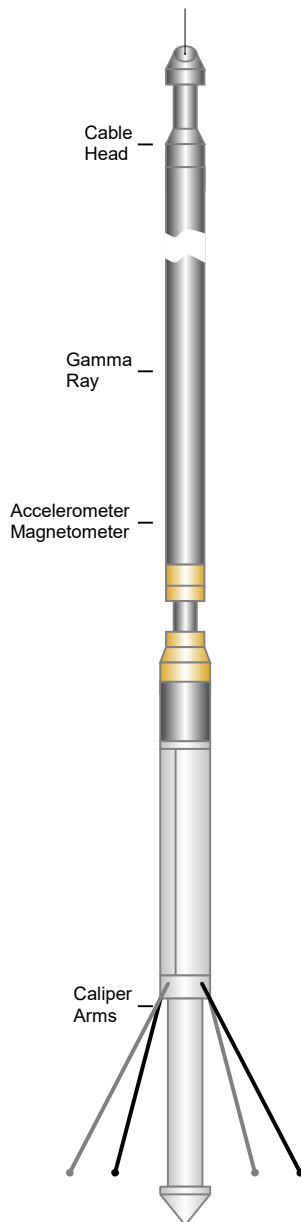
Filing No.	COMPANY Parks Water Resources	
	WELL M-GWL-3 Corral De Tierra	
	FIELD Salinas	
	STATE California COUNTY Monterey	
	LOCATION: Corral De Tierra Rd. & Markham Ln.	OTHER SERVICES: E-Log
Job No. 1846	SEC: 10 TWP: 16S RGE: 02E LAT.: 36.5571423 LONG.: -121.7325379	

Permanent Datum: **Ground Level** Elev.: **389** Ft. Elevs.: K.B. _____ Ft.
Log Measured From: **Ground Level**, **0** Ft. Above Perm. Datum D.F. _____ Ft.
Drilling Measured From: **Ground Level** G.L. **389** Ft.

Date	Oct 08, 2024			
Type Log	Caliper			
Run	One			
Depth-Driller	600 Ft		Ft	Ft
Depth-Logger	410 Ft		Ft	Ft
Top Logged Interval	0 Ft		Ft	Ft
Btm Logged Interval	410 Ft		Ft	Ft
Type Fluid In Hole	Bentonite			
Fluid Level	0 Ft		Ft	Ft
Max Temp	82.5 °F		°F	°F
Operating Rig Time	1.5 °Hr		°Hr	°Hr
Van No.	Location	SWLS-2 WOODLAND		
Recorded By	Stewart			
Witnessed By	T.Parks			

RUN	BOREHOLE RECORD				CASING RECORD			
	NO.	BIT SIZE	FROM	TO	CASING SIZE	CASING TYPE	FROM	TO
	1	10.625 In	0 Ft	410 Ft	4.5 In	PVC	0 Ft	395 Ft
	2	In	Ft	Ft	In		Ft	Ft
	3	In	Ft	Ft	In		Ft	Ft

4-ARM X-Y CALIPER LOG TOOL



GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

4 ARM CALIPER LOGS:

Caliper Logs provide a continuous measurement of the size and shape of a borehole along its depth and is commonly used to determine the annular hole volume of wells. The measurements that are recorded can be an important indicator of voids and swelling clay in the borehole. 4 Arm Caliper Logs measure the borehole on two perpendicular planes resulting in more accurate annular volumes when washouts occur during the drilling process.

MAGNETIC DEVIATION LOGS:

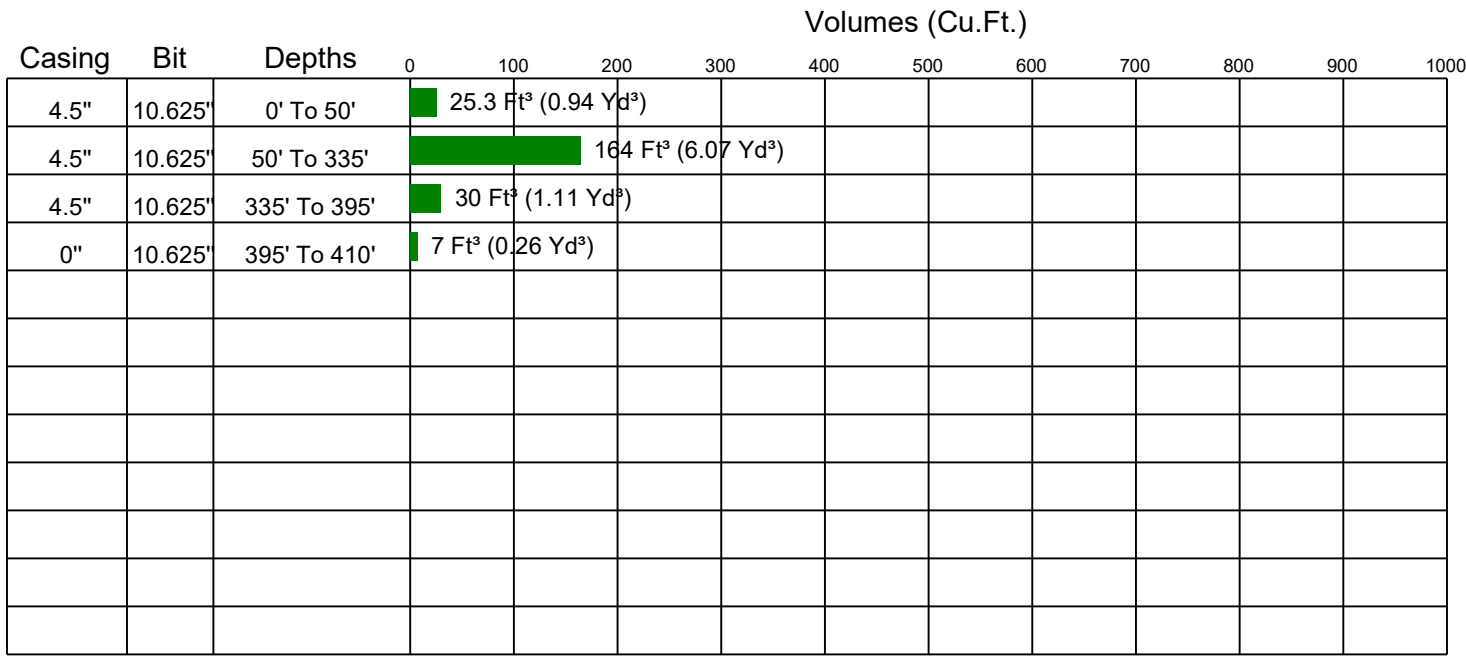
Magnetic logs are used to determine the inclination and direction of the well bore versus depth. With these three parameters, wellbore drift, bearing, and true vertical depth can be calculated based on any one of five API approved methodologies. The magnetic deviation will function in any non-magnetic wellbore with any type of wellbore fluid.

4 ARM CALIPER SPECIFICATIONS:

Diameter	2.36 Inches
Range	2.95 - 52 Inches
Length	11.5 Feet
Weight	88.18 Lbs.
Max. Temp	158° F
Inclination	0 to 180 Deg., +/- 0.5 Deg.
Azimuth	0 to 360 Deg., +/- 1.5 Deg.
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

VOLUME CALCULATIONS

Annular Volumes Graph



Total Annular Volume: 226.3 Ft³ / 8.4 Yds³

Annular Volumes Table

Casing	Bit	Depths	Feet³	Yards³
4.5"	10.625"	0' To 50'	25.3 Ft³	0.94 Yds³
4.5"	10.625"	50' To 335'	164 Ft³	6.07 Yds³
4.5"	10.625"	335' To 395'	30 Ft³	1.11 Yds³
0"	10.625"	395' To 410'	7 Ft³	0.26 Yds³
Total Annular Volume			226.3 Ft³	8.4 Yds³

NOTICE

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REMARKS

Parks Water Resources
M-GWL-3 Corral De Tierra
Oct 08, 2024

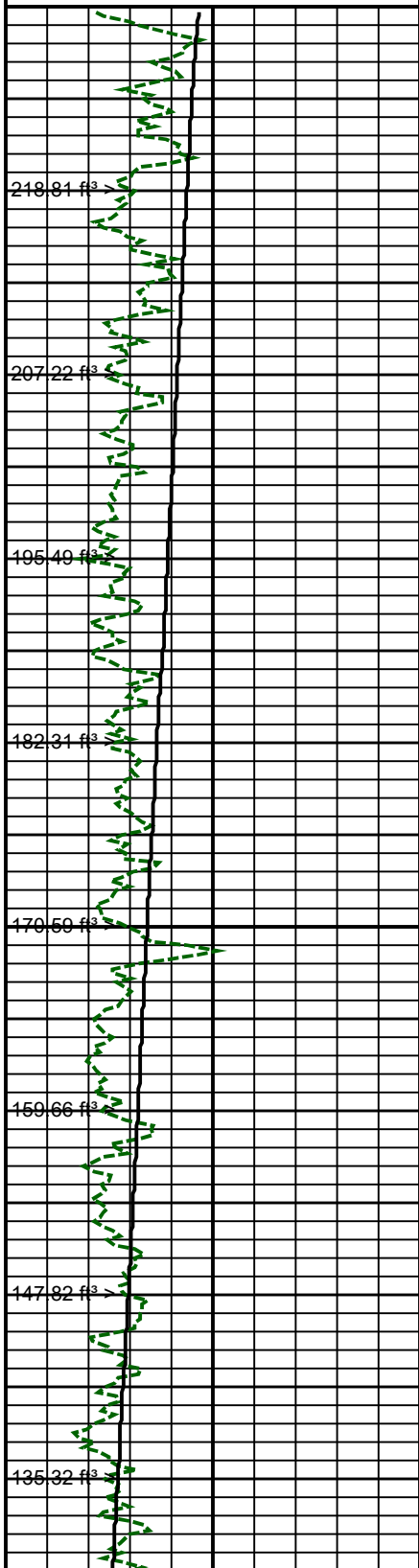
4-ARM X-Y CALIPER LOG

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500
0 Gamma Ray(api) 200

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20

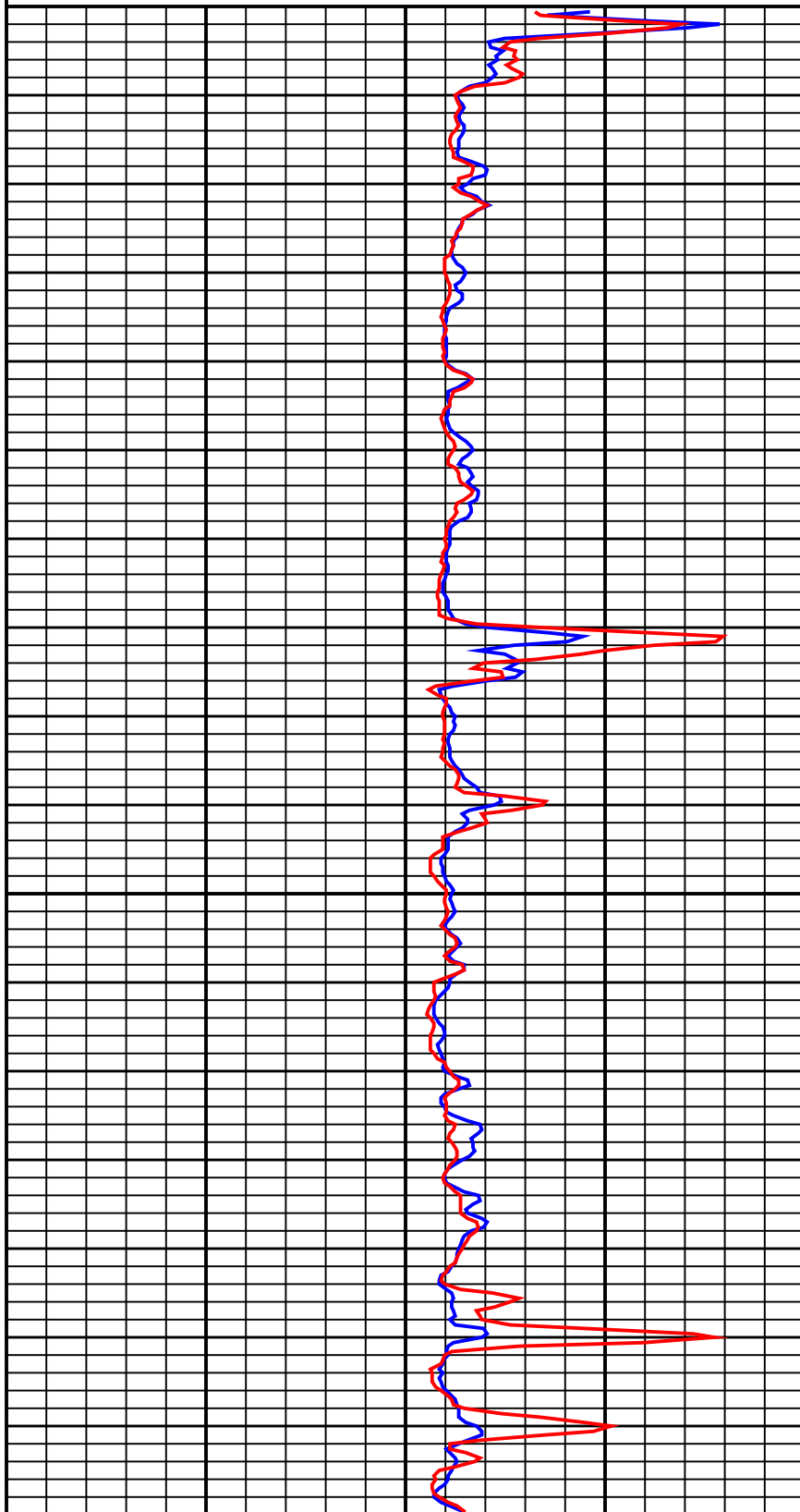


50'

100'

150'

171'



Parks Water Resources
M-GWL-3 Corral De Tierra
Oct 08, 2024

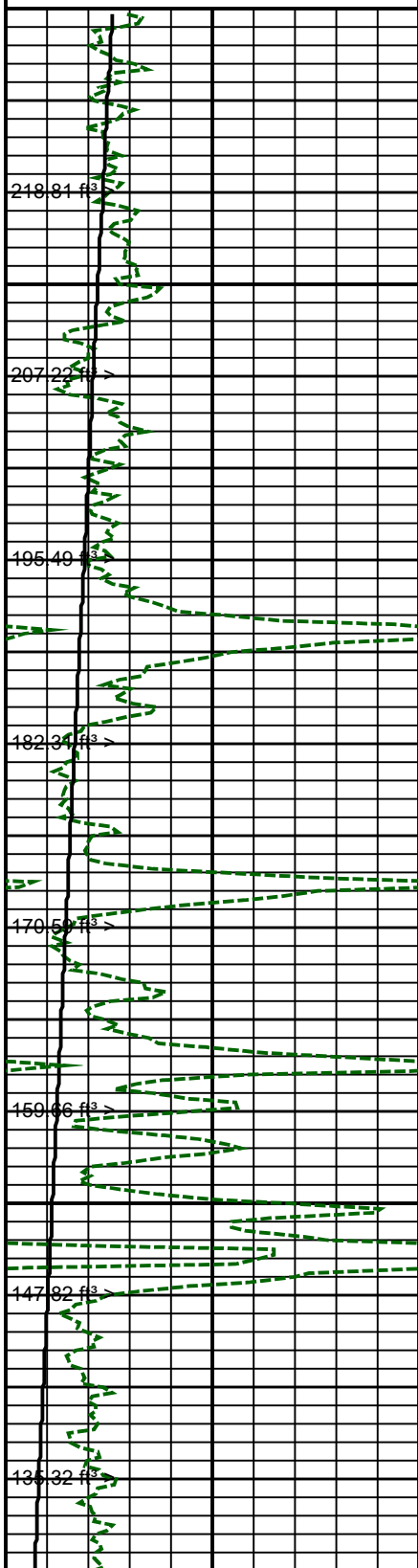
4-ARM X-Y CALIPER LOG

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500
0 Gamma Ray(api) 200

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20



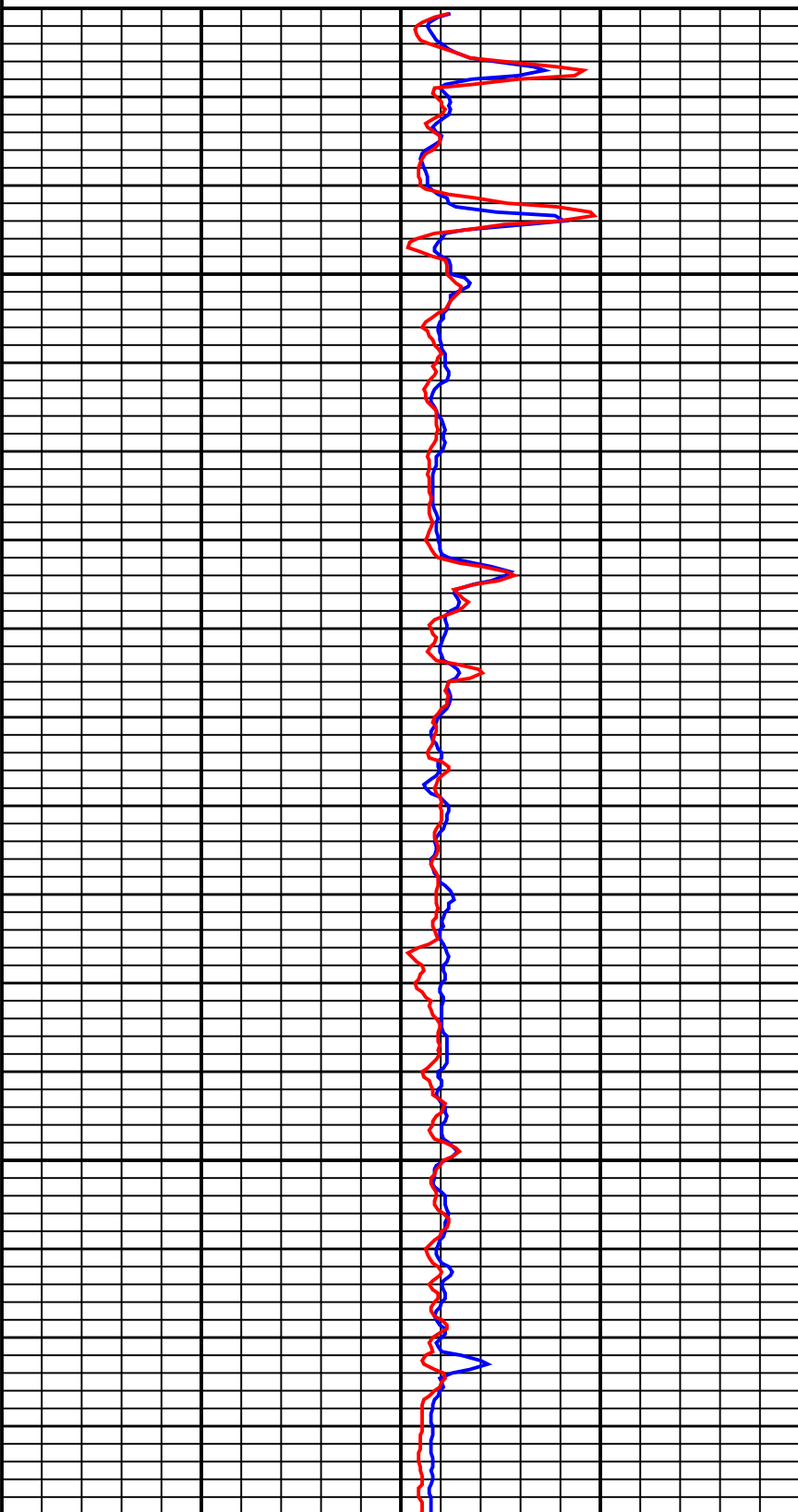
171'

200'

250'

300'

341'



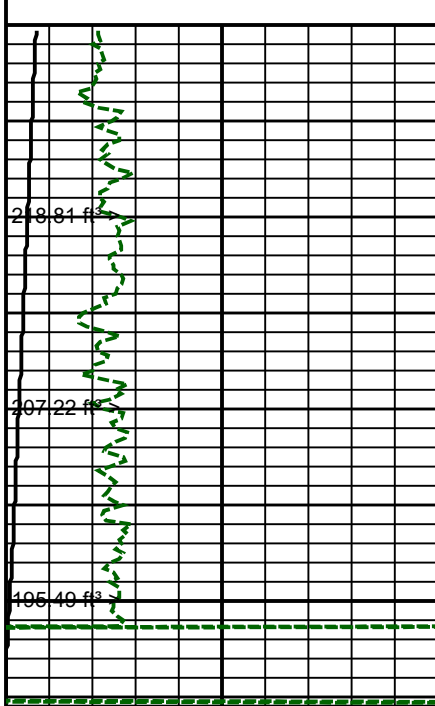
Parks Water Resources
M-GWL-3 Corral De Tierra
Oct 08, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Annular Volume (ft³) 500

0 Gamma Ray(api) 200



341'

350'

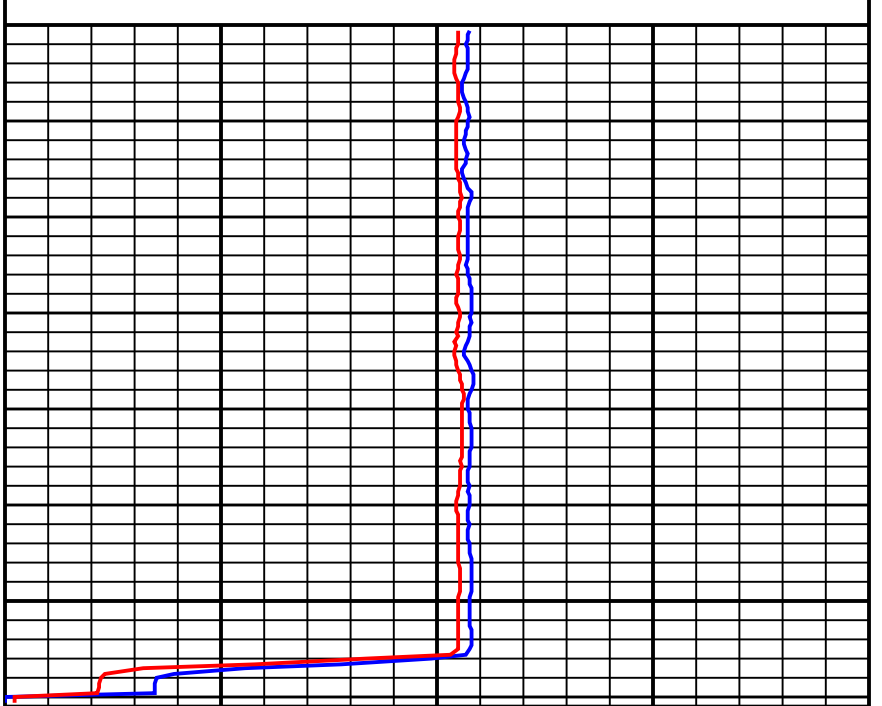
400'

Log Depth 410'

4-ARM X-Y CALIPER LOG

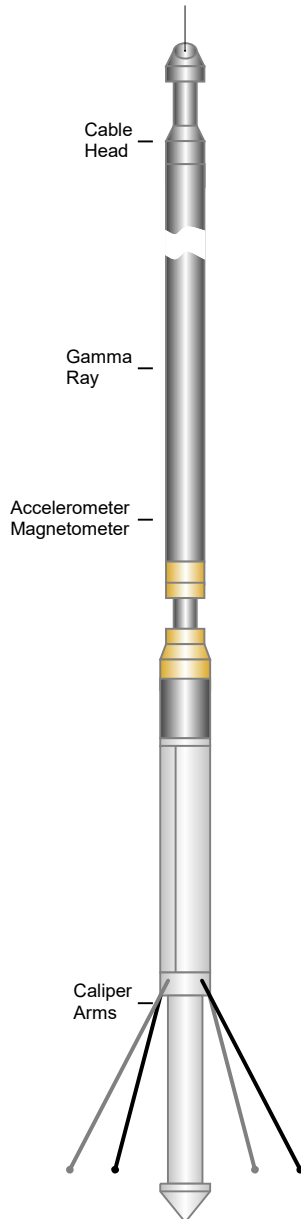
0 Y Axis Caliper(inches) 20

0 X Axis Caliper(inches) 20



		4-ARM X-Y CALIPER LOG					
		Stewart Well Logging Service					
Phone: (530)908-6928 Email: STEWARTWELLOGGING@GMAIL.COM							
Filing No.	COMPANY <u>Parks Water Resources</u> WELL <u>M-GWL-4 San Benancio</u> FIELD <u>Salinas</u> STATE <u>California</u> COUNTY <u>Monterey</u> LOCATION: <u>255 San Benancio Rd.</u> OTHER SERVICES: <u>E-Log</u>						
Job No. 1830	SEC: <u>12</u> TWP: <u>16S</u> RGE: <u>02E</u> LAT.: <u>36.5538294</u> LONG.: <u>-121.6940174</u>						
Permanent Datum: <u>Ground Level</u> Elev.: <u>655</u> Ft. Elevs.: K.B. <u> </u> Ft. Log Measured From: <u>Ground Level</u> , <u>0</u> Ft. Above Perm. Datum D.F. <u> </u> Ft. Drilling Measured From: <u>Ground Level</u> G.L. <u>655</u> Ft.							
Date	Sep 11, 2024						
Type Log	Caliper						
Run	One						
Depth-Driller	340	Ft		Ft		Ft	Ft
Depth-Logger	340	Ft		Ft		Ft	Ft
Top Logged Interval	0	Ft		Ft		Ft	Ft
Btm Logged Interval	340	Ft		Ft		Ft	Ft
Type Fluid In Hole	Bentonite						
Fluid Level	20	Ft		Ft		Ft	Ft
Max Temp	94	°F		°F		°F	°F
Operating Rig Time	1	°Hr		°Hr		°Hr	°Hr
Van No.	Location	SWLS-2 WOODLAND					
Recorded By	Stewart						
Witnessed By	T.Parks						
RUN	BOREHOLE RECORD				CASING RECORD		
NO.	BIT SIZE	FROM	TO	CASING SIZE	CASING TYPE	FROM	TO
1	10-5/8 In	0 Ft	340 Ft	4 In	PVC	Ft	Ft
2	In	Ft	Ft	In		Ft	Ft
3	In	Ft	Ft	In		Ft	Ft

4-ARM X-Y CALIPER LOG TOOL



GAMMA RAY LOGS:

Gamma Ray Logs record the amount of natural gamma radiation emitted by the rocks surrounding the borehole. The most significant naturally occurring sources of gamma radiation are potassium 40 and daughter products of the uranium and thorium decay series. Clay and shale bearing rocks commonly emit relatively high gamma radiation because they include weathering products of potassium feldspar and mica and tend to concentrate uranium and thorium by ion absorption and exchange.

4 ARM CALIPER LOGS:

Caliper Logs provide a continuous measurement of the size and shape of a borehole along its depth and is commonly used to determine the annular hole volume of wells. The measurements that are recorded can be an important indicator of voids and swelling clay in the borehole. 4 Arm Caliper Logs measure the borehole on two perpendicular planes resulting in more accurate annular volumes when washouts occur during the drilling process.

MAGNETIC DEVIATION LOGS:

Magnetic logs are used to determine the inclination and direction of the well bore versus depth. With these three parameters, wellbore drift, bearing, and true vertical depth can be calculated based on any one of five API approved methodologies. The magnetic deviation will function in any non-magnetic wellbore with any type of wellbore fluid.

4 ARM CALIPER SPECIFICATIONS:

Diameter	2.36 Inches
Range	2.95 - 52 Inches
Length	11.5 Feet
Weight	88.18 Lbs.
Max. Temp	158° F
Inclination	0 to 180 Deg., +/- 0.5 Deg.
Azimuth	0 to 360 Deg., +/- 1.5 Deg.
Gamma Ray	1.97 inches long x .98 inches diameter Scintillation crystal

NOTICE

All interpretations are opinions based on inferences from electrical and other measurements and we do not guarantee the accuracy or correctness of any verbal or written interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

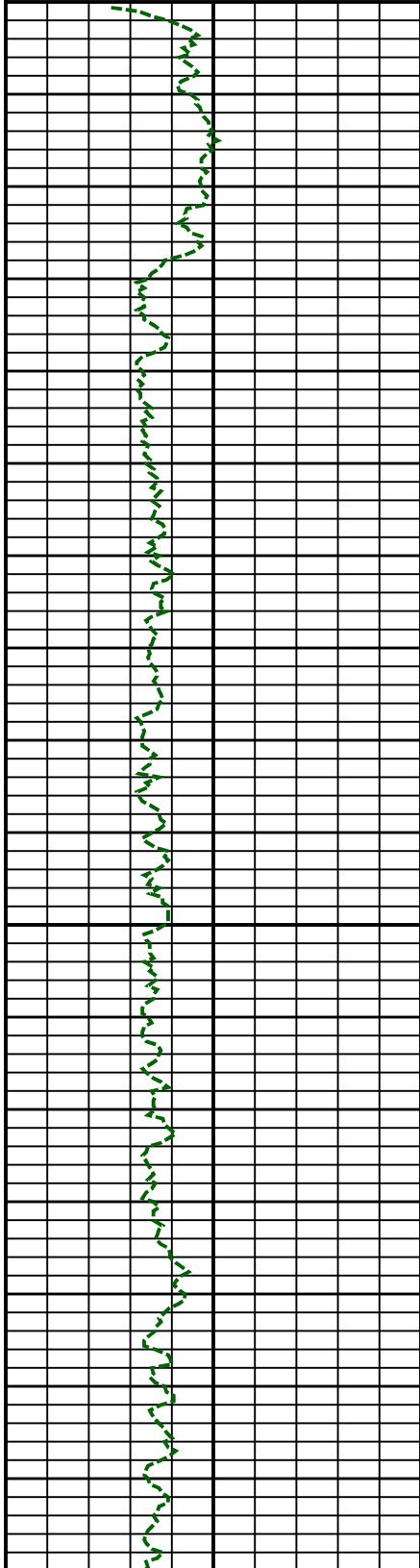
REMARKS

Parks Water Resources
M-GWL-4 San Benancio
Sep 11, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200



50'

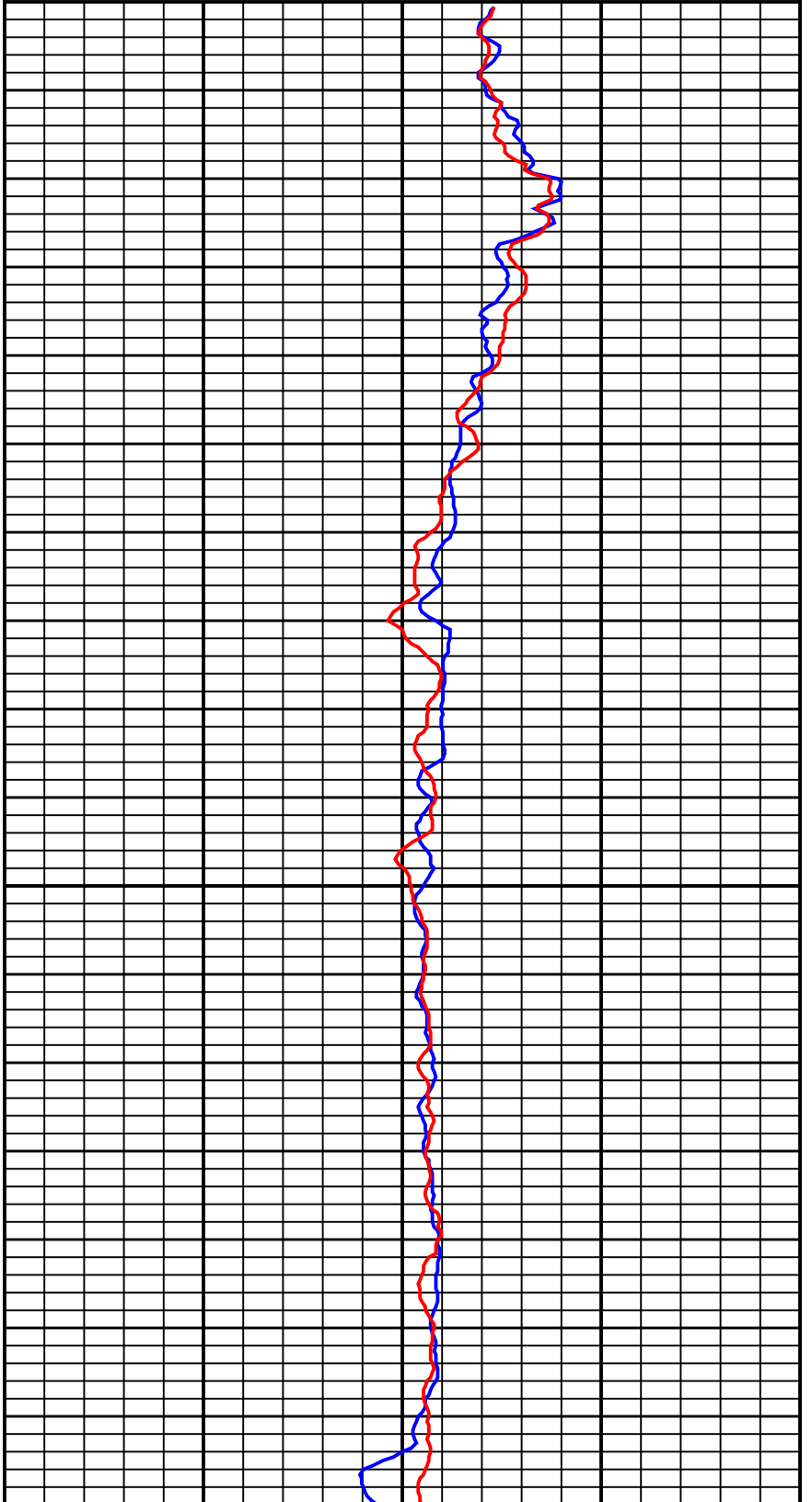
100'

150'

171'

4-ARM X-Y CALIPER LOG

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20



Parks Water Resources
M-GWL-4 San Benancio
Sep 11, 2024

Mult. Pages
5"/100'

DEPTHS
(Feet)

0 Gamma Ray(api) 200

171'

200'

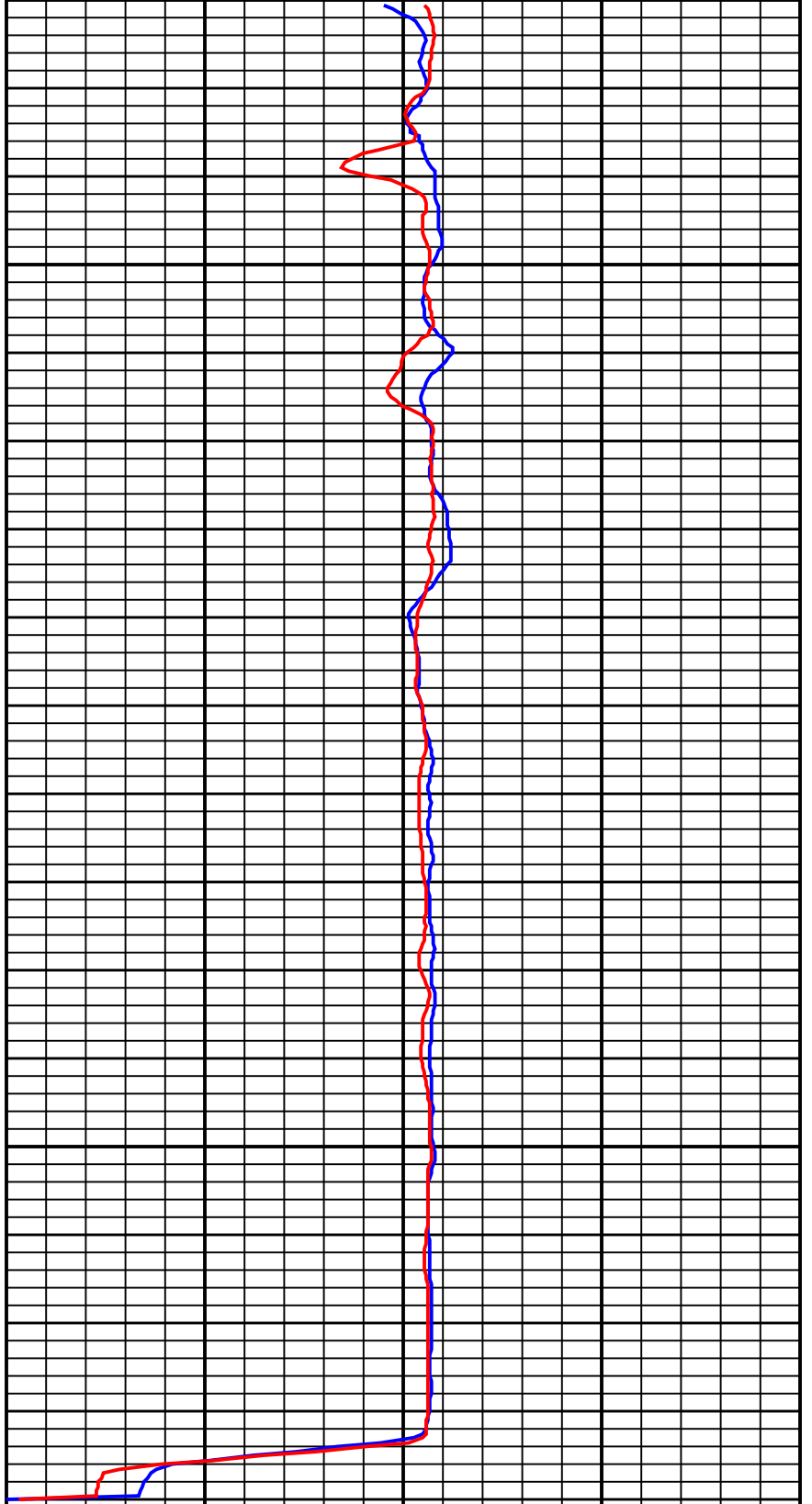
250'

300'

Log Depth 340'

4-ARM X-Y CALIPER LOG

0 Y Axis Caliper(inches) 20
0 X Axis Caliper(inches) 20



M-ISW-1		
Depth Top (feet bgs)	Depth Bottom (feet bgs)	Hydrogeologic Unit
0	20	Older Flood Plain Deposits (Oof)
20	70	Paso Robles Formation (QTc)
M-GWL-2		
Depth Top (feet bgs)	Depth Bottom (feet bgs)	Hydrogeologic Unit
0	600	Paso Robles Formation (QTc)
M-GWL-3		
Depth Top (feet bgs)	Depth Bottom (feet bgs)	Hydrogeologic Unit
0	30	Alluvial Deposits (Qal)
30	340	Paso Robles Formation (QTc)
M-GWL-4		
Depth Top (feet bgs)	Depth Bottom (feet bgs)	Hydrogeologic Unit
0	20	Older Flood Plain Deposits (Oof)
20	470	Paso Robles Formation (QTc)
470	560	Santa Margarita Sandstone (Tsm)
560	600	Monterey Formation (Tm)

M-ISW-1

From (ft bgs)	To (ft bgs)	Lithologic Description
0	10	Top soil, brown, composed of dirt, sand, and gravel, very fine to coarse-grained, poorly sorted, subangular to rounded, dry
10	20	Top soil, grey, composed of dirt, sand, and gravel, very fine to coarse-grained, poorly sorted, subangular to rounded, dry
20	30	Clay with sand, light brown, loose/soft, dry, with very fine-grained, angular to subrounded sand
30	40	Sand with clay, tan, very fine-grained, subangular to subrounded, with minor clay, dry
40	50	Clay with sand, brown, stiff/firm, dry, with very fine-grained, angular to subrounded sand
50	60	Clay with sand, greyish brown, stiff/firm, dry, with very fine-grained, angular to subrounded sand
60	70	Clay with sand, brown, stiff/firm, dry, with very fine-grained, angular to subrounded sand
70	80	Chert, white, hard, dry

M-GWL-2

From (ft bgs)	To (ft bgs)	Lithologic Description
0	10	sand, tan, medium-coarse grained, moderately sorted, very angular
10	20	sandy clay, tan, medium grained, moderately firm clay, poorly sorted, sub angular - subrounded
20	30	sand, tan, medium-coarse grained, poorly sorted, angular-subangular
30	40	sandy clay, tan, medium-coarse grained, moderately firm clay, moderately sorted, subrounded
40	50	sand, tan, medium-coarse grained, moderately sorted, angular-subrounded
50	60	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
60	70	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
70	80	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
80	90	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
90	100	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
100	110	sand, tan, medium-coarse grained, poorly sorted, subangular-rounded
110	120	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
120	130	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
130	140	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
140	150	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
150	160	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
160	170	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
170	180	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
180	190	sand, tan, medium-coarse grained, well sorted, angular-subangular
190	200	sand, tan, medium-coarse grained, well sorted, subangular-subrounded
200	210	sand, tan, medium-coarse grained, well sorted, subangular-subrounded
210	220	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
220	230	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
230	240	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded

240	250	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
250	260	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
260	270	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
270	280	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
280	290	clayey sand, tan, medium-coarse grained, poorly sorted, angular-rounded
290	300	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
300	310	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
310	320	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
320	330	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
330	340	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
340	350	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
350	360	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
360	370	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
370	380	clayey sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
380	390	sand, tan, medium-coarse grained, moderately sorted, subangular-subrounded
390	400	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
400	410	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
410	420	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
420	430	clayey sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
430	440	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
440	450	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
450	460	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
460	470	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
470	480	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
480	490	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded

490	500	sand, tan, medium-coarse grained, poorly sorted, subangular-subrounded
500	510	sand, tan medium-coarse grained poorly sorted, angular-subrounded
510	520	sand, tan medium-coarse grained poorly sorted, angular-subrounded
520	530	clayey sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
530	540	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
540	550	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
550	560	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
560	570	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
570	580	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
580	590	clayey sand, tan, medium-coarse grained, poorly sorted, angular-subrounded
590	600	sand, tan, medium-coarse grained, poorly sorted, angular-subrounded

M-GWL-3

From (ft bgs)	To (ft bgs)	Lithologic Description
0	10	sand,tan,medium-coarse,well sorted, very angular-angular
10	20	sand,tan,medium-coarse,well sorted, very angular-angular
20	30	sandy gravel, medium-coarse grain(sand), moderately sorted, very angular-angular, tan
30	40	sand, medium-coarse, moderately sorted, very angular-angular
40	50	sand, tan, fine-coarse, well sorted, very angular-angular
50	60	sand, tan, fine-coarse, moderately sorted, very angular-angular
60	70	sand, tan, fine-coarse, poorly sorted, very angular-angular
70	80	clayey, gravely sand, tan, fine-coarse, moderately sorted, subangular-angular
80	90	clayey sand, tan, fine-coarse, moderately sorted, subangular-angular
90	100	sand, tan, fine-coarse, moderately sorted, subangular-angular
100	110	sand, light tan, medium-coarse, well sorted, very angular-subangular
110	120	sand, light tan, medium-coarse, well sorted, very angular-subangular
120	130	sand, light tan, medium-coarse, moderately sorted, very angular-angular
130	140	clayey sand, light tan, medium-coarse, moderately sorted, very angular-angular
140	150	clayey sand, light tan, fine-coarse, moderately sorted, very angular-angular
150	160	clayey sand, light tan, fine-coarse, moderately sorted, very angular-angular
160	170	clayey sand, light tan, fine-coarse, moderately sorted, very angular-angular
170	180	sand, light tan, fine-coarse, moderately sorted, very angular-angular
180	190	clayey sand, light tan, fine-coarse, well sorted, very angular-angular
190	200	sandy clay, tan, sand is fine-coarse grained, very angular-subangular, clay - medium plasticity
200	210	clay/sand, tan, sand is fine-coarse grained, very angular-angular, clay - low plasticity
210	220	sandy clay, tan, sand is fine-coarse grained, very angular-angular, clay - low plasticity
220	230	sandy clay, tan, sand is fine-coarse grained, very angular-angular, clay - low plasticity
230	240	sandy clay, tan, sand is fine-coarse grained, very angular-angular, clay - medium plasticity
240	250	sandy clay, tan, sand is fine-medium grained, very angular-angular, clay - low plasticity
250	260	sandy clay, tan, sand is fine-medium grained, very angular-angular, clay - low plasticity

260	270	clay, tan, low plasticity
270	280	clayey silt, tan
280	290	sandy, clayey silt, sand is fine-medium grained, angular-subangular
290	300	clayey sand, light tan, fine-medium, well sorted, angular-subangular
300	310	clayey sand, tan, fine-medium, well sorted, angular-subangular
310	320	clayey sand, tan, fine-coarse, well sorted, angular-subangular
320	330	clayey sand, tan, fine-coarse, well sorted, angular-subangular
330	340	sandy clay, tan, soft/runny clay

M-GWL-4

From (ft bgs)	To (ft bgs)	Lithologic Description
0	10	sand, tan/grey, fine-coarse grained, well sorted, very angular-angular
10	20	sand, tan/grey, fine-coarse grained, well sorted, very angular-angular
20	30	clayey sand, dark brown/tan, fine-coarse grained, poorly sorted, very angular-angular
30	40	sandy clay, dark brown/tan, soft
40	50	sandy clay, grey, soft, abundant chert, minimal quartz
50	60	sandy, clayey silt, grey
60	70	sand, grey, fine-coarse grained, moderately sorted, very angular-subrounded
70	80	clayey sand, grey, fine-coarse grained, moderately sorted, very angular-subrounded
80	90	clayey sand, grey, fine-coarse grained, moderately sorted, very angular-subrounded
90	100	sandy clay, grey, firm
100	110	sandy clay, grey, firm
110	120	gravely sand, dark grey, fine-coarse grained, moderately sorted, very angular-subrounded
120	130	gravely sand, dark grey, fine-coarse grained, moderately sorted, very angular-subrounded
130	140	clay, dark grey, very firm
140	150	clay, dark grey, firm
150	160	clayey sand, grey/tan, fine-coarse grained, well sorted, very angular-subrounded
160	170	sandy clay, grey/tan, firm
170	180	clayey sand, dark grey, fine-coarse, moderately sorted, very angular-subrounded
180	190	clayey sand, tan/grey, fine-coarse grained, moderately sorted, very angular-subrounded
190	200	sandy clay, dark grey, soft
200	210	clayey sand, black/dark grey, fine-coarse grained, moderately sorted, very angular-angular
210	220	clayey sand, grey, fine-coarse grained, poorly sorted, very angular-angular
220	230	clay, grey, soft/runny
230	240	clay, grey, soft
240	250	clay, grey, soft
250	260	sand, grey, fine-coarse grained, poorly sorted, very angular
260	270	sand, grey, fine-coarse grained, poorly sorted, very angular
270	280	sand, grey, fine-coarse grained, moderately sorted, very angular
280	290	clayey sand, grey, fine-medium grained, moderately sorted, very angular-angular
290	300	sand, grey, fine-coarse grained, moderately sorted, very angular-angular
300	310	clayey sand, grey, fine-coarse grained, moderately sorted, very angular

310	320	clayey sand, tan, fine-coarse grained, moderately sorted, very angular
320	330	sand, light tan, fine-coarse grained, moderately sorted, very angular
330	340	sand silt, grey
340	350	clayey, sandy, silt, grey
350	360	sandy silt, grey sand is fine grained, well sorted, subrounded, abundant quartz
360	370	sand, light tan/white, fine-medium grained, very well sorted, subrounded
370	380	sand, light tan/white, fine-medium grained, very well sorted, subrounded
380	390	sand, light tan/white, fine-medium grained, very well sorted, subrounded
390	400	silt, grey
400	410	clay, grey, soft
410	420	sand, light tan/white, fine-medium grained, very well sorted, subrounded, abundant quartz
420	430	sand, light tan/white, fine-medium grained, very well sorted, subrounded, abundant quartz
430	440	sand, white, fine-medium grained, well sorted, subrounded-subangular, abundant quartz
440	450	sand, white, fine-medium grained, well sorted, subrounded-subangular, abundant quartz
450	460	sand, dark grey/white, fine-medium grained, well sorted, surrounded, abundant quartz, minimal sandstone
460	470	silty sand, dark grey/white, fine-coarse grained, moderately sorted, subrounded-subangular
470	480	sand, grey, fine-medium grained, mostly fine grained, well sorted, angular-subangular
480	490	sand, grey, fine-medium grained, mostly fine grained, well sorted, angular-subangular
490	500	sand, grey, fine grained, very well sorted, angular
500	510	sand, grey, fine-medium grained, mostly fine grained, well sorted, angular-subangular
510	520	sand, grey, fine grained, very well sorted, subangular
520	530	sand, light tan, fine grained, well sorted, angular-subangular, abundant feldspars and quartz
530	540	sand, light tan, fine grained, well sorted, subangular, abundant feldspars and quartz
540	550	sand, light tan, fine grained, well sorted, subangular-subrounded, abundant feldspars and quartz
550	560	clay, grey, soft
560	570	sand, dark grey, fine-coarse grained, moderately sorted, very angular, indurated sandstone
570	580	clayey sand, dark grey, fine-coarse grained, poorly sorted, very angular, indurated sandstone
580	590	clay, dark grey, soft
590	600	sandy clay, dark grey, soft



M-GWL-3



M-GWL-4



M-GWL-4

200 - 210	
210 - 220	
220 - 230	
230 - 240	
240 - 250	
250 - 260	
260 - 270	
270 - 280	
280 - 290	
290 - 300	
300 - 310	
310 - 320	
320 - 330	
330 - 340	
340 - 350	
350 - 360	
360 - 370	
370 - 380	
380 - 390	
390 - 400	

LIFETIME

M-GWL-4

400-410
410-420
420-430
430-440
440-450
450-460
460-470
470-480
480-490
490-500
500-510
510-520
520-530
530-540
540-550
550-560
560-570
570-580
580-590
590-600

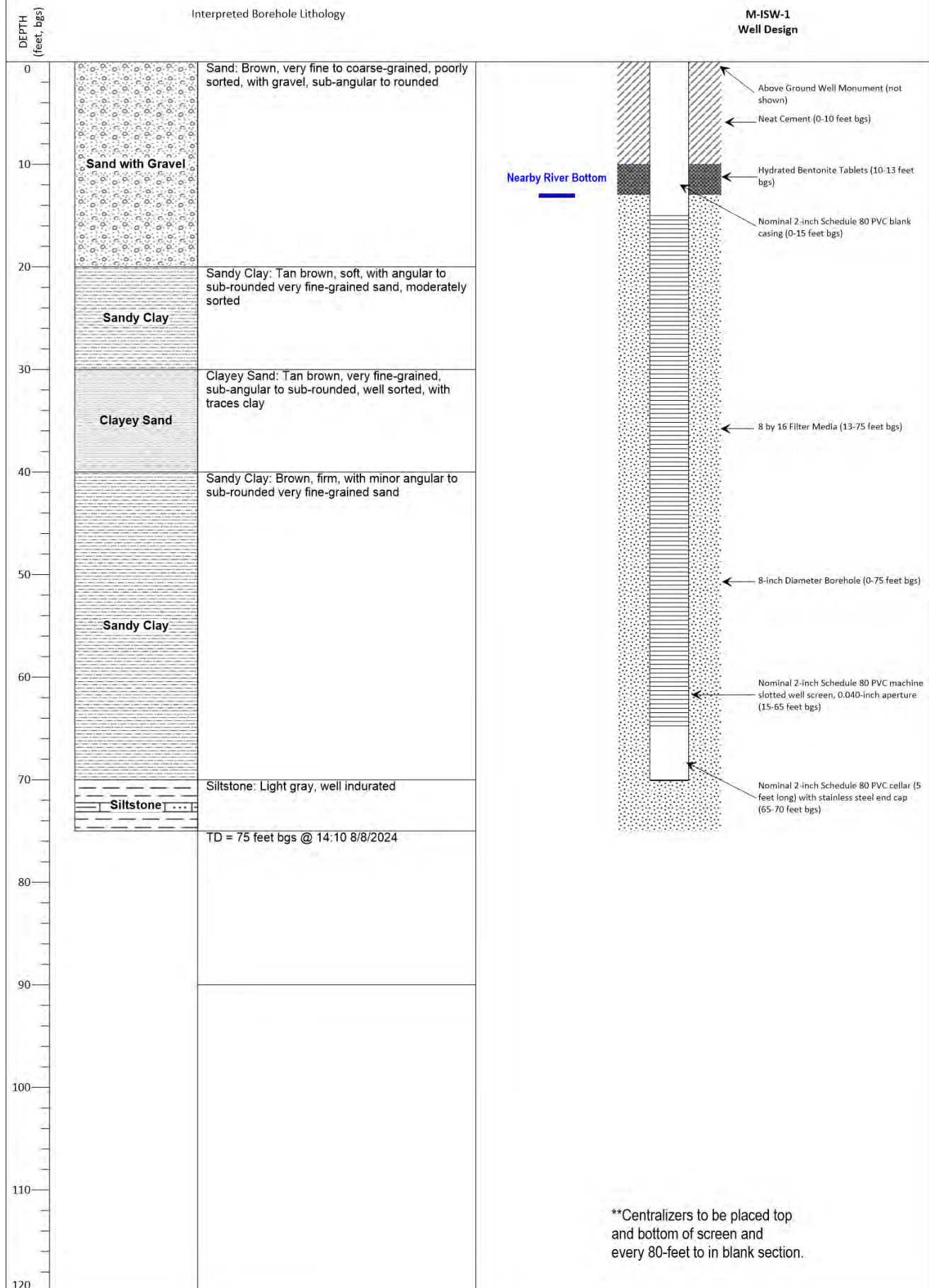


LIFETIME

M-ISW-1 Well Design - FINAL FOR CONSTRUCTION

Client: Salinas Valley Basin GSA
Driller: Parks Water Resources
Method: Hollow Stem Auger

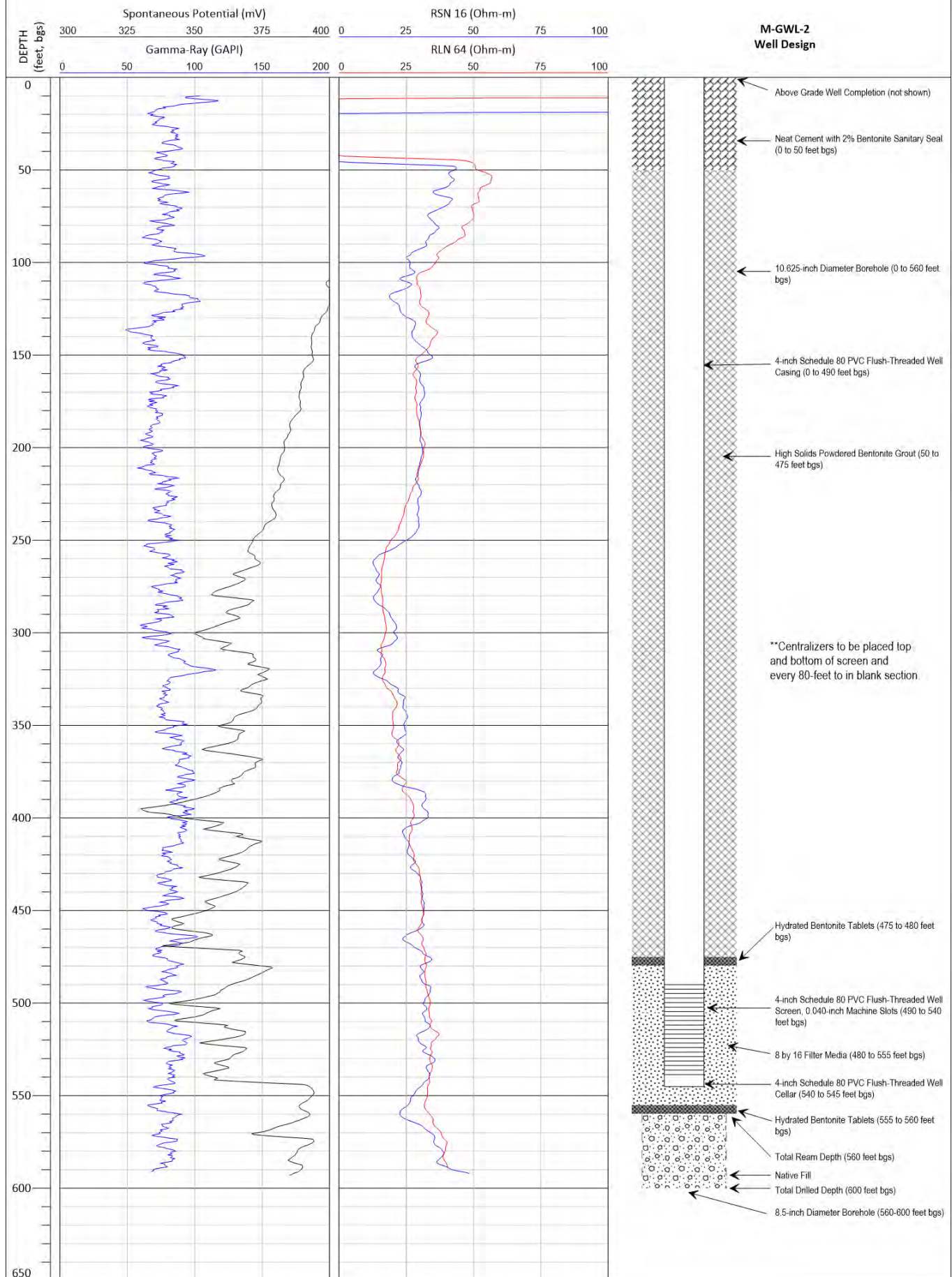
August 9, 2024



M-GWL-2 Well Design - FINAL FOR CONSTRUCTION

Client: Salinas Valley Basin GSA
Driller: Parks Water Resources
Method: Direct Mud Rotary

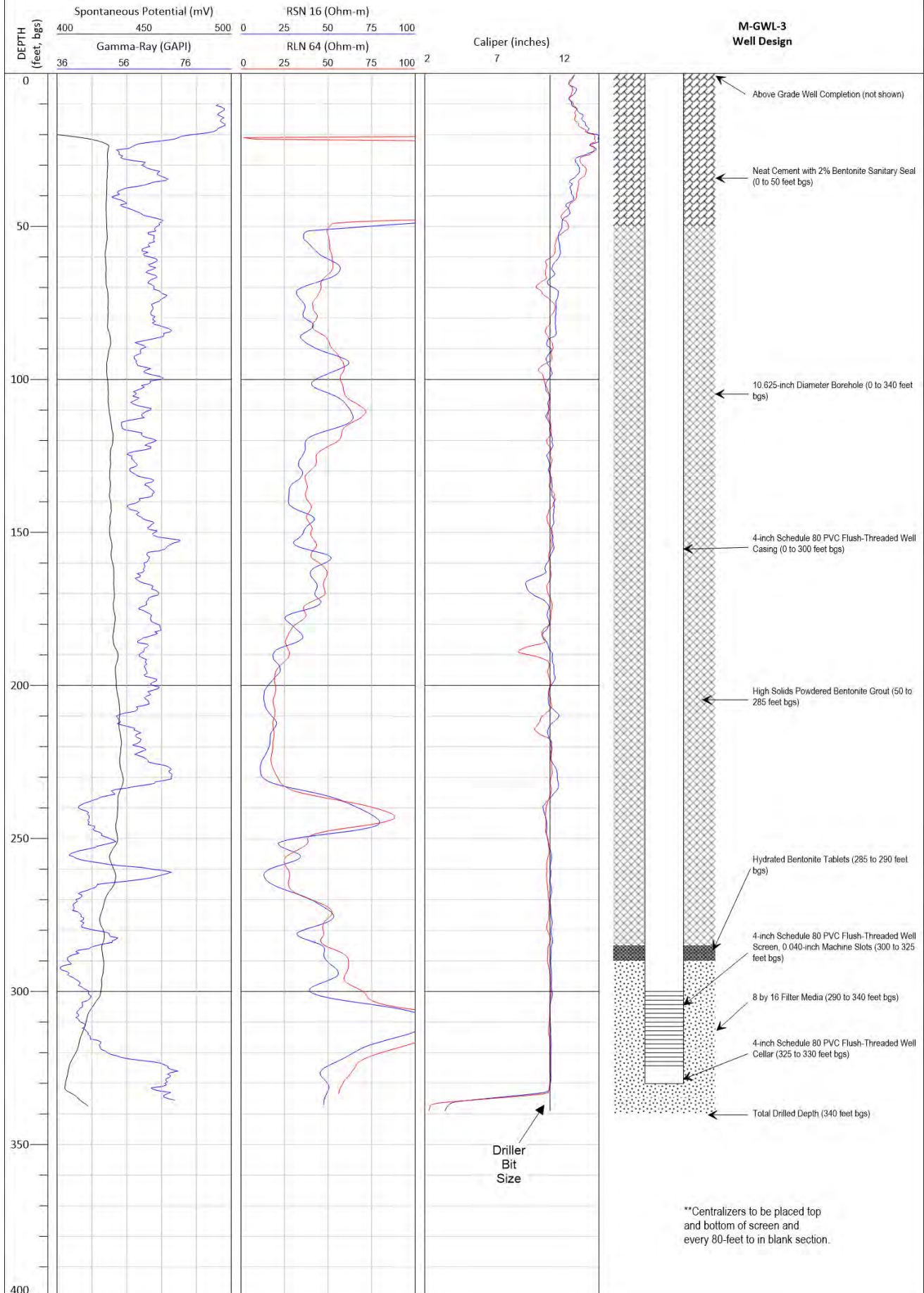
August 23, 2024



M-GWL-3 Well Design - FINAL FOR CONSTRUCTION

Client: Salinas Valley Basin GSA
Driller: Parks Water Resources
Method: Direct Mud Rotary

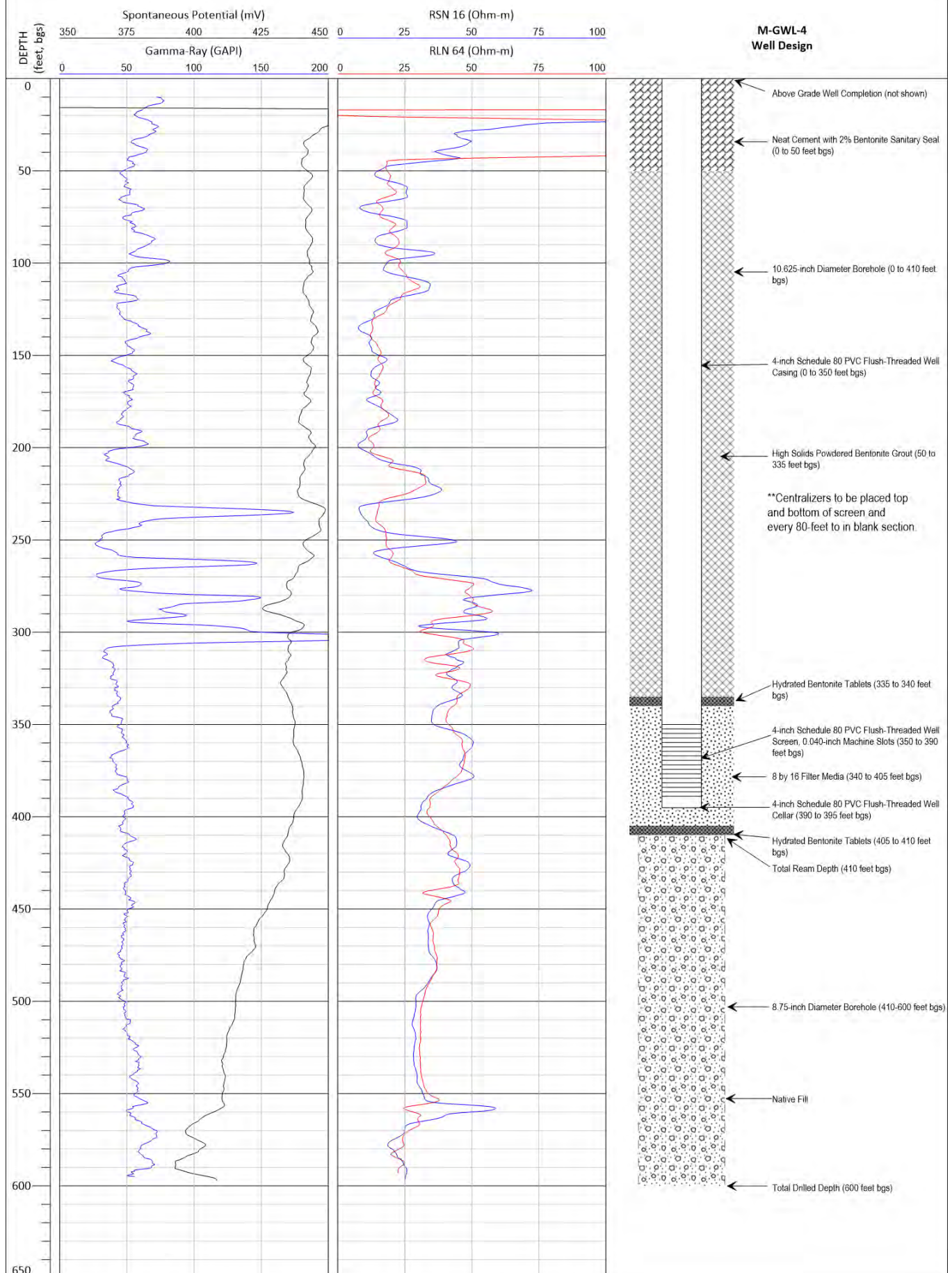
September 12, 2024



M-GWL-4 Well Design - FINAL FOR CONSTRUCTION

Client: Salinas Valley Basin GSA
Driller: Parks Water Resources
Method: Direct Mud Rotary

September 27, 2024



State of California
Well Completion Report
Form DWR 188 Submitted 12/3/2024
WCR2024-012665

Owner's Well Number M-ISW-1 Date Work Began 08/08/2024 Date Work Ended 08/09/2024
Local Permit Agency Environmental Health Services of Monterey County
Secondary Permit Agency _____ Permit Number 25-000011 Permit Date 07/27/2024

Well Owner (must remain confidential pursuant to Water Code 13752)		Planned Use and Activity	
Name	<u>SALINAS VALLEY BASIN GROUND WATER SUSTAINABLE AGENCY,</u>	Activity	<u>New Well</u>
Mailing Address	<u>PO Box 1350</u>	Planned Use	<u>Monitoring</u>
City	<u>Carmel Valley</u>		
State	<u>CA</u>		
Zip	<u>93924</u>		

Well Location			
Address <u>18987 Portola Dr.</u>		APN <u>SEA25-000011</u>	
City <u>Salinas</u>	Zip <u>93908</u>	County <u>Monterey</u>	Township <u>15 S</u>
Latitude <u>36</u> <u>37</u> <u>24.5999</u> <u>N</u>	Longitude <u>-121</u> <u>41</u> <u>4.5887</u> <u>W</u>	Range <u>03 E</u>	Section <u>18</u>
Deg. <u></u> Min. <u></u> Sec. <u></u>	Deg. <u></u> Min. <u></u> Sec. <u></u>	Baseline Meridian <u>Mount Diablo</u>	
Dec. Lat. <u>36.6235</u>	Dec. Long. <u>-121.684608</u>	Ground Surface Elevation _____	
Vertical Datum _____	Horizontal Datum <u>WGS84</u>	Elevation Accuracy _____	
Location Accuracy _____	Location Determination Method _____	Elevation Determination Method _____	

Borehole Information		Water Level and Yield of Completed Well	
Orientation <u>Vertical</u>	Specify _____	Depth to first water _____ (Feet below surface)	
Drilling Method <u>Auger</u>	Drilling Fluid <u>None</u>	Depth to Static _____	
Total Depth of Boring <u>75</u> Feet		Water Level _____ (Feet)	Date Measured _____
Total Depth of Completed Well <u>70</u> Feet		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	Sand w/Gravel
20	30	Sandy Clay
30	40	Clay Sand
40	70	Sandy Clay
70	75	Silt Stone

Casings										
Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	15	Blank	PVC	N/A	0.218	2			PVC SCH 80
2	15	65	Screen	PVC	N/A	0.218	2	Milled Slots	0.04	PVC SCH 80
3	65	70	Blank	PVC	N/A	0.218	2			PVC SCH 80

Annular Material					
Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	10	Cement	Portland Cement/Neat Cement		
10	13	Bentonite	Other Bentonite		Tablets
13	75	Filter Pack	Other Gravel Pack		SRI#8

Other Observations:

Borehole Specifications			Certification Statement			
Depth from Surface Feet to Feet	Borehole Diameter (Inches)		I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief Name <u>PARKS WATER RESOURCES LLC</u> Person, Firm or Corporation			
0	15	8	<u>P O BOX 494</u> <u>ZAMORA</u> <u>CA</u> <u>95698</u> Address City State Zip			
15	65	8	Signed <u>electronic signature received</u> <u>12/04/2024</u> <u>1113206</u> <u>C-57 Licensed Water Well Contractor</u> Date Signed C-57 License Number			
65	75	8				

DWR Use Only											
CSG #	State Well Number	Site Code	Local Well Number								
Latitude Deg/Min/Sec								Longitude Deg/Min/Sec			
TRS: _____ APN: _____											

State of California
Well Completion Report
Form DWR 188 In Review 11/27/2024
WCR2024-008387

Owner's Well Number M-GWL-2 Date Work Began 08/20/2024 Date Work Ended 09/06/2024
Local Permit Agency Environmental Health Services of Monterey County
Secondary Permit Agency _____ Permit Number 25-000012 (600FT) Permit Date 07/27/2024

Well Owner (must remain confidential pursuant to Water Code 13752)	Planned Use and Activity
Name <u>SALINAS VALLEY BASIN GROUND WATER SUSTAINABLE AGENCY,</u>	Activity <u>New Well</u>
Mailing Address <u>PO Box 1350</u>	Planned Use <u>Monitoring</u>
City <u>Carmel Valley</u> State <u>Ca.</u> Zip <u>93924</u>	

Well Location	
Address <u>132 River Rd.</u>	APN <u>SEA25-000012</u>
City <u>Salinas</u> Zip <u>93908</u> County <u>Monterey</u>	Township <u>15 S</u>
Latitude <u>36</u> <u>37</u> <u>1.4556</u> N Longitude <u>-121</u> <u>39</u> <u>35.8128</u> W	Range <u>03 E</u>
Deg. Min. Sec. Deg. Min. Sec.	Section <u>20</u>
Dec. Lat. <u>36.617071</u> Dec. Long. <u>-121.659948</u>	Baseline Meridian <u>Mount Diablo</u>
Vertical Datum _____ Horizontal Datum <u>WGS84</u>	Ground Surface Elevation _____
Location Accuracy _____ Location Determination Method _____	Elevation Accuracy _____
	Elevation Determination Method _____

Borehole Information	Water Level and Yield of Completed Well
Orientation <u>Vertical</u> Specify _____	Depth to first water _____ (Feet below surface)
Drilling Method <u>Direct Rotary</u> Drilling Fluid <u>Bentonite</u>	Depth to Static _____
Total Depth of Boring <u>600</u> Feet	Water Level _____ (Feet) Date Measured _____
Total Depth of Completed Well <u>545</u> Feet	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	5	Coarse
5	10	Sandy Brown Clay
10	25	Brown Clay
25	30	Coarse Sand
30	33	Brown Rock
33	52	Sandy Brown Clay
52	130	Coarse Sand w/Cobbles
130	140	Coarse Sand
140	150	Sandy Clay
150	170	Coarse Sand w/Gravel Layers
170	205	Sand - Coarse to Fine
205	270	Sand w/Layered Hard Streaks
270	280	Gravel
280	290	Fine Gravel w/Clay

290	300	Fine to Medium Sand
300	314	Medium Gravel
314	320	Large Gravel
320	326	Brown Clay
326	330	Mixed Gravel
330	372	Cemented Sand
372	420	Mixed Gravel
420	435	Gravel w/Thin Clay Layers
435	465	Cemented Medium Gravel
465	495	Mixed Medium Gravel
495	505	Large Gravel and Sand
505	560	Fine Gravel and Coarse Sand
560	582	Coarse Sand w/Clay Lenses
582	600	Coarse Sand & Fine Gravel

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	490	Blank	PVC	N/A	0.337	4			SCH 80
2	490	540	Screen	PVC	N/A	0.337	4	Milled Slots	0.04	SCH 80
3	540	545	Blank	PVC	N/A	0.337	4			SCH 80

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	50	Cement	Other Cement		2% Bentonite
50	475	Bentonite	Other Bentonite		High Solid Grout
475	480	Bentonite	Other Bentonite		Tablets
480	555	Filter Pack	Other Gravel Pack		SRI#8
555	560	Bentonite	Other Bentonite		Tablets
560	600	Other Fill	See description.		Native Fill

Other Observations:

State of California
Well Completion Report
Form DWR 188 In Review 2/4/2025
WCR2024-012462

Owner's Well Number M-GWL-3 Date Work Began 09/10/2024 Date Work Ended 09/12/2024
Local Permit Agency Environmental Health Services of Monterey County
Secondary Permit Agency _____ Permit Number 25-000013 Permit Date 07/24/2024

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

Name SALINAS VALLEY BASIN GROUND WATER SUSTAINABLE AGENCY,
Mailing Address PO Box 1350
City Carmel Valley State Ca Zip 93924

Planned Use and Activity

Activity New Well
Planned Use Monitoring

Well Location

Address 0 San Benancio APN SEA25-000013
City Salinas Zip 93908 County Monterey Township 16 S
Latitude 36 33 14.1984 N Longitude -121 41 38.9832 W Range 02 E
Deg. Min. Sec. Deg. Min. Sec. Section 12
Dec. Lat. 36.553944 Dec. Long. -121.694162 Baseline Meridian Mount Diablo
Vertical Datum _____ Horizontal Datum WGS84 Ground Surface Elevation _____
Location Accuracy _____ Location Determination Method _____ Elevation Accuracy _____
Elevation Determination Method _____

Borehole Information

Orientation Vertical Specify _____
Drilling Method Direct Rotary Drilling Fluid Bentonite
Total Depth of Boring 340 Feet
Total Depth of Completed Well 330 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	2	Hard Pan
2	18	Cemented Sand/Rock
18	28	Sand-Fine to Medium
28	32	Cobbles
32	70	Cemented Sand (Hard)
70	73	Sandstone - Hard
73	95	Sandstone w/White Sand
95	105	Hard Sandstone
105	120	Weathered Sand
120	150	Broken Sandstone
150	153	Hard Layer
153	154	Hard Sand & Gravel
154	160	Broken Sandstone
160	164	Hard Layer

164	166	Broken Rock
166	172	Hard Sandstone
172	192	Sandstone
192	205	Hard Brown Clay
205	280	Hard White Silt
280	322	Brown/Tan Clay
322	340	Brown/Tan 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	300	Blank	PVC	N/A	0.337	4			PVC SCH 80
2	300	325	Screen	PVC	N/A	0.337	4	Milled Slots	0.04	PVC SCH 80
3	325	330	Blank	PVC	N/A	0.337	4			PVC SCH 80

Annular Material					
Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	50	Cement	Other Cement		2% Bentonite
50	285	Bentonite	High Solids		
285	290	Bentonite	Other Bentonite		Tablets
290	340	Filter Pack	Other Gravel Pack		SR#8

Other Observations:

Borehole Specifications			Certification Statement			
Depth from Surface Feet to Feet		Borehole Diameter (inches)	I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.			
			Name			
			PARKS WATER RESOURCES LLC			
			Person, Firm or Corporation			
			P O BOX 494	ZAMORA	CA	95698
			Address	City	State	Zip
			Signed			
			electronic signature received	11/27/2024	1113206	
			C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number	

DWR Use Only																		
CSG #	State Well Number				Site Code			Local Well Number										
				N							W							
Latitude Deg/Min/Sec					Longitude Deg/Min/Sec													
TRS:																		
APN:																		

State of California
Well Completion Report
Form DWR 188 In Review 2/4/2025
WCR2024-012581

Owner's Well Number M-GWL-4 Date Work Began 09/23/2024 Date Work Ended 09/26/2024
Local Permit Agency Environmental Health Services of Monterey County
Secondary Permit Agency _____ Permit Number 25-000010 Permit Date 07/27/2024

Well Owner (must remain confidential pursuant to Water Code 13752)	Planned Use and Activity
Name <u>SALINAS VALLEY BASIN GROUND WATER SUSTAINABLE AGENCY,</u>	Activity <u>New Well</u>
Mailing Address <u>PO Box 1350</u>	Planned Use <u>Monitoring</u>
City <u>Carmel Valley</u> State <u>Ca</u> Zip <u>93924</u>	

Well Location	
Address <u>0 Corral De Tierra</u>	APN <u>161-552-045</u>
City <u>Salinas</u> Zip <u>93908</u> County <u>Monterey</u>	Township <u>16 S</u>
Latitude <u>36</u> <u>33</u> <u>25.6031</u> <u>N</u> Longitude <u>-121</u> <u>43</u> <u>57.3239</u> <u>W</u>	Range <u>02 E</u>
Deg. Min. Sec. Deg. Min. Sec.	Section <u>10</u>
Dec. Lat. <u>36.557112</u> Dec. Long. <u>-121.73259</u>	Baseline Meridian <u>Mount Diablo</u>
Vertical Datum _____ Horizontal Datum <u>WGS84</u>	Ground Surface Elevation _____
Location Accuracy _____ Location Determination Method _____	Elevation Accuracy _____
	Elevation Determination Method _____

Borehole Information	Water Level and Yield of Completed Well
Orientation <u>Vertical</u> Specify _____	Depth to first water _____ (Feet below surface)
Drilling Method <u>Direct Rotary</u> Drilling Fluid <u>Bentonite</u>	Depth to Static _____
Total Depth of Boring <u>600</u> Feet	Water Level _____ (Feet) Date Measured _____
Total Depth of Completed Well <u>395</u> Feet	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	3	Coarse Fill
3	18	Coarse Sand
18	29	Large Gravel Sand
29	38	Hard Brown Clay
38	40	Coarse Sand
40	64	White Clay
64	75	Hard White Silt
75	77	Grey Clay
77	90	Decomposed Granite
90	105	Grey Clay
105	108	Decomposed Granite
108	110	Grey Clay
110	135	Hard Grey Silt
135	145	Blue Clay

145	165	Sandy Grey Clay
165	205	Grey Clay w/hard silt lenses
205	234	Sandstone Layers
234	250	Sandstone Clay
250	257	Hard White Silt
257	261	White Silt
261	266	Hard Silt
266	272	Grey Clay
272	285	White Shale
285	298	Grey Shale Clay
298	301	White Shale
301	305	Grey Sandy Clay
305	320	Hard White Silt w/clay layers
320	323	Hard Layers
323	340	White Shale
340	400	White Ash/Clay
400	419	White Ash Clay
419	445	Cemented Black Sand
445	450	Hard Shale/Black
450	462	Cemented Black Sand
462	505	Grey Silt
505	560	Hard Silt Layer
560	570	Hard Shale Layer
570	588	Grey Shale
588	590	Hard Shale
590	596	Grey Shale
596	600	Hard Grey Shale

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	350	Blank	PVC	N/A	0.337	4			PVC SCH 80
2	350	390	Screen	PVC	N/A	0.337	4	Milled Slots	0.04	PVC SCH 80
3	390	395	Blank	PVC	N/A	0.337	4			PVC SCH 80

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	50	Cement	Other Cement		2% Bentonite
50	335	Bentonite	High Solids		
335	340	Bentonite	Other Bentonite		Tablets
340	405	Filter Pack	Other Gravel Pack		SRM#8
405	410	Bentonite	Other Bentonite		Tablets
410	600	Other Fill	See description.		Native Fill

Other Observations:

Borehole Specifications
Borehole ID:
Date:
Location:
Depth:
Diameter:
Drilling Method:
Operator:
Notes:

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	350	10.625
350	390	10.625
390	600	10.625

Certification Statement

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

Name	PARKS WATER RESOURCES LLC
------	---------------------------

Person, Firm or Corporation

P O BOX 494 ZAMORA CA 95698

Address	City	State	Zip
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Signed	<i>electronic signature received</i>	11/27/2024	1113206
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C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number
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DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

			N					W
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Latitude Deg/Min/Sec Longitude Deg/Min/Sec

Latitude Deg/Min/Sec Longitude Deg/Min/Sec

TRS:

APN: _____



COUNTY OF MONTEREY

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

ENCROACHMENT PERMIT 24EP0279

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:	08/01/2024	DISTRICT:	5-All Districts
PERMIT ISSUE DATE:	08/02/2024	ASSOCIATED CONSTRUCTION PERMIT:	
PARCEL NO. (if any):	111-111-111-111	UTILITY WORK ORDER:	
PROJECT ADDRESS:	VARIOUS COUNTY ROADS		
LOCATION DESCRIPTION:	SOMAVIA ROAD, CORRAL DE TIERRA ROAD, PORTOLA DRIVE, RIVER ROAD, SAN BENANCIO ROAD, BRADLEY ROAD, SAN JUAN GRADE ROAD, ESPINOSA ROAD AND STRAWBERRY ROAD.		
PERMITTEE:	PARKS WATER RESOURCES, LLC		
ORGANIZATION:	C/O SVBGSA		
PERMITTEE ADDRESS:	PO BOX 494, ZAMORA, CA 93924		
PERMITTEE PHONE:	5306619027		
PERMITTEE EMAIL:	drilling@parkswaterresources.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:

*INSTALL AND MAINTAIN (10) GSA MONITORING WELLS LOCATED ON VARIOUS COUNTY ROADS
PER ATTACHED LOCATION MAPS FOR SALINAS VALLEY BASIN GROUNDWATER SUSTAINABILITY
AGENCY PROJECT.*

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: 08/01/25

CEQA Status:

CEQA Section:

CEQA Class:

Fees Assessed: \$2,794.43

Copy: Permittee Job Site Inspector File District Superintendent Finance

“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)

DATE	WORK DESCRIPTION
7/10/2024	Stake Borehole Locations.
7/29/2024	Underground Utility Locating.
7/30/2024	Underground Utility Locating.
8/8/2024	Mobilize to M-ISW-1, drill to 75 feet bgs.
8/9/2024	Install casing/screen, filter pack, sanitary seal, and monument.
8/16/2024	Construct well pad at M-ISW-1.
8/19/2024	Mobilize to M-GWL-2, hand clear borehole location.
8/20/2024	Drill to 300 feet bgs.
8/21/2024	Reach TD, conduct geophysical logging.
8/22/2024	No work, waiting on County to approve well design.
8/23/2024	No work, waiting on County to approve well design.
8/26/2024	Ream borehole to 300 feet bgs.
8/27/2024	Ream borehole to 560 feet bgs. Conduct caliper log.
8/28/2024	Complete clean out pass. Install casing/screen, filter pack, and bentonite transition seal.
8/29/2024	Install high solids bentonite grout.
8/30/2024	Pour sanitary seal. Open ended airlifting.
9/3/2024	Set up for mechanical development.
9/4/2024	Mechanical development with dual swab.
9/5/2024	Construct well pad at M-GWL-2.
9/6/2024	No work, mobilizing to M-GWL-3.
9/9/2024	Mobilize to M-GWL-3, hand clear borehole location.
9/10/2024	Drill to 210 feet bgs.
9/11/2024	Drill to 340 feet bgs, conduct geophysical and caliper logs.
9/12/2024	Complete clean out pass. Install casing/screen, filter pack, and bentonite transition seal.
9/13/2024	Install high solids bentonite grout.
9/16/2024	Pour sanitary seal.
9/17/2024	Open ended airlifting. Flush with potable water. Construct well pad.
9/18/2024	No work, mobilizing to M-GWL-4
9/19/2024	No work, mobilizing to M-GWL-4
9/20/2024	No work, mobilizing to M-GWL-4
9/23/2024	Hand clear borehole location. Drill to 200 ft bgs.
9/24/2024	Drill to 400 ft bgs.
9/25/2024	Reach total depth. Conduct geophysical logs.
9/26/2024	No work, waiting on County to approve well design.
9/27/2024	No work, waiting on County to approve well design.
9/30/2024	No work, Drilling crew is sick.
10/1/2024	No work, Drilling crew is sick.
10/2/2024	No work, Drilling crew is sick.
10/3/2024	No work, Drilling crew is sick.
10/4/2024	No work, Drilling crew is sick.
10/7/2024	Ream borehole to 300 feet bgs.

10/8/2024	Ream borehole to 410 feet bgs. Conduct Caliper log.
10/9/2024	Install casing/screen, filter pack, and bentonite transition seal. Install high solids bentonite grout.
10/10/2024	Pour sanitary seal.
10/11/2024	Open ended airlifting.
10/14/2024	Mechanical development with dual swab.
10/15/2024	Construct well pad at M-GWL-4.
1/7/2025	Pump development and water quality sampling at M-GWL-2 and M-GWL-4.
1/8/2025	Resample M-GWL-2 and M-GWL-4.



Appendix B

Land Surveyor Data Sheets

SVBGSA Monitoring Well As-Built Survey

Date Prepared: 1/31/25

Project No. 4728.00



Well ID:

180/400-ISW-2

Surveyed September 18, 2024

As-Built Positions

Northing

Easting

Elevation

PVC Well Casing

2106808.26

5808996.64

88.92

Described Location:

Metal Standpipe

90.04

Somavia Road

Adjacent Ground

86.34

Well ID:

M-GWL-2

Surveyed September 18, 2024

Northing

Easting

Elevation

PVC Well Casing

2118587.22

5781136.20

63.86

Described Location:

Metal Standpipe

64.19

River Road

Adjacent Ground

61.92

Well ID:

M-GWL-3

Surveyed October 28, 2024

Northing

Easting

Elevation

PVC Well Casing

2097357.31

5759221.82

381.61

Described Location:

Metal Standpipe

381.97

Corral De Tierra

Adjacent Ground

379.95

Well ID:

M-GWL-4

Surveyed October 28, 2024

Northing

Easting

Elevation

PVC Well Casing

2095820.89

5770514.31

670.69

Described Location:

Metal Standpipe

670.93

San Benancio

Adjacent Ground

668.75

Well ID:

L-GWL-2

Surveyed January 20, 2025

Northing

Easting

Elevation

PVC Well Casing

2174873.78

5799171.24

243.64

Described Location:

Metal Standpipe

243.82

San Juan Grade

Adjacent Ground

240.74

SVBGSA Monitoring Well As-Built Survey

Date Prepared: 1/31/25

Project No. 4728.00



Well ID:

L-GWL-6

Surveyed January 20, 2025

		Northing	Easting	Elevation
	PVC Well Casing	2198042.49	5776971.15	262.62
Described Location:	Metal Standpipe			263.04
San Miguel Canyon	Adjacent Ground			259.98

Well ID:

M-ISW-1

Surveyed December 3, 2024

		Northing	Easting	Elevation
	PVC Well Casing	2121098.85	5773987.33	65.54
Described Location:	Metal Standpipe			66.28
Portola Drive	Adjacent Ground			62.66

Well ID:

E-DA-2

Surveyed January 20, 2025

		Northing	Easting	Elevation
	PVC Well Casing	2163912.40	5782413.26	125.11
Described Location:	Metal Standpipe			125.51
Christensen Road	Adjacent Ground			122.58

Well ID:

UV-GWL-1

Surveyed December 3, 2024

		Northing	Easting	Elevation
	PVC Well Casing	1838712.52	6026440.53	536.29
Described Location:	Metal Standpipe			536.46
Bradley (GWL)	Adjacent Ground			533.24

Well ID:

UV-ISW-1

Surveyed December 3, 2024

		Northing	Easting	Elevation
	PVC Well Casing	1838723.95	6026396.02	535.67
Described Location:	Metal Standpipe			536.19
Bradley (ISW)	Adjacent Ground			532.93

Survey Notes:

Coordinates are grid coordinates per the California Coordinate System, NAD83 Zone IV.

Elevations are relative to the North American Vertical Datum of 1988 (NAVD88).

Positions were determined using a combination of GNSS and conventional survey methods; at each well location the site control was related to the National Spatial Reference System using static GNSS observations and the use of the National Geodetic Survey's (NGS's) Online Positioning User Service (OPUS). Positions were subsequently transferred to the wells using conventional survey equipment.

All units are US Survey Feet.



Appendix C

Laboratory Reports



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

Page 1 of 3

Monday, January 27, 2025

Lab Number: AC89006

Sample Site M-GWL-2 (RIVER ROAD)

Source Code

Other ID

Client Code: MONTGOMERY

Collection Date/Time 01/08/2025 14:50

Submittal Date/Time 01/08/2025 15:19

Sample Collector GRANICHER H

Sample Comments: Ground Water. Receiving temperature 5.6°C.

Analyte	Method	Unit	Result	PQL	Qualifier	Analysis Start Date Time
adjusted Sodium Adsorption Ratio	UC Davis1993		0.74			01/25/2025 16:00
Agriculture-Conductivity	SM2510B	dS/m	1.6	.1		01/10/2025 07:38
Arsenic (As)	EPA200.8 REV 5.4	ug/L	2	0.5		01/11/2025 12:00
Bicarbonate Alkalinity (as HCO ₃)	Calculated	mg/L	569.7	1.0		01/08/2025 15:35
Boron	SM4500B B-2000	mg/L	0.21	0.10		01/13/2025 11:25
Calcium	ASTM6919-17	mg/L	176	5		01/23/2025 09:00
Carbonate Alkalinity (as CO ₃)	Calculated	mg/L	<1	1.0		01/08/2025 15:35
Cl (Chloride)	EPA300.0	mg/L	108	0.2		01/08/2025 22:04
Conductivity @ 25C	SM2510 B-2011	umho/cm	1570	4		01/10/2025 07:38
Hardness	SM2340 B-2011	mg/L	2690	1.7		01/24/2025 09:38
Iron	EPA200.7	ug/L	<100	100		01/18/2025 12:30
Magnesium	ASTM6919-17	mg/L	546	1		01/23/2025 09:00
Manganese (Mn)	EPA200.7	ug/L	66	1		01/18/2025 12:30
Nitrate Nitrogen	EPA300.0	mg/L	<0.2	0.2		01/08/2025 22:04
Nitrite as nitrogen	SM4500 NO2 B	mg/L	<0.05	0.05		01/08/2025 15:41
NO ₃ (Nitrate)	EPA300.0	mg/L	<1	1		01/08/2025 22:04
pH (Laboratory)	SM4500H+ B-2011	pH	6.7	0.1	HT	01/08/2025 15:35
Potassium	ASTM6919-17	mg/L	5.1	1		01/23/2025 09:00
SO ₄ (Sulfate)	EPA300.0	mg/L	205	1		01/08/2025 22:04
Sodium	ASTM6919-17	mg/L	84	1		01/23/2025 09:00
Sodium Adsorption Ratio (SAR)	L.V. Wilcox		0.69	N/A		01/25/2025 16:00
Total Alkalinity (as CaCO ₃)	SM2320 B-2011	mg/L	467	2		01/08/2025 15:35

mg/L : Milligrams per liter (=ppm)

ug/L : Micrograms per liter (=ppb)

AC89008 1/27/25 9:14
PQL: Practical Quantitation Limit

Total Dissolved Solids (TDS)	SM2540 C-2015	mg/L	1000	5	01/09/2025 14:29
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Lab Number: AC89007

Sample Site M-GWL-4 (CORRAL DE TIERRA ROAD)

Source Code

Other ID

Client Code: MONTGOMERY

Collection Date/Time 01/08/2025 12:55

Submittal Date/Time 01/08/2025 15:19

Sample Collector GRANICHER H

Sample Comments: Ground Water. Receiving temperature 1.4°C.

Analyte	Method	Unit	Result	PQL	Qualifier	Analysis Start Date Time
adjusted Sodium Adsorption Ratio	UC Davis1993		3.42			01/25/2025 16:00
Agriculture-Conductivity	SM2510B	dS/m	1.5	.1		01/10/2025 07:38
Arsenic (As)	EPA200.8 REV 5.4	ug/L	6	0.5		01/11/2025 12:00
Bicarbonate Alkalinity (as HCO ₃)	Calculated	mg/L	353.8	1.0		01/08/2025 15:55
Boron	SM4500B B-2000	mg/L	0.17	0.10		01/13/2025 11:25
Calcium	ASTM6919-17	mg/L	132	5		01/23/2025 09:00
Carbonate Alkalinity (as CO ₃)	Calculated	mg/L	<1	1.0		01/08/2025 15:55
Cl (Chloride)	EPA300.0	mg/L	194	0.2		01/08/2025 22:18
Conductivity @ 25C	SM2510 B-2011	umho/cm	1520	4		01/10/2025 07:38
Hardness	SM2340 B-2011	mg/L	449	1.7		01/24/2025 09:38
Iron	EPA200.7	ug/L	<100	100		01/18/2025 12:30
Magnesium	ASTM6919-17	mg/L	29	1		01/23/2025 09:00
Manganese (Mn)	EPA200.7	ug/L	34	1		01/18/2025 12:30
Nitrate Nitrogen	EPA300.0	mg/L	2.0	0.2		01/08/2025 22:18
Nitrite as nitrogen	SM4500 NO2 B	mg/L	<0.05	0.05		01/08/2025 15:41
NO ₃ (Nitrate)	EPA300.0	mg/L	8.8	1		01/08/2025 22:18
pH (Laboratory)	SM4500H+ B-2011	pH	6.5	0.1	HT	01/08/2025 15:55
Potassium	ASTM6919-17	mg/L	3.9	1		01/23/2025 09:00
SO ₄ (Sulfate)	EPA300.0	mg/L	168	1		01/08/2025 22:18
Sodium	ASTM6919-17	mg/L	126	1		01/23/2025 09:00
Sodium Adsorption Ratio (SAR)	L.V. Wilcox		2.55	N/A		01/25/2025 16:00
Total Alkalinity (as CaCO ₃)	SM2320 B-2011	mg/L	290	2		01/08/2025 15:55
Total Dissolved Solids (TDS)	SM2540 C-2015	mg/L	933	5		01/09/2025 14:29

Lab Number: AC89008

Sample Site L-GWL-2 (SAN JUAN GRADE ROAD)

Source Code

Other ID

Client Code: MONTGOMERY

Collection Date/Time 01/08/2025 10:48

Submittal Date/Time 01/08/2025 15:19

Sample Collector GRANICHER H

Sample Comments: Ground Water. Receiving temperature 1.0°C.

Analyte	Method	Unit	Result	PQL	Qualifier	Analysis Start Date Time
adjusted Sodium Adsorption Ratio	UC Davis1993		3.48			01/25/2025 16:00
Agriculture-Conductivity	SM2510B	dS/m	1.0	.1		01/10/2025 07:38
Arsenic (As)	EPA200.8 REV 5.4	ug/L	2	0.5		01/25/2025 16:00
Bicarbonate Alkalinity (as HCO ₃)	Calculated	mg/L	181.8	1.0		01/08/2025 16:17

mg/L : Milligrams per liter (=ppm)

ug/L : Micrograms per liter (=ppb)

AC89008 1/27/25 9:14
PQL: Practical Quantitation Limit

Boron	SM4500B B-2000	mg/L	0.11	0.10		01/13/2025 11:25
Calcium	ASTM6919-17	mg/L	56	5		01/23/2025 09:00
Carbonate Alkalinity (as CO ₃)	Calculated	mg/L	<1	1.0		01/08/2025 16:09
Cl (Chloride)	EPA300.0	mg/L	170	0.2		01/08/2025 22:32
Conductivity @ 25C	SM2510 B-2011	umho/cm	1020	2		01/10/2025 07:38
Hardness	SM2340 B-2011	mg/L	226	1.7		01/24/2025 09:38
Iron	EPA200.7	ug/L	1440	100		01/18/2025 12:30
Magnesium	ASTM6919-17	mg/L	21	1		01/23/2025 09:00
Manganese (Mn)	EPA200.7	ug/L	213	1		01/18/2025 12:30
Nitrate Nitrogen	EPA300.0	mg/L	12.8	0.1		01/08/2025 22:32
Nitrite as nitrogen	SM4500 NO2 B	mg/L	<0.05	0.05		01/08/2025 15:41
NO ₃ (Nitrate)	EPA300.0	mg/L	57	1		01/08/2025 22:32
pH (Laboratory)	SM4500H+ B-2011	pH	6.4	0.1	HT	01/08/2025 16:09
Potassium	ASTM6919-17	mg/L	8.3	1		01/23/2025 09:00
SO ₄ (Sulfate)	EPA300.0	mg/L	35	1		01/08/2025 22:32
Sodium	ASTM6919-17	mg/L	112	1		01/23/2025 09:00
Sodium Adsorption Ratio (SAR)	L.V. Wilcox		3.20	N/A		01/25/2025 16:00
Total Alkalinity (as CaCO ₃)	SM2320 B-2011	mg/L	149	2		01/08/2025 16:09
Total Dissolved Solids (TDS)	SM2540 C-2015	mg/L	650	5		01/09/2025 14:29

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.

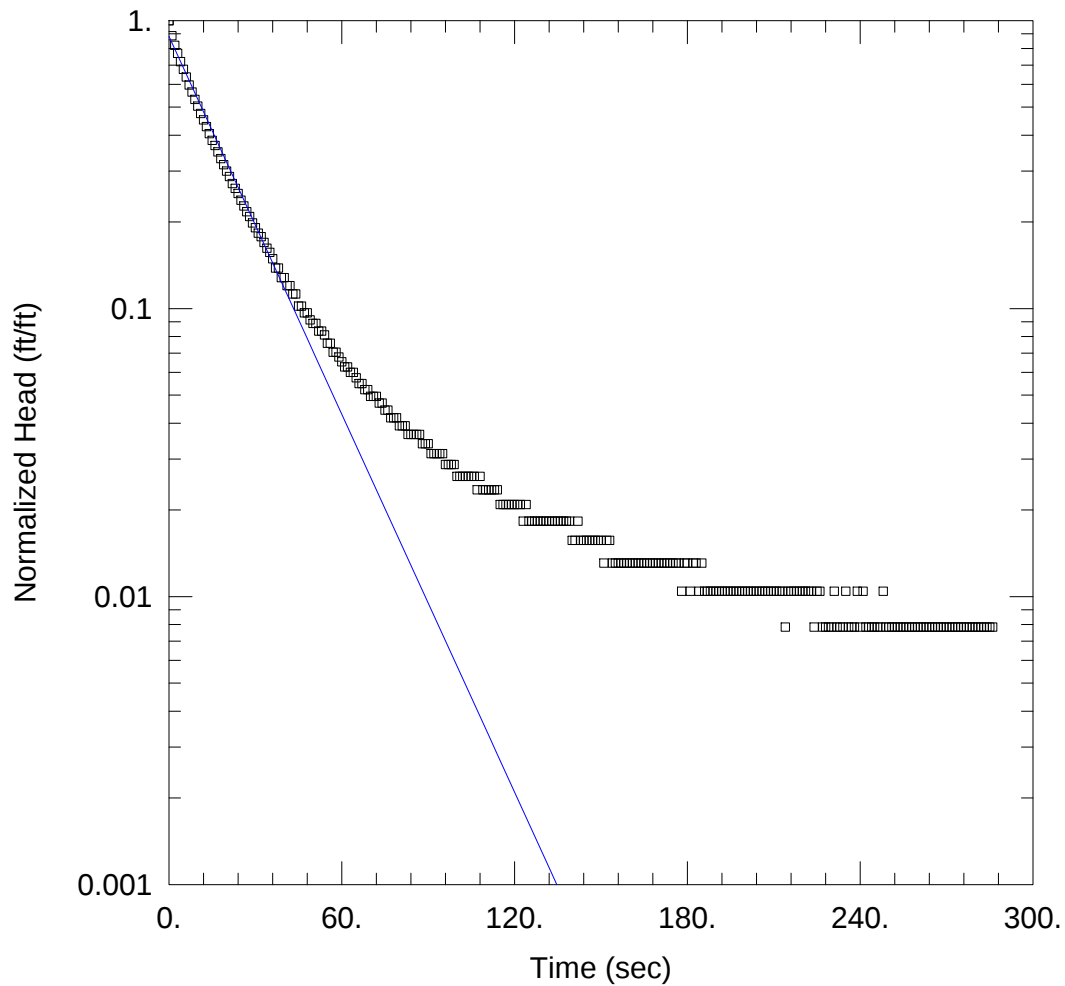
Report approved by



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

Appendix D

Pneumatic Slug Test Analysis



WELL TEST ANALYSIS

PROJECT INFORMATION

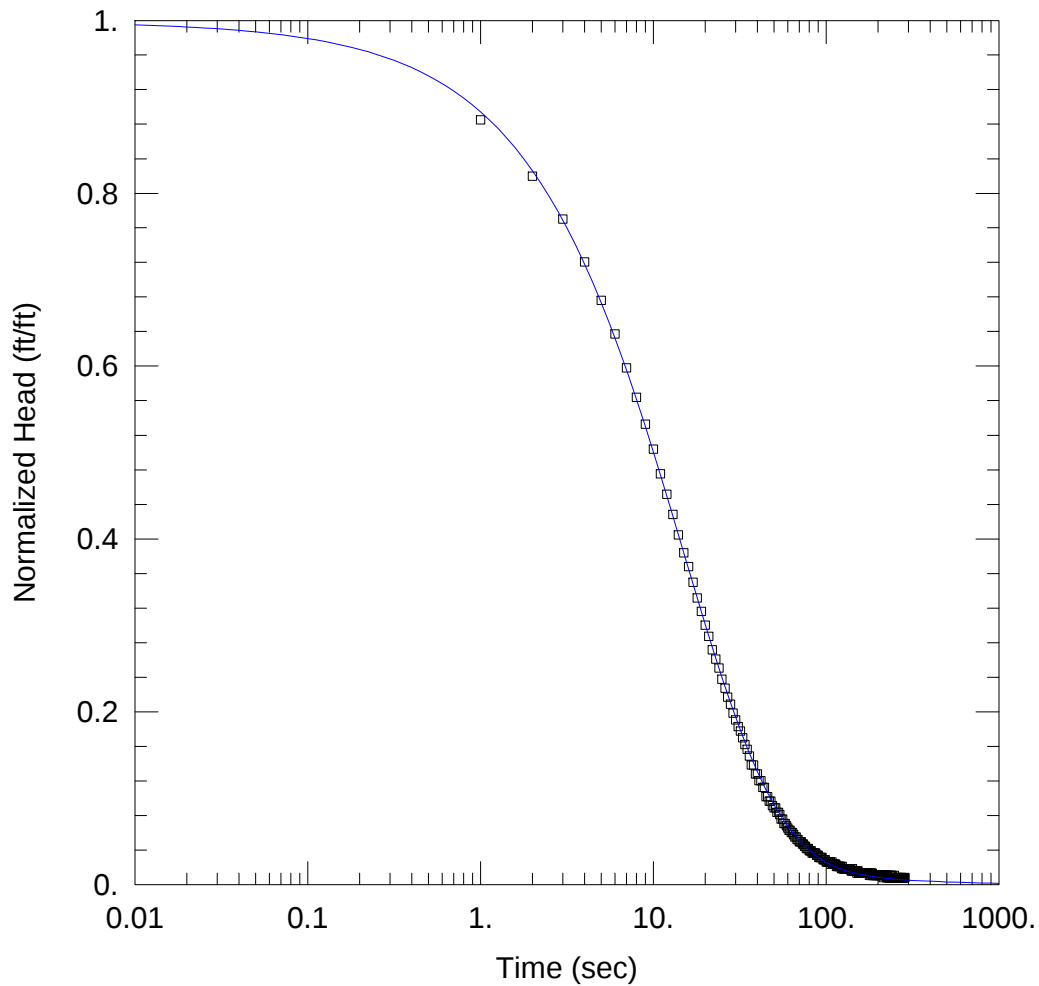
Company: Montgomery & Associates
 Client: SVBGSA
 Project: 9100.8602
 Location: M-GWL-2

WELL DATA (M-GWL-2)

Initial Displacement: <u>3.83</u> ft	Static Water Column Height: <u>482.6</u> ft
Total Well Penetration Depth: <u>70.</u> ft	Screen Length: <u>50.</u> ft
Casing Radius: <u>0.16</u> ft	Well Radius: <u>0.44</u> ft

SOLUTION

Aquifer Model: <u>Confined</u>	Solution Method: <u>Hvorslev</u>
K = <u>5.272</u> ft/day	y0 = <u>3.377</u> ft



WELL TEST ANALYSIS

PROJECT INFORMATION

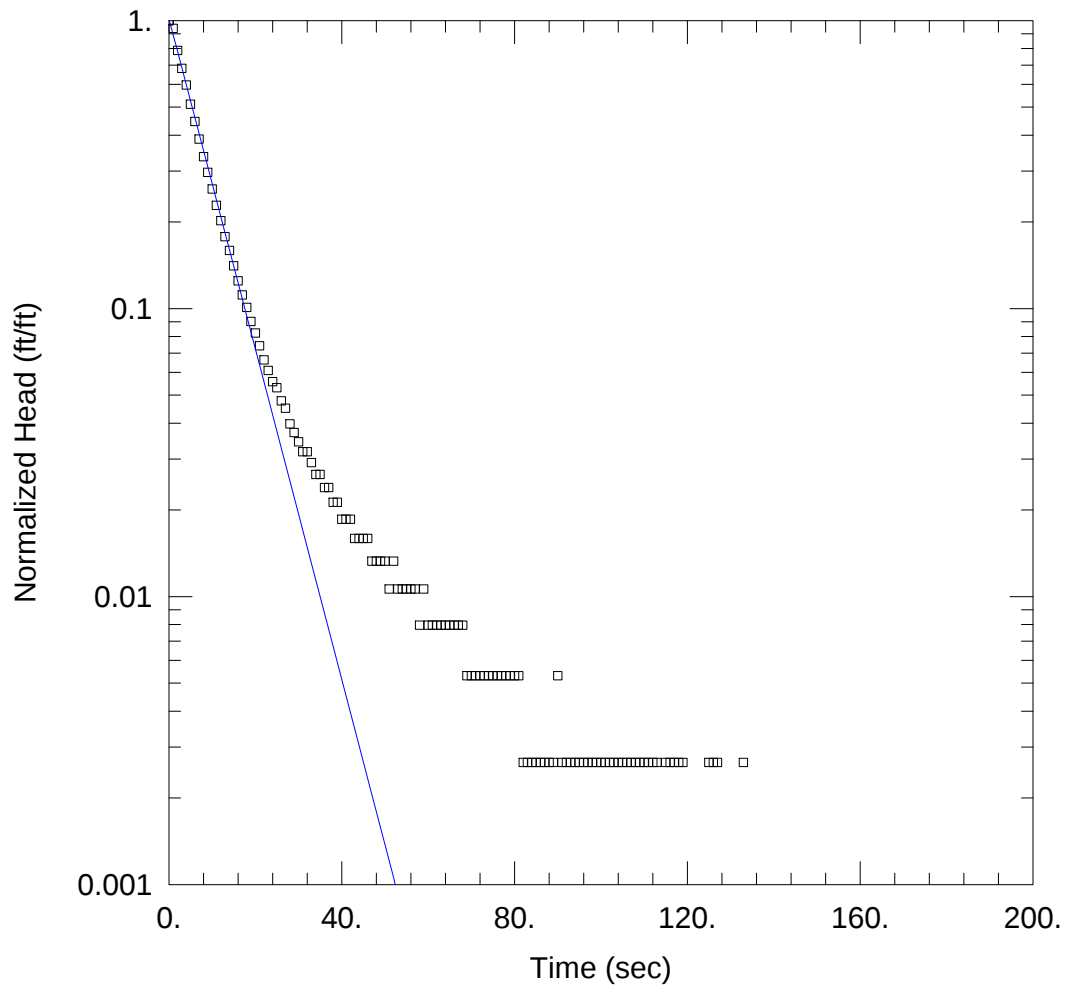
Company: Montgomery & Associates
 Client: SVBGSA
 Project: 9100.8602
 Location: M-GWL-2

WELL DATA (M-GWL-2)

Initial Displacement: <u>3.83</u> ft	Static Water Column Height: <u>482.6</u> ft
Total Well Penetration Depth: <u>70.</u> ft	Screen Length: <u>50.</u> ft
Casing Radius: <u>0.16</u> ft	Well Radius: <u>0.44</u> ft

SOLUTION

Aquifer Model: <u>Confined</u>	Solution Method: <u>KGS Model</u>
Kr = <u>4.556</u> ft/day	Ss = <u>7.888E-6</u> ft ⁻¹
Kz/Kr = <u>1.</u>	



WELL TEST ANALYSIS

PROJECT INFORMATION

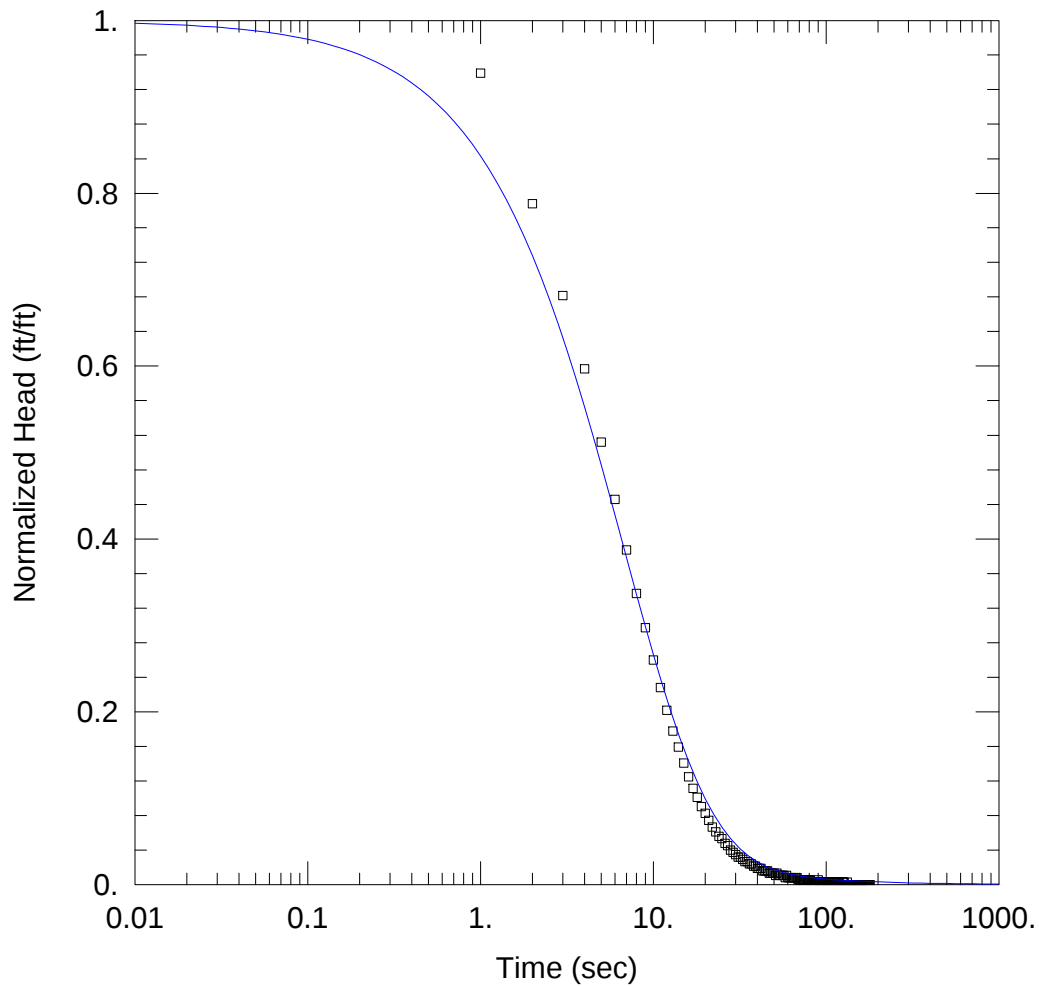
Company: Montgomery & Associates
 Client: SVBGSA
 Project: 9100.8602
 Location: M-GWL-4

WELL DATA (M-GWL-4)

Initial Displacement: 3.77 ft Static Water Column Height: 200.9 ft
 Total Well Penetration Depth: 40. ft Screen Length: 40. ft
 Casing Radius: 0.16 ft Well Radius: 0.44 ft

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev
 K = 19.01 ft/day y0 = 3.833 ft



WELL TEST ANALYSIS

PROJECT INFORMATION

Company: Montgomery & Associates
 Client: SVBGSA
 Project: 9100.8602
 Location: M-GWL-4

WELL DATA (M-GWL-4)

Initial Displacement: <u>3.77</u> ft	Static Water Column Height: <u>200.9</u> ft
Total Well Penetration Depth: <u>40.</u> ft	Screen Length: <u>40.</u> ft
Casing Radius: <u>0.16</u> ft	Well Radius: <u>0.44</u> ft

SOLUTION

Aquifer Model: <u>Confined</u>	Solution Method: <u>KGS Model</u>
Kr = <u>20.57</u> ft/day	Ss = <u>1.0E-7</u> ft ⁻¹
Kz/Kr = <u>1.</u>	