



## TOPOCK WELL COMPLETION AND ACCEPTANCE REPORT -REMEDIATION WELLS

Well Name: ER-02 (Note: Documentation referencing ER-2 is in reference to ER-02.)

Screen Zone (feet below ground surface [bgs]): <u>47 – 136 (see Meets Design Criteria for Construction</u> <u>Section below for additional details)</u>

Dates Pilot Borehole Drilling: 3/31/2022 - 5/08/2022

Dates Well Installation: 5/08/2022 - 5/10/2022 (6/8/2022 for Well Bung Installation)

Dates Well Head Completion: 5/10/2022

Dates of Development: 6/04/2022 - 6/28/2022

Note: Well Testing was completed successfully and in accordance with Well Specification 33 22 00 unless noted below.

| Well Testing Conducted     | Required (Y/N)    | Dates              | Comments               |
|----------------------------|-------------------|--------------------|------------------------|
| Alignment Test             | Y                 | 6/29/2022          | Completed Successfully |
|                            |                   |                    | See comments below     |
|                            |                   |                    | related to Specific    |
| Specific Capacity Test     | Y                 | 6/29/2022          | Capacity.              |
| Injectivity Test           | N                 |                    |                        |
| Plumbness Test (Gyroscope) | Ν                 |                    |                        |
| Spinner Log                | Ν                 |                    |                        |
| Downhole Video             | Y                 | 6/30/2022          | None                   |
| Other                      |                   |                    |                        |
|                            |                   |                    | See comments below     |
| 48-hour Constant Rate      | Added to Phase 2a |                    | related to Specific    |
| Test                       | SOW               | 11/3/22-11/10/2022 | Capacity.              |

## **Acceptance Criteria**

☑ **Meets Design Criteria for Construction** - Well installed in accordance with well specifications and final design.

Comments: <u>As-built well construction consistent with the final well design (see Attached Logs). The</u> <u>Phase 2a scope of work preliminary design included the installation of a conductor casing to the top of the</u> <u>competent bedrock. The bedrock was planned to be reamed to a diameter of 6-inches and the well was to</u> <u>be completed as an open bedrock well to an estimated depth of 138 ft bgs.</u> However, drilling conditions and lithologic descriptions from the pilot borehole suggested the bedrock was not fully competent (See boring log). To avoid installing a well with the potential for collapse, the well was redesigned as a fully cased well with well screen depths consistent with the depth of the originally open bedrock well (See Final Well Design and Well Construction Log). After observing drilling conditions during the pilot borehole of ER-01, the drillinger company recommended that a pilot hole be drilled using 4-inch and 6-inch diameter tooling. Once the pilot hole was drilling to total depth, larger diameter tooling would washed over the 6-inch the diameter drill casing using water. This process would continue until the borehole was reamed to a minimum 10-inch diameter for the installation of the 6-inch diameter well. During various diameters of drill tooling became temporarily locked up in the formation. As result the larger diameter casing could not be flushed over the 6-inch casing. Due to challenging drilling conditions, the borehole was reamed using tooling with multiple diameters e drilling logs various diameter(see attachments).

During development, filter pack material was observed in the sediments removed by bailing. As the sediments and filter pack were removed by bailing additional filter pack would enter the well, indicating potential damage to the well. A camera survey of the well, conducted on 6 June 2022 (results attached) did not identify damage above approximately 133 feet bgs. The video log could not assess well condition below the 133 foot bgs depth due to poor visibility and sediment/filter pack in the well. The location of the sediment/filter pack indicated potential damage to the lower portion of the screen or in the joint connecting the sump to the screen. To prevent additional filter pack from entering the well and repair the well, a well bung (plug) was installed to approximately 136 to 137 feet bgs. (approximately 2 feet above screen bottom) and well development resumed.

Trace amounts of fine-grained filter pack sand continued to be observed in the sediments material removed by bailing during well development. As discussed in the call with PGE, PMO, ABC, and Arcadis, a sample of the filter pack material used at ER-2 was submitted to Western Labs for grain size analysis. The analysis was conducted to evaluate if the filter pack material installed met the grain size distribution specifications grading parameters provided by the manufacture and approved in the submittal. Results of the analysis of the filter pack sand used for the installation of the well showed a higher percentage of finegrained sand compared to the grading parameter grain distribution specifications s provided by the manufacturer in the submittal. On 6/23/22 ABC provide a The certificate of compliance supplied by the manufacture. The grain size distribution data from the manufacturer's certificate of compliance and the results of the grain-size analysis grain size results from the sample submitted to Western Technologies by Arcadis where plotted in a grain-size distribution curve for comparison. The grain-size distribution plots showed that the submittal data and certificate of compliance data where not consistent with the results of the Western Technologies sieve grain-size analysis provided to Arcadis as a submittal. The grain-size analysis showed that the filter pack installed had a higher percentage of fine-grained sand and did not meet the published submittal or certificate of compliance grain-size distribution. The higher percentage of fine-grained sand in the filter pack most likely resulted in an increase in the volume of filter pack sand passing through the 0.020-inch slot well screen during bailing activities. Based on the results of the grain size analysis, it is likely that the increased volume of sand observed entering the well was due to the filter pack sand not meeting the manufacturer's published grain-sized distribution specifications and not from a damaged well screen or sump. The fine-grained sand observed in the sediments removed from the well during well development was the result of the fine-grained filter pack passing through the 0.020" slot well screen.

| Goal from 100% Design:      | 0.5 gpm   |
|-----------------------------|---|
| Tested Rates                |   |
| (gallons per minute [gpm]): | 0.25  |
|                             |   |
| Specific Capacity           | 0.0125 gpm/ft per 20.05 ft of drawdown at an extraction rate of ~0.25 gpm.                |
|                             | Drawdown did not stabilize after approximately 244 minutes of pumping during the          |
|                             | specific capacity evaluation and the test was ended. A constant-rate pump test was        |
|                             | later conducted to further evaluate the well yield. The results of the constant-rate test |
|                             | will be submitted separately. Although this well did not meet the target pumping          |
|                             | rate, the other the ER-01 bedrock wells exceeded its target extraction rates. Flow in     |
|                             | bedrock is highly variable and dependent on a variety of factors including distribution   |
| Comments                    | of fractures and variability of cementation.  |

### Meets Design Criteria for Specific Capacity Testing

#### ☑ Well Functions as Designed

the installation of the well bung (plug), well development was able to be completed. The downhole camera survey showed that the well criteria for the intended use.

#### Comments:

Meets Design Criteria for Plumbness and Equipment Install – The well was free of blockages and of sufficient plumbness and alignment to allow for well development, "Dummy Tool" alignment testing, well testing, and well sampling.

**Comments**: Downhole equipment has not been installed as of the submittal of this Completion Report. Installation is planned to be completed in 2023.

#### Meets Design Criteria for Turbidity (Turbidity less than 50 NTU)

**Comments:** Turbidity following well development meets the design criteria.

#### Final Turbidity at End of Well Development

| Screen Zone      | Turbidity (NTUs) |
|------------------|------------------|
| <u>48 – 136'</u> | 25.8             |

### Other Water Quality Parameters

Water Quality Parameters at End of Development

| Screen Depths            | Temp (C) | рН   | ORP (mV) | Cond (mS/cm) | DO   |
|--------------------------|----------|------|----------|--------------|------|
| <u>47 – 136 feet bgs</u> | 33.5     | 9.12 | 42.2     | 13840        | 2.07 |

## ATTACHMENTS

- Final Well Design
- Boring Log
- Drilling Logs (logs for multiple diameter boreholes)
- Well Construction Log
- Well Development Log
- Specific Capacity Testing Package
- Photo Logs
- Filter Pack Sand Issue Summary and Plots
- Video Survey Reports
  - Investigative Video Log on 5 June 2022
  - $\circ$  ~ Final Video Log 30 June 2022 ~

### NOTE:

Field documentation for all phases of well installation, well development and testing are included in the Daily Well Construction Reports. The Daily Well Construction Reports and DoR Daily Well Construction Quality Control Reports are compiled and organized by date on *AutodeskBuild*. The parent folder for both daily reports are located on *AutodeskBuild* in the following location: Files/For the Field/DOR Drilling Quality Control/01 QC Documentation. Analytical reports are compiled and uploaded to *AutodeskBuild* in the same folder. The technical scopes were performed by or under the direct supervision of Designer of Record (DoR) Professional Geologists (see attached Certification Statement).

Acceptance APPROVAL DoR Approver Name: <u>Greg Foote</u>

Areg S. Jew to

Approval Signature/Date:

1/27/23

# **Attachment 1**

Final Well Design

| ARCADIS               |
|-----------------------|
| Conductor casing Dia: |

12

## ER-02 Final Well Design 05/08/22

Well Casing Outer Diameter: Well Casing Inner Diameter:



Drill casing Dia: 10.75 Rathole Dia: 8 Surface Completion: Ground surface 0.0 ft. Annular Materials Quantity Material Type Units 5.0 Native fill ft. Well Materials 316 SS Wire Wrap 0.020" Slot Size 25.0 ft. 170.1 Gallons Portland up to 5% Bentonite Sch 80 PVC Blank Casing Centralizer Stainless Steel Portland Type I, II and V up to 5% Bentonite **Conductor Casing** Transition Sand Cemex #0/30 Heat of Hydration Safety 12 in PSI on Pipe Bentonite Chips or Pellets Factor 120.00 Lapis Lustre #2/16 (16 x 30) filter pack 10 ft Well Materials Length Sections Casing Sch 80 PVC 48 4.8 Upper Screen 90.0 9 Sump Sch 40 PVC 5.3 1.06 ft. **Temporary Conductor Casing** 36.0 41.0 ft. ft. 43.0 3.6 Cemex #0/30 Bags 45.5 ft. 0.3 Chips Bags 46.0 ft. 48.0 ft. 49.0 ft. Approximate DTW 80.6 Cemex #2/16 Bags 138.0 ft. 140.5 ft. ft. 143.3 145.0 ft. 146.0 ft.

# Attachment 2

Boring Log

|   | RCADI                            | S   |  | Bo           | oring  | J Log  | 3   |  |   | She              | eet: 1 of                       | 8  |
|---|----------------------------------|---|--|--------------|--|--|---|--|---|------------------|---------------------------------|--|
| Date Started  | : <u>03/31/2</u>                 | 2022                                      | 5                                      | Surface      | e Eleva  | tion:  | 506.35 ft amsl  |  | Boring  | No               | · FR-02                         |  |
| Date Comple   | eted: <u>05/08/2</u>             | 2022                                      | N                                      | Northin      | g (NAI   | 083):  | 2101009.50  |  | Doring  | 10.              |                                 |  |
| Drilling Co.:   | ABC L                            | IOVIN                                     | E                                      | Easting      | (NAD   | 83):   | 7616642.75  |  | Client: <u>PG</u>   | &Ε               |                                 |  |
| Drilling Meth   | od: <u>Sonic [</u>               | Drilling                                  | 1                                      | Fotal D      | epth:  |  | <u>146 ft bgs</u>   |  | Project: Fin  | al G             | W Remedy Pr                     | nase 2A                                    |
| Drill Rig Typ   | e: <u>Terra S</u>                | Sonic Truck N                             | <u>Nounted</u> E                       | Boreho       | le Diar  | neter:   | 8-12 inches   |  | Location: PG  | <u>&amp;E</u> -  | <u> Topock, Need</u>            | les California                             |
| Driller Name  | : <u>Eddie I</u>                 | Ramos                                     | [                                      | Depth 1      | o First  | Water:   | <u>60.0 ft bgs</u>  |  |   |                  |                                 |  |
| Drilling Asst:  | <u>J. Can</u>                    | <u>delaria / F. P</u>                     | erez S                                 | Sampli       | ng Met   | hod:   | 4 inch x 10 ft. Core  | e Barrel   | Project Numb  | ber:             | 30126255                        |  |
| Logger:   | <u>Grant \</u>                   | Nillford                                  | 5                                      | Sampli       | ng Inte  | rval:  | Continuous  |  |   |                  |                                 |  |
| Editor:   | <u>Sean N</u>                    | /IcGrane                                  | (                                      | Conver       | ted to   | Well:  | 🛛 Yes 🗌 No  |  |   |                  |                                 |  |
| Depth<br>(ft)<br>Recovery<br>(ft)                     | Sieve<br>Sample ID               | Groundwater<br>Sample ID                  | Geologic<br>Formation                  | USCS<br>Code | USCS<br>Class  |  | Soil De   | escription   |   |                  | Drilling Notes                  | Drilling Fluid                             |
|   |                                  |   | Fill                                   | SM           |  | (0-1.5 ft<br>fine to v<br>small to<br>angular                          | ) Silty sand with gravel (S<br>ery coarse grained, angu<br>very large pebbles, angu<br>to subangular; trace sma                             | SM); reddish bro<br>Ilar to subround<br>Ilar to subangu<br>all cobbles, ang              | own (5YR 5/4); ve<br>l; little silt; little<br>lar; little granules<br>jular; trace clay; c | ery<br>,<br>lry. |                                 |  |
| _ 2   |                                  |   | Weathered<br>Bedrock -<br>Conglomerate | N/A          | x x x x x x x x x x x x x x x x x x x  | (1.5-7 ft<br>5/4); mid<br>intensel<br>observe<br>friable; c<br>process | Sedimentary Rock - Co<br>crocrystalline to coarse g<br>y fractured; massive; son<br>d, 1-4 inches in length; m<br>rry; NOTE: Core sample    | nglomerate; re<br>grained, angula<br>ne competent r<br>nost fragments<br>mostly pulveriz | ddish brown (2.5'<br>r; hard; very<br>ock fragments<br>are weak and<br>zed by drilling      | (R               |                                 |  |
|   | No Sieve<br>Samples<br>Collected | No<br>Groundwater<br>Samples<br>Collected |  |              | <pre>x * x * x * x * x * x * x * x * x * x *</pre>   | (7-22 ft)<br>5/4); mid<br>intensel<br>and frial<br>sample              | Sedimentary Rock - Cor<br>procrystalline to coarse g<br>y fractured; massive; mo-<br>ble with a few competent<br>mostly pulverized by drill | nglomerate; rec<br>grained, angula<br>st fragments of<br>rock fragments<br>ing process.  | ldish brown (2.5Y<br>r; hard; very<br>oserved are weak<br>s; dry; NOTE: Col                 | R<br>e           | (7.0 - 50.0°)<br>Rough drilling | (7.0 - 50.0°)<br>No drilling fluid<br>used |
| <br>- 13<br>- 14<br>5<br>- 15<br><br>- 16<br><br>- 17 |                                  |   | Weathered<br>Bedrock -<br>Conglomerate | N/A          | x x x x x x x x x x x x x x x x x x x  |  |   |  |   |                  |                                 |  |
| 5<br>- 18 5<br>- 19                                   | s: USCS = L                      | Jnified Soil C                            | lassification                          | Syster       | $x^{*} x^{*} x^{*$ | eet, bg  | s = below ground su   | urface, amsl   | = above mea   | n se             | a level, NR = 1                 | No Recovery,                               |
| N/A = Not A   | pplicable, GW                    | V = groundwa                              | ater, Notes:                           | solid b      | lue an   | d hollov   | / blue water table m  | arks repres  | ent depth to w  | ater             | (ft. bgs.) first e              | encountered                                |
| during drilling                                       | g and approx                     | imate static n                            | neasured du                            | uring p      | re-deve  | elopmer  | nt, respectively. App   | arent partia   | recoveries ca   | n be             | e the result of p               | ootential                                  |
| compaction  | of sediments                     | in the core b                             | ag.                                    |              |  |  |   |  |   |                  |                                 |  |

| 9             | AR               | CADI                | S                        |  | Bo           | pring  | g Log  | ]  |  |   | She                      | et: 2 of  | 8                                   |
|---------------|------------------|---------------------|--------------------------|--|--------------|--|--|--|--|---|--------------------------|---|-------------------------------------|
| Date S        | started:         | 03/31/2             | 2022                     | \$                                     | Surface      | e Eleva  | ation:   | 506.35 ft amsl   |  | Borin   | g No.:                   | ER-02   |                                     |
| Date C        | Comple           | eted: 05/08/2       | 2022                     | I                                      | Northir      | ıg (NAI  | D83):  | 2101009.50   |  |   | 5                        |   |                                     |
| Drilling      | Co.:             | <u>ABC L</u>        | IOVIN                    | E                                      | Easting      | ) (NAD   | 983):  | 7616642.75   |  | Client:   | PG&E                     |   |                                     |
| Drilling      | Metho            | od: <u>Sonic I</u>  | Drilling                 |  | Fotal D      | epth:  |  | <u>146 ft bgs</u>  |  | Project:  | Final GV                 | V Remedy Pl   | nase 2A                             |
| Drill Ri      | д Туре           | e: <u>Terra S</u>   | Sonic Truck N            | lounted [                              | Boreho       | ole Diar   | meter:   | 8-12 inches  |  | Location:   | <u>PG&amp;E T</u>        | opock, Need   | <u>les California</u>               |
| Driller       | Name:            | <u>Eddie I</u>      | Ramos                    | [                                      | Depth :      | to First   | Water:   | 60.0 ft bgs  |  |   |                          |   |                                     |
| Drilling      | Asst:            | J. Can              | delaria / F. Pe          | erez S                                 | Sampli       | ng Met   | thod:  | 4 inch x 10 ft. Core B   | Barrel   | Project N   | umber: <u>3</u>          | 30126255  |                                     |
| Logge         | r:               | Grant               |                          |  | Sampli       | ng Inte  | erval:   |  |  |   |                          |   |                                     |
| Ealtor:       |                  | <u>Sean N</u>       |                          | (                                      | Jonvei       |  | vveii:   |  |  |   |                          |   |                                     |
| Depth<br>(ft) | Recovery<br>(ft) | Sieve<br>Sample ID  | Groundwater<br>Sample ID | Geologic<br>Formation                  | USCS<br>Code | USCS<br>Class  |  | Soil Descr   | cription   |   |                          | Drilling Notes  | Drilling Fluid                      |
| 21            | 5                |                     |                          | Weathered<br>Bedrock -<br>Conglomerate | N/A          | × × ×<br>× × ×<br>× × ×<br>× × ×<br>× × ×<br>× × ×   | (7-22 ft)<br>5/4); mid<br>intensely<br>and friat<br>sample | Sedimentary Rock - Conglo<br>rocrystalline to coarse grair<br>/ fractured; massive; most fr<br>le with a few competent roc<br>mostly pulverized by drilling    | omerate; rec<br>ined, angula<br>fragments ol<br>ck fragments<br>process. | ldish brown (<br>r; hard; very<br>oserved are v<br>s; dry; NOTE | 2.5YR<br>veak<br>: Core  |   |                                     |
|               |                  |                     |                          | L                                      | L            |  |  |  |  |   |                          | (00.5 5   | (00.0 0 0 0                         |
|               |                  |                     |                          |  | NR           | $\left \right\rangle$  | (22-23 fi  | ) No Recovery; see Drilling  | Notes.   |   |                          | (22.0 - 27.0')<br>Top foot of drill                     | (22.0 - 27.0')<br>No drilling fluid |
| 23            |                  |                     |                          |  | L            | ŔĴ   |  |  |  |   |                          | run fell out of<br>core barrel                          | useď                                |
| 24            |                  |                     |                          |  |              | ^ × × × × × × × × × × × × × × × × × × ×  | (23-50 ft<br>5/4); mid<br>intensely<br>and friat<br>sample | ) Sedimentary Rock - Congi<br>procrystalline to coarse grain<br>/ fractured; massive; most fr<br>ole with a few competent roc<br>mostly pulverized by drilling | lomerate; re<br>ned, angula<br>fragments ol<br>ck fragments<br>process.  | r; hard; very<br>served are v<br>s; dry; NOTE                   | (2.5YR<br>veak<br>: Core | during<br>extraction onto<br>drill deck/into<br>hopper. |                                     |
| 25            | 4                |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| 26            |                  |                     |                          |  |              |  |  | 0  |  |   |                          |   |                                     |
|               |                  |                     |                          |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$   |  |  |  |   |                          |   |                                     |
| _27_          |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| 28            |                  |                     |                          |  |              | $\begin{array}{c} \times \ \times \ \times \\ \times \ \times \ \end{array}$   |  |  |  |   |                          |   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| 29            |                  |                     |                          |  |              | × × ×<br>× × ×   |  |  |  |   |                          |   |                                     |
| <u> </u>      | 5                |                     | No                       |  |              |  |  |  |  |   |                          |   |                                     |
| 30            | -                | No Sieve<br>Samples | Groundwater              |  |              |  |  |  |  |   |                          |   |                                     |
|               |                  | Collected           | Collected                |  |              | $\begin{vmatrix} \mathbf{x} & \mathbf{x} & \mathbf{x} \\ \mathbf{x} & \mathbf{x} & \mathbf{x} \end{vmatrix}$                             |  |  |  |   |                          |   |                                     |
| 31            |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
|               |                  |                     |                          | Bedrock -                              | N/A          |  |  |  |  |   |                          |   |                                     |
| 32            |                  |                     |                          | Conglomerate                           |              |  |  |  |  |   |                          |   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| 33            |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| 34            |                  |                     |                          |  |              | × × ×<br>  × × ×   |  |  |  |   |                          |   |                                     |
|               | 5                |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| 35            |                  |                     |                          |  |              |  |  |  |  |   |                          | (35.0')   | (35.0')                             |
|               |                  |                     |                          |  |              | $  \times \times$ |  |  |  |   |                          | 6-inch casing<br>getting hung                           | No drilling fluid<br>used           |
| 36            |                  |                     |                          |  |              |  |  |  |  |   |                          | up at   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          | 35 ft. bgs. Trip  |                                     |
|               |                  |                     |                          |  |              | $  \times \times$ |  |  |  |   |                          | drill with larger                                       |                                     |
| 20            |                  |                     |                          |  |              |  |  |  |  |   |                          | diameter<br>tooling (see                                |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          | Drilling Logs).<br>6-inch pilot                         |                                     |
| 30            | 6                |                     |                          |  |              |  |  |  |  |   |                          | hole drilling   |                                     |
|               |                  |                     |                          |  |              |  |  |  |  |   |                          | 4/25/22.  |                                     |
| 40            |                  |                     |                          |  |              |  |  |  |  |   |                          |   |                                     |
| Abbrev        | viations         | s: USCS = l         | Jnified Soil Cl          | assification                           | Syster       | <u>m, ft</u> = <sup>-</sup>  | feet, bg   | s = below ground surfa   | ace, amsl  | = above r   | nean sea                 | a level, NR = l   | No Recovery,                        |
| N/A =         | Not Ap           | plicable, GV        | V = groundwa             | ater, Notes:                           | solid b      | olue an  | d hollow   | / blue water table mark  | ks repres  | ent depth   | to water (               | (ft. bgs.) first (                                      | encountered                         |
| during        | drilling         | and approx          | imate static n           | neasured du                            | uring p      | re-dev   | elopmer  | nt, respectively. Appare   | ent partia   | recoverie   | s can be                 | the result of   | potential                           |
| compa         | action c         | of sediments        | in the core b            | ag.                                    |              |  |  |  |  |   |                          |   |                                     |

| Data Startic     D321/2022     Surface Elevator     D323/2022     Norther, NAD33     D0100050     Borting No.:     ER-02       Delle Completed:     608/2022     Norther, NAD33     7016042.75     Clent:     PO3E       Delling Moto:     Sanchicking Matches     Project:     Enaid GW Ramedy Phrase 2A       Delling Moto:     Easing (NAD38)     7016042.75     Clent:     PO3E       Delling Moto:     Easing (NAD38)     201002.01     Project:     Enaid GW Ramedy Phrase 2A       Delling Moto:     Easing (NAD38)     20100.01     Project:     Project:     Project:     Project:     Project:     Project:     Project:     Project:     Number:     301262255       Delling Moto:     Sampling Method:     Easing (NAD38)     Solutionus     Project:     Pro  | 9              | AR               | CADI                 | S                               |                          | Bo                  | oring  | g Lo   | g   |  |  | She                      | et: 3 of  | 8   |
|--|----------------|------------------|----------------------|---------------------------------|--------------------------|---------------------|--|--|---|--|--|--------------------------|---|---|
| Date Complexit:       55082222       Northing (NADB3):       2101009.50       Clenct Worth Complexit:       Decision PG24E         Drilling Method:       Sonic Drilling Actic LaVIN       Easting (NADB3):       2101009.50       Clenct Worth Complexit:       Project:       Final CM model y Pr  | Date S         | Started:         | 03/31/2              | 2022                            |                          | Surface             | e Eleva  | ation:   | <u>506.35 ft ar</u>   | nsl  | Borin  | a No.                    | : ER-02   |   |
| Drilling Co.:       ABC LLOVIN       Easting (VAD83):       761694.27.5       Clean:       PC48:1         Drilling Method       Borahole Dameter:       B-12 Inchas       Locardion:       FG82 Expose:       Nemetry Phase 2A         Drilling Method       Gandalata/E. Persez:       Sampling Method:       Anch x 10.1. Core Baral       Project Number:       FG82 Expose:       Nemetry Phase 2A         Drilling Asst:       J. Candalata/E. Persez:       Sampling Method:       Anch x 10.1. Core Baral       Project Number:       Southass:         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       No         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       Daling Plade         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       Daling Plade         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       Daling Plade         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       Daling Plade         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       Daling Plade         Edifor:       Sean McGrane       Converted to Welt:       [2] Yes       No       Daling Plade <td>Date C</td> <td>Comple</td> <td>ted: <u>05/08/2</u></td> <td>2022</td> <td></td> <td>Northin</td> <td>g (NAI</td> <td>D83):</td> <td>2101009.50</td> <td>)</td> <td></td> <td>5</td> <td></td> <td></td>  | Date C         | Comple           | ted: <u>05/08/2</u>  | 2022                            |                          | Northin             | g (NAI   | D83):  | 2101009.50  | )  |  | 5                        |   |   |
| Uning Number       Softe Ling       Project:  | Drilling       | Co.:             | <u>ABC L</u>         | IOVIN<br>Duilling at            |                          | Easting             | ) (NAD   | 83):   | 7616642.75  | 5  | Client:  | PG&E                     |   |   |
| Unit Notice:       Endia Ramos       Operior Diamiter:       6:12 Initize       Column       Column       Project Number:       Sources       Diamiter:       Column       Project Number:       Sources       <   | Drilling       |                  | od: <u>Sonic i</u>   | Drilling<br>Damia Truak N       | A supto d                | i otal D<br>Deneh e | eptn:  |  | <u>146 π bgs</u>  |  | Project:   | Final G                  | <u>/V Remedy Pr</u>                               | hase 2A                                     |
| Under Hall       Exclude Januaria       Oppin of yala       Song print yala       Depin of yala       Song print yala       Depin of yala       Song print   | Drillor        | g Type<br>Nomo:  | Eddio I              | <u>Bomoo</u>                    | <u>nounted</u>           | Borenc<br>Dooth     | he Diar  | Meter:   | 80.0 ft bas   | •  | _ Location:  | PG&EI                    | ороск, мееа                                       | lies Calilornia                             |
| Chardy Front       Construction       Construction       Front       Front       Construction       Front       Construction  | Drilling       | Name.<br>ι Δeet· |                      | <u>Kamos</u><br>delaria / F. Pe | araz                     | Depin<br>Samnli     | na Met   | thod.  | <u>00.0 IL Dgs</u>  | ft. Core Barrel  | -<br>Project N   | umber: '                 | 30126255  |   |
| Edior:       Sean MicGrane       Converted to Weit:       Yes       No <u> <u> </u></u>  |                | r.               | <u>Grant \</u>       | Willford                        |                          | Sampli<br>Sampli    | ng Inte  | erval <sup>.</sup>                                       | Continuous  |  |  |                          | 50120255  |   |
| B       B       Bare Sample D       Groundware Sample D       B       B       B       B       B       B       Drilling Note:       Drilling Note:<  | Editor         |                  | Sean N               | AcGrane                         |                          | Conver              | ted to   | Well:  | X Yes   | No   | -  |                          |   |   |
| B        | <u> </u>       | ~                |                      |                                 | 0 5                      |                     |  |  |   | _  |  |                          |   |   |
| 41       -   | Depth<br>(ft)  | Recover<br>(ft)  | Sieve<br>Sample ID   | Groundwater<br>Sample ID        | Geologi<br>Formatic      | USCS<br>Code        | USCS<br>Class  |  |   | Soil Description   |  |                          | Drilling Notes                                    | Drilling Fluid                              |
| 44       4         45       4         46       4         47       4         48       4         49       5         50       5         50       5         60       6         48       6         49       6         50       5         5       Collected         60       6         50       5         61       6         62       6         63       6         64       6         65       6         65       6         65       6         64       6         65       6         65       6         64       6         65       6         64       6         65       6         64       6         65       6         64       6         65       6         64       6         65       6         64       6         7       7         65  | 41<br>42<br>43 | 6                |                      |                                 |                          |                     | × × × × × × × × × × × × × × × × × × ×  | (23-50 f<br>5/4); min<br>intensel<br>and frial<br>sample | <li>t) Sedimentary F<br/>crocrystalline to<br/>y fractured; mas<br/>ble with a few cc<br/>mostly pulverize</li> | Rock - Conglomerate; r<br>coarse grained, anguli<br>sive; most fragments o<br>mpetent rock fragmen<br>d by drilling process. | reddish brown<br>ar; hard; very<br>observed are v<br>ts; dry; NOTE | (2.5YR<br>veak<br>: Core |   |   |
| -46       -47       -48       -  | 44             |                  |                      |                                 | Weathered                | N/A                 | × × × × × × × × × × × × × × × × × × ×  |  |   |  |  |                          |   |   |
| -46       -47       -48       -47       -  |                | 4                |                      |                                 | Conglomerat              | e IN/A              | $  \begin{array}{c} \times \\ \times \\ \times \\ \times \\ \times \end{array} \\ \times \\ \times \end{array} \\ \times \\ \times \\$   |  |   |  |  |                          |   |   |
| <ul> <li>Ar</li> <li>A</li></ul>   | 46             |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| 47   |                |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
|  | 47             |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| -48       -49       -  |                |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| -49       -       5       No Sieve<br>Collected       No       Groundwater<br>Scillected       FG0.72 ft) Sedimentary Rock - Conglomerate: redish brown (2.5%)       2       (50.0-52.0')       No drilling fluid<br>used         -51       -  | 48             |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| -49       -5       No Situe<br>Samples<br>Collected       No<br>Groundwater<br>Samples<br>Collected       No<br>Groundwater<br>Samples<br>Collected       (50-72 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR)       (50.0 - 52.0')<br>Drilling<br>becoming<br>significantly<br>rougher.         -51       -  | <u> </u>       |                  |                      |                                 |                          |                     |  | $\mathcal{M}(\mathcal{O})$                               |   |  |  |                          |   |   |
| -       5       No Sieve<br>Samples<br>Collected       No and<br>Foundwaters<br>Collected       No and<br>Foundwaters<br>Collected       (50.72 ft) Sedimentary Rock - Congiomerate: reddish brown (25YR<br>intensely fractured; massive, most fragments; dry; NOTE: Core<br>sample mostly pulverized by drilling process.       (50.0 - 52.0')<br>(50.0 - 62.0')         -<   | 49             |                  |                      |                                 |                          |                     | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$   |  |   |  |  |                          |   |   |
| Samples<br>Collected       Collected       Collected       Collected       Collected       (50.0 - 52.0)<br>S4). microcrystalline to coarse grained, argular, hard; very<br>sample and finable with a few competent took fragments day. NOTE: Core<br>samples       (50.0 - 52.0)<br>Drilling<br>becoming<br>samples       (50.0 - 52.0)<br>S4). microcrystalline to coarse grained, argular, hard; very<br>sample mosity pulvetized by drilling process.       (50.0 - 52.0)<br>Drilling<br>becoming<br>samples       (50.0 - 52.0)<br>Drilling<br>becoming<br>samples       (50.0 - 52.0)<br>Drilling<br>becoming<br>samples       (50.0 - 52.0)<br>Drilling<br>becoming<br>samples       (50.0 - 64.0)<br>Rough drilling<br>sample       (50.0 - 64.0)<br>Rough drilling<br>sample  |                | 5                | No Sieve             | No                              |                          |                     | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$  |  |   |  |  |                          |   |   |
| Collected Collec | 50             |                  | Samples<br>Collected | Samples                         |                          |                     |  | (50-72 f   | t) Sedimentary F  | Rock - Conglomerate; r   | eddish brown   | (2.5YR ¥                 | (50.0 - 52.0')                                    | (50.0 - 52.0')                              |
| 52   | 51             |                  |                      | Collected                       |                          |                     | × × ×<br>× × ×<br>× × ×<br>× × ×   | 5/4); m<br>intensel<br>and frial<br>sample               | icrocrystalline to<br>y fractured; mas<br>ble with a few co<br>mostly pulverize                                 | o coarse grained, angul<br>sive; most fragments o<br>ompetent rock fragmen<br>ed by drilling process.                        | lar; hard; very<br>observed are v<br>ts; dry; NOTE                 | veak<br>: Core           | Drilling<br>becoming<br>significantly<br>rougher. | No drilling fluid<br>used                   |
| Second and the sec    | 52             |                  |                      |                                 |                          |                     |  |  |   | ,  |  |                          |   |   |
|  | 53             |                  |                      |                                 |                          |                     |  |  |   |  |  |                          | (52.0 - 64.0')<br>Rough drilling                  | (52.0 - 64.0')<br>No drilling fluid<br>used |
| 54      5        55      5        56   |                |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
|  | 54             |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| Bedrock -       N/A  |                | 5                |                      |                                 | Weathered                |                     | $  \times \times \times \\ \times \times \times $  |  |   |  |  |                          |   |   |
|  |                |                  |                      |                                 | Bedrock -<br>Conglomerat | N/A                 |  |  |   |  |  |                          |   |   |
|  | _56            |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| 57   |                |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| 58      5         -59       -5         -59       -5         -60  |                |                  |                      |                                 |                          |                     | $  \times \times$ |  |   |  |  |                          |   |   |
| -58       -59       -59       -50       -  |                |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| -       -       5       -       5       -       5       -       5       -       5       -       5       -       5       -       -       5       -       -       -       5       -       5       -       -       5       -       -       5       -       -       5       -       -       5       -       -       -       -       -  | 58             |                  |                      |                                 |                          |                     | $  \begin{array}{c} \times \times \times \\ \times \times \\ \times \times \end{array} \\ \times \times \end{array}$                     |  |   |  |  |                          |   |   |
| $\frac{-59}{60}$ Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, NR = No Recovery, N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential compaction of sediments in the core bag.   |                | 5                |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| $\frac{1}{60} = \frac{1}{10000000000000000000000000000000000$  | 59             |                  |                      |                                 |                          |                     |  |  |   |  |  |                          |   |   |
| 60   |                |                  |                      |                                 |                          |                     | $\begin{vmatrix} \hat{x} & \hat{x} & \hat{x} \\ x & x & x \end{vmatrix}$   |  |   |  |  |                          |   |   |
| N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential compaction of sediments in the core bag.  | 60<br>Abbre    | viations         | s: USCS = 1          | Inified Soil C                  | <br> assification        | Sveter              | $  \times \times \times$<br>m ft = $\frac{1}{2}$   | l<br>feet ha   | s = helow ar  | ound surface amo   | sl = ahove r   | nean se                  | alevel NR - I                                     |   |
| during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential compaction of sediments in the core bag.  | N/A =          | Not Ar           | plicable. GV         | V = groundwa                    | ater, Notes              | solid h             | lue an   | d hollov   | v blue water f  | table marks repres   | sent depth   | to water                 | (ft. bas.) first (                                | encountered                                 |
| compaction of sediments in the core bag.   | durina         | drilling         | and approx           | imate static n                  | neasured d               | uring p             | re-dev   | elopme   | nt, respective  | ly. Apparent partia  | al recoverie   | s can be                 | the result of                                     | potential                                   |
|  | compa          | action o         | of sediments         | in the core b                   | ag.                      |                     |  |  | · · · · · · · · · · · · · · · · · · ·   | •  |  |                          |   |   |

| 9/                | ٩R               | CADI               | S                        |                        | Bc           | oring   | j Log                              | ġ  |   | She         | eet: 4 of                               | 8   |
|-------------------|------------------|--------------------|--------------------------|------------------------|--------------|---|------------------------------------|--|---|-------------|---|---|
| Date Sta          | arted:           | 03/31/2            | 2022                     |                        | Surface      | e Eleva   | tion:                              | 506.35 ft amsl   | Boring  | No.         | : ER-02                                 |   |
| Date Co           | mplet            | ed: <u>05/08/</u>  | 2022                     |                        | Northin      | g (NAE  | D83):                              | 2101009.50   | Donig   | ,           | <u></u>                                 |   |
| Drilling C        | Co.:             | <u>ABC L</u>       | IOVIN                    |                        | Easting      | (NAD  | 83):                               | 7616642.75   | Client: <u>F</u>                                    | PG&E        |   |   |
| Drilling N        | /letho           | d: <u>Sonic I</u>  | Drilling                 | · · · · ·              | Total D      | epth:   |                                    | <u>146 ft bgs</u>  | Project: <u>F</u>                                   | inal G      | N Remedy Ph                             | nase 2A   |
| Drill Rig         | Туре             | <u>Terra S</u>     | Sonic Truck N            | Nounted                | Boreho       | le Dian   | neter:                             | 8-12 inches  | Location: F   | PG&E 1      | opock, Need                             | les California  |
| Driller Na        | ame:             | <u>Eddie l</u>     | Ramos                    |                        | Depth        | to First  | Water:                             | <u>60.0 ft bgs</u>   |   |             |   |   |
| Drilling A        | Asst:            | <u>J. Can</u>      | <u>delaria / F. Pe</u>   | erez                   | Sampli       | ng Met  | hod:                               | 4 inch x 10 ft. Core Barrel  | Project Nu  | mber:       | 30126255                                |   |
| Logger:           |                  | Grant \            | Willford                 |                        | Sampli       | ng Inte   | rval:                              | Continuous   |   |             |   |   |
| Editor:           |                  | <u>Sean N</u>      | <i><b>AcGrane</b></i>    |                        | Conver       | ted to  | Well:                              | 🔀 Yes 🗌 No   |   |             |   |   |
| Depth<br>(ft)     | tecovery<br>(ft) | Sieve<br>Sample ID | Groundwater<br>Sample ID | Geologic<br>ormation   | USCS<br>Code | USCS<br>Class   |                                    | Soil Description   |   |             | Drilling Notes                          | Drilling Fluid  |
|                   | r –              |                    |                          |                        |              | × × ×   | (50-72 f                           | ) Sedimentary Rock - Condomerate: re   | eddish brown ()                                     | 2.5YR       |   |   |
|                   | 5                |                    |                          |                        |              | × × × × × × ×   | 5/4); mi<br>intensely<br>and friat | crocrystalline to coarse grained, angula<br>y fractured; massive; most fragments o<br>ble with a few competent rock fragment | ar; hard; very<br>bserved are we<br>s; dry; NOTE: ( | eak<br>Core |   |   |
|                   |                  |                    |                          |                        |              | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$  | sample<br>(60 ft) O                | mostly pulverized by drilling process.<br>bserved slight moisture on rock fragme   | ent.  |             |   |   |
| 62                |                  |                    |                          |                        |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  | (,                                 |  |   |             |   |   |
|                   |                  |                    |                          |                        |              | $\times \times \times$  |                                    |  |   |             |   |   |
| 63                |                  |                    |                          |                        |              |   |                                    |  |   |             |   |   |
| L -               |                  |                    |                          |                        |              | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |                                    |  |   |             |   |   |
| 64                |                  |                    |                          |                        |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |                                    |  |   |             | (04.0, 07.0))                           | (04.007.01)   |
|                   | 5                |                    |                          |                        |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |                                    |  |   |             | (64.0 - 67.0 <sup>°</sup> )<br>Drilling | (64.0 - 67.0 <sup>°</sup> )<br>No drilling fluid  |
| 65                | -                |                    |                          |                        |              |   |                                    |  |   |             | becoming<br>significantly               | used  |
|                   |                  |                    |                          |                        |              | $\hat{x} \hat{x} \hat{x}$   |                                    |  |   |             | rougher.                                |   |
| 66                |                  |                    |                          | Weathered              | N/A          |   |                                    |  |   |             |   |   |
|                   |                  |                    |                          | Conglomerat            | e            | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |                                    |  |   |             |   |   |
| 67                |                  |                    |                          |                        |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |                                    |  |   |             |   |   |
|                   |                  |                    |                          |                        |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |                                    |  |   |             | (67.0 - 105.0')                         | (67.0 - 105.0')   |
|                   |                  |                    |                          |                        |              | $\times \times $ |                                    |  |   |             | Rough drilling                          | No drilling fluid<br>used   |
| 68                |                  |                    |                          |                        |              | $\times \times \times$  |                                    |  |   |             |   |   |
|                   |                  |                    |                          |                        |              | $\times \times \times$  |                                    |  |   |             |   |   |
| 69                |                  |                    |                          |                        |              | x x x   |                                    |  |   |             |   |   |
|                   | 5                | No Ciava           | No                       |                        |              | $\times \times \times$  |                                    |  |   |             |   |   |
| 70                |                  | Samples            | Groundwater              |                        |              | × × ×<br>× × ×  |                                    |  |   |             |   |   |
|                   |                  | Collected          | Collected                |                        |              | $\times \times \times$  |                                    |  |   |             |   |   |
| 71                |                  |                    |                          |                        |              |   |                                    |  |   |             |   |   |
|                   |                  |                    |                          |                        |              |   |                                    |  |   |             |   |   |
| 72                |                  |                    |                          |                        |              | ×××   |                                    |  |   |             | (======)                                | ( <b>7</b> , |
|                   |                  |                    |                          | Weathered              |              | $\backslash$  | (72-73.5                           | ift) No Recovery; see Drilling Notes.  |   |             | (72.0 - 77.0')<br>Top portion of        | (72.0 - 77.0 <sup>°</sup> )<br>No drilling fluid  |
| _73_              |                  |                    |                          | Bedrock -              | N/A          | X   |                                    |  |   |             | drill run fell out                      | used  |
|                   |                  |                    |                          |                        |              | $\lfloor \_ \setminus$  |                                    |  |   |             | during                                  |   |
| _ <sub>74</sub> ] |                  |                    |                          |                        | [ _ <b>_</b> | $\times \times \times$  | (73.5-82<br>(2 5VP                 | t) Sedimentary Rock - Conglomerate;  | reddish brown                                       | verv        | extraction onto<br>drill deck/soil      |   |
|                   | 2 -              |                    |                          |                        |              |   | intensel                           | y fractured; massive; most fragments o   | bserved are we                                      | eak         | hopper.                                 |   |
| 75                | 3.5              |                    |                          |                        |              |   | and friat                          | pie with a tew competent rock fragment<br>mostly pulverized by drilling process.   | s; dry; NOTE: (                                     | ore         |   |   |
|                   |                  |                    |                          |                        |              |   | (74-74.3                           | ft) Rock fragments are moist.  |   |             |   |   |
| 76                |                  |                    |                          |                        |              |   |                                    |  |   |             |   |   |
|                   |                  |                    |                          |                        | 1            | $\left  \begin{array}{c} \times \times \times \\ \times \times \end{array} \right $   |                                    |  |   |             |   |   |
| <u> </u>          |                  |                    |                          | Weathered<br>Bedrock - | N/A          | $  \times \times \times  $  |                                    |  |   |             |   |   |
| $\vdash'' +$      |                  |                    |                          | Conglomerat            | е            |   |                                    |  |   |             |   |   |
| F                 |                  |                    |                          |                        |              |   |                                    |  |   |             |   |   |
| 78                |                  |                    |                          |                        | 1            |   |                                    |  |   |             |   |   |
| ⊢ ┥               | 5                |                    |                          |                        |              | $\left  \begin{array}{c} \times \times \times \\ \times \times \end{array} \right $   |                                    |  |   |             |   |   |
| 79                |                  |                    |                          |                        |              | $  \times \times \times  $  |                                    |  |   |             |   |   |
| ⊢ ⊣               |                  |                    |                          |                        |              |   |                                    |  |   |             |   |   |
| 80                |                  |                    |                          |                        | <u> </u>     | $  \begin{array}{c} \times \times \times \\ \times \times \end{array} \\ \times \times \end{array}$                                     |                                    |  |   |             |   |   |
| Abbrevia          | ations           | : USCS = l         | Jnified Soil C           | lassification          | Syster       | n, ft = f   | feet, bg                           | s = below ground surface, ams  | l = above m   | ean sea     | a level, NR = N                         | No Recovery,  |
| N/A = Nc          | ot Ap            | plicable, GV       | V = groundwa             | ater, Notes:           | solid b      | lue and   | d hollow                           | v blue water table marks repres  | ent depth to  | water       | (ft. bgs.) first e                      | encountered   |
| الما بم مشير باما | rilling          | and approx         | imate static n           | neasured d             | uring p      | re-deve   | elopmer                            | nt, respectively. Apparent partia  | l recoveries  | can be      | the result of p                         | ootential   |
| auring a          |                  | • ··               |                          |                        |              |   |                                    |  |   |             |   |   |

| Self Stand         O331/2022         Surface Elevation:         Sol S & f.amsl.         Boring No.: ER.02           Iming Complete:         ColorB2022         Nothing (NADB3):         2010005.00         Cline1:         EGAE           Iming Moto:         Sacc Draining (NADB3):         2010042.00         Cline1:         EGAE           Iming Moto:         Sacc Draining (NADB3):         2010042.00         Cline1:         EGAE           Iming Moto:         Sacc Draining (NADB3):         2010041.00         Cline1:         EGAE           Iming Moto:         Locardolatia / E. Parcez         Sampling Method:         4 Inch x10 L. Carce Barrol.         Project: Number: 30120225.           Sampling Method:         Contentions         Sampling Interval:         Contentions         Sampling Method:         1 Carcel Barrol.           Sampling Method:         E. Yes         No         Contentions         Data McCarce         Contentions           Sampling Method:         E. Yes         No         Contentions         Contentions         Sampling Note           Sampling Method:         E. Yes         No         Contentions         Contention         Contention           Sampling Method:         E. Yes         No         Contention         Contention         Contention           Sampr  | 9             | AR              | CADI                     | S                        |  | Bc               | pring  | j Log  |  | Sheet: 5 of   | 8                                 |
|--|---------------|-----------------|--------------------------|--------------------------|--|------------------|--|--|--|---|-----------------------------------|
| Jake Completed:       Biol/B2/022       Northing (NADB3)       201009.50         Joining Method:       Sone Drilling.       Total Depth:       146.1 bps.       Project:       End CW Method         Joining Method:       Sone Drilling.       Total Depth:       146.1 bps.       Project:       End CW Method       Edde Earons.       Location: PGGE Topoch. Needides Californ         Joining Asst:       J. Candelatiar JF. Perce:       Sampling Method:       Location: PGGE Topoch. Needides Californ         Joining Asst:       J. Candelatiar JF. Perce:       Sampling Method:       Location: PGGE Topoch. Needides Californ         Sampling Asst:       J. Candelatiar JF. Perce:       Sampling Method:       Location: PGGE Topoch. Needides Californ         Sampling Asst:       J. Candelatiar JF. Perce:       Sampling Method:       Location: PGGE Topoch. Needides Californ         Sampling Asst:       J. Candelatiar JF. Perce:       Sampling Method:       Location: PGGE Topoch. Needides Californ         Sampling Asst:       J. Sampling Intervent Complex Method:       Diffing Needides Californ       Diffing Needides Californ         Sampling Asst:       J. Sampling Intervent Complex Method:       Diffing Needides Californ       Diffing Needides Californ         Sampling Asst:       J. Sampling Intervent Complex Method:       Diffing Needides Californ       Diffing Needides Californ   | Date S        | Started:        | 03/31/2                  | 2022                     |  | Surface          | e Eleva  | tion: <u>506.35 ft amsl</u>  | Boring N   | o.: ER-02   |                                   |
| Johing Mctoc:       ABC LOVIN       Easting (NADEs):       701664.27.5       Client:       POiget:       Final GW Remedy Phase 2A.         Joiling Mctoc:       Sono Drilling       Total Depth:       148.1bg.       Project Final GW Remedy Phase 2A.         Joiling Mattoc:       Sono Drilling       Total Opth:       168.1bg.       Location:       PC6ET Topack, Needles Caliform         Joiling Mattoc:       Grant Wilford       Sompling Method:       Control Control       Project Number:       30126255.         Joing Optic:       Grant Wilford       Sompling Interval.       Control Control Control Optic Project Project Number:       30126255.         Googer:       Grant Wilford       Sompling Interval.       Control Control Optic Project Project Number:       301262255.         Sompling Definition Statistics       Converted to Welk:       Yes       No       No       No         81       Sompling Definition Statistics       Converted to Welk:       Yes       No   | Date C        | Comple          | eted: 05/08/2            | 2022                     | I                                      | Northin          | ig (NAI  | D83): <u>2101009.50</u>  |  |   |                                   |
| Initing Method:       Some Drining       Total Deepti:       148 TLgs       Project: Final GW Rendby Phase 2A.         Initing Nethod:       Some Drining Asta:       Locative Peak Examples       Locative Peak Examples       Deeptito First Water: 60.01 fLgs       Project: Final GW Rendby Phase 2A.         Oppite Name:       Locative Peak Examples       Deeptito First Water: 60.01 fLgs       Project Number: 30126255       Some Drining Nate:       Project Number: 30126255         Oppite Sample D       Sample D       Sample D       Sample D       Sample D       Down Pack Examples         Sample D       Sample D       Sample D       Sample D       Sample D       Down Pack Examples         80       Sample D       Sample D       Sample D       Sample D       Down Pack Examples         81       Sample D       Sample D       Sample D       Sample D       Down Pack Examples         83       Sample D       Sample D       Sample D       Sample D       Down Pack Examples         84       Sample D       Sample D       Sample D       Sample D       Sample D       Sample D         84       Sample D       Sample D <td>Drilling</td> <td>Co.:</td> <td>ABC L</td> <td></td> <td> I</td> <td>Easting</td> <td>) (NAD</td> <td>83): <u>7616642.75</u></td> <td>Client: PG8</td> <td><u>ke</u></td> <td></td>   | Drilling      | Co.:            | ABC L                    |                          | I                                      | Easting          | ) (NAD   | 83): <u>7616642.75</u>   | Client: PG8  | <u>ke</u>   |                                   |
| Init Notifier       Lerral Sono Linck Mounted<br>Beller Name.       Sorobio Dismeter:       8:12 inches       Location:       Location:       Location:       Project Number:       301262255         Joing Asst.       J. Candedaria / F. Perez.       Sampling Method:       A linch: 10 L. Core Barrel<br>Project Number:       301262255         Gager:       Gant Wilford       Sampling Method:       Continuous       Project Number:       301262255         Gato:       Sampling Method:       Continuous       Continuous       Disting Name.       Disting Name.         6       Sample D       Sample D       Considering Place       Disting Name.       Disting Name.       Disting Name.         81       Sample D       Sample D       Sample D       Sample D       Sample D       Sample D       Disting Name.       Distin  | Drilling      | Metho           | od: <u>Sonic I</u>       | Drilling                 |  | Total D          | epth:  | <u>146 ft bgs</u>  | Project: Fina  | I GW Remedy Pr  | hase 2A                           |
| Jamer Kamer<br>Jamer Kamer<br>Jager - Grant Wilford - E. Perez<br>Sample D - Start Water rol 0.010 bgs.<br>Sample D - Start Water Rol 0.010 bgs   | Drill Ri      | g lype          | e: <u>lerra S</u>        | <u>Sonic Truck I</u>     | <u>lounted</u>                         | Boreho           | ble Diar   | neter: <u>8-12 inches</u>  | Location: PG8  | <u>kE Topock, Need</u>  | les California                    |
| Joint 24.00  | Driller       | Name:           | Eddie I                  | Ramos                    | l                                      | Depth            | to First   | Water: 60.0 ft bgs   |  | 201000055   |                                   |
| Oppletitie       Sean McGrane       Converted to Welf       EV res       No <u>65</u> <u>65             <u>65</u> <u>65             <u>65</u> <u>65             <u>65           </u></u></u></u>   |               | r'              | <u>J. Can</u><br>Grant \ | Villford                 |  | Sampli<br>Sampli | ng iviei<br>ng inte  | nou. <u>4 Incli x 10 II. Cole Ballel</u>   | Project Numbe  | el. <u>30120233</u>   |                                   |
| Basel Monoclassical Sector       Description       Description       Drilling Notes       Driling Notes       Drilling Notes <thd< td=""><td>Editor:</td><td>1.</td><td>Sean M</td><td>ArGrane</td><td> `</td><td>Convei</td><td>ted to</td><td>Well <math>\times</math> Yes <math>\square</math> No</td><td></td><td></td><td></td></thd<>   | Editor:       | 1.              | Sean M                   | ArGrane                  | `                                      | Convei           | ted to   | Well $\times$ Yes $\square$ No   |  |   |                                   |
| B       B       B       B       Countwater       B       B       B       B       B       Drilling Rule       Drilling Rule       Drilling Rule         A81       5       Sample ID       Sample ID       Weatherd<br>Bettock - INA       If 5-17 m] Summer to be weat any local - Conductable in data brown<br>intriget mostly publicated by data water and in mer to be weat any local - Sample ID       If 2-2-17 m]<br>Top potion of weat<br>and the weat and  |               | >               |                          |                          |  |                  |  |  |  |   |                                   |
| 81       5         82       25         83       -         84       -         85       -         86       -         86       -         86       -         87       -         88       -         89       -         91       -         93       -         94       -         95       NS Single         00       -         94       -         95       -         96       -         97       -         98       -         99       -         94       -         95       -         96       -         97       -         98       -         99       -         90       -         91       -         92       -         93       -         94       -         95       -         96       -         97       -         98       -         99   | Depth<br>(ft) | Recover<br>(ft) | Sieve<br>Sample ID       | Groundwater<br>Sample ID | Geologic<br>Formatio                   | USCS<br>Code     | USCS<br>Class  | Soil Description   |  | Drilling Notes  | Drilling Fluid                    |
| 88       2.5       (d2.44.5 ft) N0 Recovery see Drilling Notes       (d2.0 = 37.0)       (d2.0   | <br>81        | - 5             |                          |                          | Weathered<br>Bedrock -<br>Conglomerate | N/A              |  | (73.5-82 ft) Sedimentary Rock - Congiomerate;<br>(2.5YR 5/4); microcrystalline to coarse grained,<br>intensely fractured; massive; most fragments o<br>and friable with a few competent rock fragment<br>sample mostly pulverized by drilling process. | reddish brown<br>, angular; hard; very<br>bserved are weak<br>s; dry; NOTE: Core |   |                                   |
| 83       1   | 82            |                 |                          |                          | L                                      | L                | <u>lê ê ê</u>  |  |  | (82.0   |                                   |
| LB4  | <br>83<br>    |                 |                          |                          | Weathered<br>Bedrock -<br>Conglomerate | NR               |  | (62-64.5 II) NO Recovery, see Drining Notes.   |  | Top portion of<br>drill run fell out<br>of core barrel<br>during<br>extraction onto | No drilling fluid<br>used         |
| 25       3       104       105<  | 84            |                 |                          |                          |  |                  | $ / \setminus$   |  |  | drill deck/soil hopper.   |                                   |
| 100       1  |               | 2.5             |                          |                          | <b> </b>                               |                  |  | (84.5-117 ft) Sedimentary Rock - Conglomerate  | e, reddish brown   |   |                                   |
|  | 00            |                 |                          |                          |  |                  | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ | (2.5YR 5/4); microcrystalline to coarse grained,<br>intensely fractured; massive; most fragments o   | , angular; hard; very<br>bserved are weak  | /   |                                   |
| 87   | 86            |                 |                          |                          |  |                  |  | and friable with a few competent rock fragment<br>sample mostly pulverized by drilling process.  | s; dry; NOTE: Core   |   |                                   |
| 87   |               |                 |                          |                          |  |                  | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$               |  |  |   |                                   |
| 88       -       5       No Sieve<br>Somples<br>Collected       Image: Somples<br>Collected       I  | 87            |                 |                          |                          |  |                  |  |  |  |   |                                   |
| 89       5       No Sieve<br>Collected       No         90       5       No Sieve<br>Collected       Samples<br>Samples<br>Collected       Weathered<br>Bedrock -<br>Congionerate       NA         91       -       -       -       -       -         92       -       -       -       -       -         93       -       -       -       -       -         94       -       -       -       -       -         94       -       -       -       -       -         94       -       -       -       -       -         95       -       -       -       -       -         96       -       -       -       -       -       -         97       -       -       -       -       -       -         98       -       -       -       -       -       -       -         99       -       -       -       -       -       -       -       -         99       -       -       -       -       -       -       -       -       -       -       -       -       -       -       <   | 88            |                 |                          |                          |  |                  |  |  |  |   |                                   |
| 1       1       No Sirve<br>Samples<br>Collected       No<br>Groundwater<br>Samples<br>Collected       No<br>Groundwater<br>Samples<br>Collected       Weathered<br>Bedrock -<br>Congiomerate       N/A         92       -       -       -       -       -       -         93       -       -       -       -       -       -         94       -       5       -       -       -       -       -         96       -       -       -       -       -       -       -       -         97       -   |               |                 |                          |                          |  |                  | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$             |  |  |   |                                   |
| 90       5       No Single Samples Collected       Groundwater Samples Collected       Weathered Bedrock - Congromerate         91       -       -       -       -       -       -         92       -       -       -       -       -       -         93       -       -       -       -       -       -       -         94       -       -       -       -       -       -       -       -         94       -   | 89            |                 |                          |                          |  | ٠.               |  |  |  |   |                                   |
| Samples<br>Collected       Samples<br>Collected       Samples<br>Collected       Samples<br>Collected         91   | 90            | 5               | No Sieve                 | No<br>Groundwater        |  |                  |  | •  |  |   |                                   |
| 91       92       93       94       94       94       94       94       94       94       94       94       95       95       96       96       96       97 <td< td=""><td></td><td></td><td>Collected</td><td>Samples<br/>Collected</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>   |               |                 | Collected                | Samples<br>Collected     |  |                  |  |  |  |   |                                   |
| Weathered<br>Bedrock -<br>Congiomerate<br>93<br>-<br>94<br>-<br>95<br>-<br>95<br>-<br>96<br>-<br>96<br>-<br>97<br>-<br>96<br>-<br>96<br>-<br>96<br>-<br>96<br>-<br>96  | 91            |                 |                          |                          |  | K                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ |  |  |   |                                   |
| 92   |               |                 |                          |                          |  |                  |  |  |  |   |                                   |
| Bedrock - Conglomerate<br>93   | 92            |                 |                          |                          | Weathered                              |                  | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$               |  |  |   |                                   |
| -94       -5       -5       (94 ft) Slight increase in competent rock fragments.         -95       -5       -5       -5       -6         -96       -6       -7       -7       -7         -97       -7       -7       -7       -7         -98       -6       -7       -7       -7       -7         -98       -7       -7       -7       -7       -7         -98       -7       -7       -7       -7       -7         -99       -7       -7       -7       -7       -7         -99       -7       -7       -7       -7       -7       -7         -99       -7       -7       -7       -7       -7       -7       -7         -99       -7   |               |                 |                          |                          | Bedrock -<br>Conglomerate              | N/A              |  |  |  |   |                                   |
| 94       5       5       (94 ft) Slight increase in competent rock fragments.         96       5       (94 ft) Slight increase in competent rock fragments.       (97.0 - 127.0)         96       6       (97.0 - 127.0)       (97.0 - 127.0)         98       6       (97.0 - 127.0)       (97.0 - 127.0)         98       6       (97.0 - 127.0)       (97.0 - 127.0)         99       6       (97.0 - 127.0)       (97.0 - 127.0)         100       VX X X X       X X X X       (X X X X X)         100       X X X X       X X X X       (X X X X)         100       X X X X       X X X X       (X X X X)         100       X X X X       X X X X       (Y X X X)         101       X X X X       X X X X       (Y X X X)         102       X X X X       (Y X X X)       (Y X X X)         103       X X X X       (Y X X X)       (Y X X X)         104       X X X X       (Y X X X)       (Y X X X)         105       (Y X X X)       (Y X X X)       (Y X X X)         104       (Y X X X)       (Y X X X)       (Y X X X)         105       (Y X X X)       (Y X X X)       (Y X X X)         106       (Y X X X)       (Y X   |               |                 |                          |                          |  |                  |  |  |  |   |                                   |
| -       5       -       (94 ft) Slight increase in competent rock fragments.         -95       -       -       -       -         -96       -       -       -       -         -97       -       -       -       -         -97       -       -       -       -       -         -98       -       -       -       -       -       -         -98       -       -       -       -       -       -       -         -99       -       -       -       -       -       -       -       -         -99       -       -       -       -       -       -       -       -       -         -99       -   | 94            |                 |                          |                          |  |                  |  |  |  |   |                                   |
| 95       95       96       97 <td< td=""><td></td><td>5</td><td></td><td></td><td></td><td></td><td></td><td>(94 ft) Slight increase in competent rock fragme</td><td>ents.</td><td></td><td></td></td<>   |               | 5               |                          |                          |  |                  |  | (94 ft) Slight increase in competent rock fragme   | ents.  |   |                                   |
| -96<br>-97<br>-97<br>-98<br>-98<br>-99<br>-6<br>-99<br>-6<br>-99<br>-10<br>-98<br>-99<br>-10<br>-10<br>-98<br>-99<br>-10<br>-10<br>-98<br>-99<br>-10<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100<br>-100 | 95            |                 |                          |                          |  |                  |  |  |  |   |                                   |
| -96       -96       -97       -97       -98       -99       -98       -  |               |                 |                          |                          |  |                  |  |  |  |   |                                   |
| -97       -97       -98       -  | 96            |                 |                          |                          |  |                  |  |  |  |   |                                   |
| -97       -  |               |                 |                          |                          |  |                  |  |  |  |   |                                   |
| $\begin{bmatrix} -98 \\ -99 \\ -99 \\ -99 \\ -100 \end{bmatrix} = \begin{bmatrix} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$   | 97<br>        |                 |                          |                          |  |                  |  |  |  | (97.0 - 127.0')<br>Began using  | (97.0 - 127.0')<br>500 gallons of |
| -99       6       6       6       6       6       6       6       water recovered; 5         100   | 98            |                 |                          |                          |  |                  | $  \begin{array}{c} \times & \times \\ \times & \times \end{array} $ |  |  | water to advance in   | water used;<br>450 gallons of     |
|  |               | 6               |                          |                          |  |                  |  |  |  | 6-inch casing.  | water<br>recovered; 50            |
| Image: state       Image: state <td< td=""><td>99</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>gallons of<br/>water lost</td></td<>  | 99            |                 |                          |                          |  |                  |  |  |  |   | gallons of<br>water lost          |
| Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, NR = No Recover<br>I/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered<br>luring drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential<br>ompaction of sediments in the core bag.  |               |                 |                          |                          |  |                  |  |  |  |   |                                   |
| I/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered uring drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential ompaction of sediments in the core bag.  | 100<br>Abbrev | viations        | s: USCS = I              | Jnified Soil C           | lassification                          | l<br>Svster      | <u>10 0 0</u><br>n. ft = '   | feet, bas = below around surface, ams  | l = above mean   | sea level. NR = I   | No Recoverv                       |
| luring drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential ompaction of sediments in the core bag.   | N/A =         | Not Ap          | plicable, GV             | V = groundw              | ater, Notes:                           | solid b          | lue an   | d hollow blue water table marks repres   | ent depth to wa  | ater (ft. bgs.) first e   | encountered                       |
| ompaction of sediments in the core bag.  | during        | drilling        | and approx               | imate static r           | neasured d                             | uring p          | re-dev   | elopment, respectively. Apparent partia  | l recoveries car   | be the result of p  | ootential                         |
|  | compa         | action o        | of sediments             | in the core b            | ag.                                    |                  |  |  |  |   |                                   |

| Date Started:       03/31/2022       Surface Elevation:       506.35 ft amsl       Boring No.:       ER-02         Date Completed:       05/08/2022       Northing (NAD83):       2101009.50       Client:       PG&E         Drilling Co.:       ABC LIOVIN       Easting (NAD83):       7616642.75       Client:       PG&E         Drilling Method:       Sonic Drilling       Total Depth:       146 ft bgs       Project:       Final GW Remedy P         Driller Name:       Eddie Ramos       Depth to First Water:       60.0 ft bgs       Location:       PG&E         Drilling Asst:       J. Candelaria / F. Perez       Sampling Method:       4 inch x 10 ft. Core Barrel       Project Number:       30126255         Logger:       Grant Willford       Sampling Interval:       Continuous       Continuous       Project Number:       30126255         Editor:       Sean McGrane       Converted to Well:       Yes       No       Northingely fractured; massive; most fragments dragenets, dry, NOTE: Core sample ID       Sile Vertice Signet sample ID       Soil Description       Drilling Notes         101       -       6       -       -       -       -       -       -       -       -       -         101       -       6       Sieve       Sieve       S  | hase 2A<br>Iles California           |
|--|--------------------------------------|
| Date Completed:       05/08/2022       Northing (NAD83):       2101009.50         Drilling Co.:       ABC LIOVIN       Easting (NAD83):       7616642.75       Client:       PG&E         Drilling Method:       Sonic Drilling       Total Depth:       146 ft bgs       Project:       Final GW Remedy P         Driller Name:       Eddie Ramos       Depth to First Water:       60.0 ft bgs       Location:       PG&E         Drilling Asst:       J. Candelaria / F. Perez       Sampling Method:       4 inch x 10 ft. Core Barrel       Project Number:       30126255         Logger:       Grant Willford       Sampling Interval:       Continuous       Project Number:       30126255         Editor:       Sean McGrane       Converted to Well:       X Yes       No       No         Interval:       Silve       Sample ID       Groundwater       Image: Grant Willford       Soil Description       Drilling Notes         Interval:       Sample ID       Groundwater       Image: Grant Willford       Soil Description       Drilling Notes         Interval:       Sample ID       Groundwater       Image: Grant Willford       Soil Description       Drilling Notes         Interval:       Soil Description       Image: Grant Willford       Soil Description       Drilling Notes   | hase 2A<br>Iles California           |
| Drilling Co.:       ABC LIOVIN       Easting (NAD83):       7616642.75       Client:       PG&E         Drilling Method:       Sonic Drilling       Total Depth:       146 ft bgs       Project:       Final GW Remedy P         Drilling Type:       Terra Sonic Truck Mounted       Borehole Diameter:       8-12 inches       Location:       PG&E         Driller Name:       Eddie Ramos       Depth to First Water:       60.0 ft bgs  | hase 2A<br>Iles California           |
| Drilling Method:       Sonic Drilling       Total Depth:       146 ft bgs       Project:       Final GW Remedy P         Drill Rig Type:       Terra Sonic Truck Mounted       Borehole Diameter:       8-12 inches       Location:       PG&E Topock, Neec         Driller Name:       Eddie Ramos       Depth to First Water:       60.0 ft bgs       Project:       Yes       Project Number:       30126255         Dorger:       Grant Willford       Sampling Interval:       Continuous       Project Number:       30126255         Editor:       Sean McGrane       Converted to Well:       Yes       No       No  | hase 2A<br>Iles California           |
| Drill Rig Type:       Terra Sonic Truck Mounted       Borehole Diameter:       8-12 inches       Location:       PG&E Topock, Neec         Driller Name:       Eddie Ramos       Depth to First Water:       60.0 ft bgs       Project Number:       30126255         Drilling Asst:       J. Candelaria / F. Perez       Sampling Method:       4 inch x 10 ft. Core Barrel       Project Number:       30126255         Logger:       Grant Willford       Sampling Interval:       Continuous       Continuous         Editor:       Sean McGrane       Converted to Well:       X Yes       No   | Drilling Fluid                       |
| Driller Name:       Eddie Ramos       Depth to First Water:       60.0 ft bgs         Drilling Asst:       J. Candelaria / F. Perez       Sampling Method:       4 inch x 10 ft. Core Barrel       Project Number:       30126255         Logger:       Grant Willford       Sampling Interval:       Continuous   | Drilling Fluid                       |
| Drilling Asst:       J. Candelaria / F. Perez       Sampling Method:       4 inch x 10 ft. Core Barrel       Project Number:       30126255         Logger:       Grant Willford       Sampling Interval:       Continuous         Editor:       Sean McGrane       Converted to Well:       Yes       No  | Drilling Fluid                       |
| Logger:       Grant Willford       Sampling Interval:       Continuous         Editor:       Sean McGrane       Converted to Well:       Yes       No  | Drilling Fluid                       |
| Editor:       Sean McGrane       Converted to Well:       Yes       No         Image: Sean McGrane       Groundwater Sample ID       Groundwater Sample ID       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Sean McGrane       Groundwater Sean Book       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Sean Book       Groundwater Sean Book       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Sean Book       Groundwater Sean Book       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Sean Book       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Sean Book       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Image: Sean Book       Groundwater Sean Book       Groundwater Sean Book       Soil Description       Drilling Notes         Image: Ima   | Drilling Fluid                       |
| Image: Total state       Sieve Sample ID       Groundwater Sample ID       So be   | Drilling Fluid                       |
| <pre></pre>  |                                      |
|  |                                      |
| 104<br>105<br>105<br>105<br>105<br>105<br>105<br>105<br>105  | (105.0 - 107.0')                     |
| _106X X X X X X X X X X X X X X X X  | No drilling fluid<br>used            |
|  |                                      |
|  |                                      |
|  |                                      |
| Bedrock - N/A × × ×  |                                      |
| 109 Conglomerate   |                                      |
| L110_No Sieve<br>Samples<br>Samples<br>Samples   |                                      |
| L _ Collected Collected  |                                      |
|  |                                      |
| $\begin{bmatrix} 113 \end{bmatrix} \qquad $   |                                      |
|  |                                      |
| $ \begin{bmatrix} 114 \\ 2 \end{bmatrix} \begin{bmatrix} 2 \\ 2 \end{bmatrix} \begin{bmatrix}$ |                                      |
|  |                                      |
|  |                                      |
|  |                                      |
|  |                                      |
|  |                                      |
|  | (117.0 -                             |
| 120.0°) Top portion of drill run fell out of core barrel   | 120.0')<br>No drilling fluid<br>used |
| 119 extraction onto drill deck/soil hopper.  |                                      |
| Abbreviations: USCS = Unified Soil Classification System. ft = feet. bgs = below ground surface. amsl = above mean sea level. NR =   | I<br>No Recoverv                     |
| N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bqs.) first  | encountered                          |
| during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of   | oncountorou                          |
| compaction of sediments in the core bag.   | potential                            |

| Date Startiel<br>Date Startiel<br>Date Completie<br>Second<br>Date Completie<br>Second<br>Date Startie<br>Date Completie<br>Second<br>Date Startie<br>Date Starti | 9                        | AR               | CAD                | S                         |  | Bo           | oring  | j Log  | S   | heet: 7 of   | 8   |
|---|--------------------------|------------------|--------------------|---------------------------|--|--------------|--|--|---|--|---|
| Date Completed:       05/08/2022       Northing (NAD83)       2010/09.50       Internet         Diffing Method:       Sanitz Diffing Method:       Location:       POSEE       Topics:       Enal GWL Rearby Phases 2A.         Differ Method:       Sanitz Diffing Method:       Location:       ECadeStand:       Project:       Enal GWL Rearby Phases 2A.         Differ Method:       Sanitz Differ Method:       Location:       ECadeStand:       Project:       Enal GWL Rearby Phases 2A.         Differ Method:       Sanitz Differ Method:       Controuces       Controuces       Project:       Method:       Solid Differ Method:         Differ Method:       Sanitz Differ Method:       Solid Discontron       Differ Method:       Solid Discontron       Differ Method:       Differ Method:       No         122       Sanitz Discontron       Concerved to Well:       If 10:01:01:01:01:01:01:01:01:01:01:01:01:0  | Date S                   | tarted:          | 03/31/2            | 2022                      |  | Surface      | e Eleva  | tion: <u>506.35 ft amsl</u>  | - Boring No   | D.: ER-02  |   |
| Drilling Co:       ABC LLOVIN       Easting (NAD8.3)       7261684.27.5       Clement PCSAE       Final GW Remedy Phase 2A         Drilling Method:       Sono Drilling Method:       Borbale Diameter       8-12 inches       Locaritoin: PCSAE Encode. Needles: California         Drilling Mathod:       J. Candedaria / F. Perzez.       Sampling Method:       Continuous       Project Number: 30128255         Drilling Astat:       J. Candedaria / F. Perzez.       Sampling Method:       Continuous       Continuous         Control       Sampling Method:       Control       Sampling Method:       Control       Control         Control       Sampling Method:       Control       Contro       <   | Date C                   | comple           | ted: <u>05/08/</u> | 2022                      |  | Northin      | g (NAI   | D83): <u>2101009.50</u>  |   | <u></u>  |   |
| Drilling Method:       Sonic Drilling,       Total Deph:       146 ft bgs.       Project:       End CV Project Rendy Phase 2A.         Drilling Assis:       Location:       Code Code Code Code Code Code Code Code  | Drilling                 | Co.:             | <u>ABC L</u>       | IOVIN                     |  | Easting      | (NAD   | 83): <u>7616642.75</u>   | _ Client: <u>PG&amp;E</u>   |  |   |
| 10/04 Page:       Earta Sano, Tuck Mounda       Bordhol Diameter:       8:12 inches       Location:       Project Number:       20126255         Drilling Asts:       J. Candellanis /F. Perez:       Sampling Method:       4 inch x 10 ft. Core Barrel       Project Number:       20126255         Congoor:       Sampling Method:       Converted to Welt:       [X] Yes:       No         Setting:       Setting:       Setting:       Setting:       Drilling Nume       Drilling Nume       Drilling Nume         Setting:   | Drilling                 | Metho            | od: <u>Sonic I</u> | Drilling                  | ·                                      | Total D      | epth:  | <u>146 ft bgs</u>  | _ Project: <u>Final</u>   | <u>GW Remedy Pl</u>  | nase 2A   |
| Uniter Name         Edde Ramos         Depth to First Water: 60.01.tbg         Depth to First Water: 60.01.tbg <thdepth 60.01.tbg<="" first="" th="" to="" water:="">         Depth t</thdepth>   | Drill Ri                 | g Туре           | : <u>Terra S</u>   | <u>Sonic Truck N</u><br>- | Nounted                                | Boreho       | le Diar  | neter: <u>8-12 inches</u>  | _ Location: <u>PG&amp;E</u>   | <u>E Topock, Need</u>  | <u>les California</u>   |
| Jacangestar       J. Candestar  | Driller                  | Name:            | Eddie              | Ramos                     |  | Depth 1      | o First  | Water: <u>60.0 ft bgs</u>  |   | 00100055   |   |
| Cogene       Set Water       Set Minuted interval       Contruction       Online National Set   | Drilling                 | Asst:            | <u>J. Can</u>      | delaria / F. Po           | erez                                   | Sampli       | ng Met   | hod: <u>4 inch x 10 ft. Core Barrel</u>  | _ Project Number  | : 30126255   |   |
| Statilization       Convertigitie       Convertigitie       Statilization       Defining Notes       Diffining Fluid                §              §              §              §              §              Solid Description             Solid Description             Defining Notes             During Notes             Solid Description             Not             Solid Description             Not             Solid Description             Solid Description             Not             Solid Description             No             Solid Description             No             Solid Description             No             Solid Description             Solid Description             No             Solid Description             S   | Logge                    | r:               | <u>Grant</u>       | <u>vviiliora</u>          | ·                                      | Sampii       | ng inte  | rvai: <u>Continuous</u>  | _   |  |   |
| End     Server<br>Server     Groundware<br>Server     Server<br>Server     Groundware<br>Server     Server<br>Server     Groundware<br>Server     Server<br>Server     Dilling Notes     Drilling Notes     Drilling Notes       191  |                          |                  | Seann              |                           | \                                      |              |  |  |   |  |   |
| 121         | Depth<br>(ft)            | Recovery<br>(ft) | Sieve<br>Sample ID | Groundwater<br>Sample ID  | Geologic                               | USCS<br>Code | USCS<br>Class  | Soil Description   |   | Drilling Notes   | Drilling Fluid  |
| 124       124       124       127       1   | 121<br>122<br>123        | 6                |                    |                           |  |              | ****   | (120-127 ft) Sedimentary Rock - Conglomerat<br>(2.5YR 5/4); microcrystalline to coarse grained<br>intensely fractured; massive; most fragments<br>and friable with a few competent rock fragment<br>sample mostly pulverized by drilling process.<br>(120.01-122 ft) Rock fragments are moist. | e; reddish brown<br>d, angular; hard; very<br>observed are weak<br>hts; dry; NOTE: Core | (100.0   | (100.0  |
| 127       128       127       1   | 124<br>125<br>126<br>126 | 4                |                    |                           | Weathered<br>Bedrock -<br>Conglomerate | N/A          | **************************************   | 88   |   | 123.0 -<br>127.0')<br>Drilling<br>becoming<br>significantly<br>rougher. Core<br>fell out of core<br>barrel took two<br>attempts to<br>recover. | (123.0 -<br>127.0')<br>No drilling fluid<br>used  |
| 128       132.0°       130.0°       130.0°       130.0°       130.0°       130.0°       137.0°       145.0°  | 127                      |                  |                    |                           |  |              | $\frac{\times \times \times}{}$  | (127-129.4 ft) No Recovery; see Drilling Notes   |   | (127.0 -   | (127.0 -  |
| 129       129       129       120       120       1270       1270       1270       1270       1370   | 120                      |                  |                    |                           |  |              | $  \rangle /$  |  |   | 132.0')<br>Top portion of  | 132.0')<br>No drilling fluid  |
| 129       2.6       No Situe Samples Collected       No Situe Samples Collected       No Situe Samples Collected       (123 4-145 ft) Sedimentary Rock - Congiomerate; reddish brown (2.5YR 54/h; microcrystalline to coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competent rock fragments; dry, NOTE: Core state of the coarse grained, angular, hard, very and friable with a few competence of the coarse grained, angular, hard, very and friable with a few competence of the coarse grained, angular, hard, very angular, hard, ver  | 120                      |                  |                    |                           |  | NR           | ΙX   |  |   | drill run fell out<br>of core barrel   | used<br>(127.0 -  |
| <ul> <li>2.6 No Sieve Samples Collected</li> <li>1.30 2.6 No Sieve Scalected</li> <li>1.31 2.2 Construction of sediments of the coarse grained angular, hard, up recovered; to gallons of water to sample mostly pulverized by drilling process.</li> <li>1.32</li></ul>  | 129                      |                  |                    |                           |  |              |  |  |   | during<br>extraction onto  | 137.0')   |
| 2-5       No Sinve<br>Samples<br>Collected       No and<br>Samples<br>Collected   |                          | 26               |                    |                           |  |              |  |  |   | drill deck/soil  | water used;   |
| Collected Collec  | 130                      | 2.0              | No Sieve           | No<br>Groundwater         |  |              |  | (129.4-145 ft) Sedimentary Rock - Conglomer<br>(2.5YR 5/4); microcrystalline to coarse graine  | ate; reddish brown<br>d, angular; hard; very  | (127.0 -   | 400 gallons of<br>water   |
| 131   |                          |                  | Collected          | Samples<br>Collected      |  |              | ×××<br>×××   | intensely fractured; massive; most fragments<br>and friable with a few competent rock fragmer  | observed are weak   | 137.0')<br>Drilled with  | recovered; 100<br>gallons of  |
|   | _131_                    |                  |                    |                           |  | Κ            |  | sample mostly pulverized by drilling process.  |   | water to   | water lost  |
| 132   |                          |                  |                    |                           |  |              |  |  |   | 6-inch casing.   |   |
| - 133<br>- 134<br>- 5<br>- 135<br>- 5<br>- 135<br>5<br>- 135<br>5<br>5<br>5<br>5<br>5<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>   | _132_                    |                  |                    |                           |  |              | $\times \times \times$<br>$\times \times \times$   |  |   |  |   |
|   |                          |                  |                    |                           |  |              |  |  |   |  |   |
|   | _133_                    |                  |                    |                           |  |              |  |  |   |  |   |
|   |                          |                  |                    |                           |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$   |  |   |  |   |
| 5<br>- 135<br>  | _134_                    |                  |                    |                           |  |              |  |  |   |  |   |
|   |                          | 5                |                    |                           | Weathered                              | <b>N</b> 1/A | $  \begin{array}{c} \times \\ \times \\ \times \\ \end{array} $  |  |   |  |   |
|   | 135                      |                  |                    |                           | Bedrock -<br>Conglomerate              | N/A          |  |  |   |  |   |
|   |                          |                  |                    |                           |  |              |  |  |   |  |   |
| -         | 136                      |                  |                    |                           |  |              | $  \times \times$ |  |   |  |   |
|   | <u> </u>                 |                  |                    |                           |  |              |  |  |   |  |   |
| -         | 137                      |                  |                    |                           |  |              | $  \times \times \times \\ \times \times \times$   |  |   | (137.0 -   | (137.0 -  |
| Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, NR = No Recovery N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential compaction of sediments in the core bag.  | 138<br>139<br>139        | 8                |                    |                           |  |              | *****  |  |   | 145.0')<br>Drilled with<br>water to<br>advance<br>6-inch casing.   | 145.0')<br>300 gallons of<br>water used;<br>200 gallons of<br>water<br>recovered; 100<br>gallons of<br>water lost |
| N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential compaction of sediments in the core bag.   | Abbrev                   | /iations         | : USCS = l         | Jnified Soil C            | lassification                          | Syster       | n, ft = <sup>-</sup>   | feet, bgs = below ground surface, am   | sl = above mean s   | sea level, NR = l  | No Recovery,  |
| during drilling and approximate static measured during pre-development, respectively. Apparent partial recoveries can be the result of potential compaction of sediments in the core bag.   | N/A =                    | Not Ap           | plicable, GV       | V = groundw               | ater, Notes:                           | solid b      | lue an   | d hollow blue water table marks repre  | sent depth to wate  | er (ft. bgs.) first (  | encountered   |
| compaction of sediments in the core bag.  | during                   | drilling         | and approx         | imate static r            | neasured d                             | uring p      | re-dev   | elopment, respectively. Apparent parti   | al recoveries can   | be the result of   | ootential   |
|   | compa                    | ction c          | of sediments       | in the core b             | ag.                                    |              |  |  |   |  |   |

| 9          | AR               | CAD                              | S   |                       | Bc           | oring  | j Log  | S  | Sheet: 8 of   | 8                                    |
|------------|------------------|----------------------------------|---|-----------------------|--------------|--|--|--|---|--------------------------------------|
| Date S     | started:         | 03/31/                           | 2022                                      | 5                     | Surface      | e Eleva  | tion: <u>506.35 ft amsl</u>  | Borina N   | o.: ER-02   |                                      |
| Date C     | Comple           | ted: <u>05/08/</u>               | 2022                                      | N                     | lorthin      | ıg (NAI  | D83): <u>2101009.50</u>  | 20   | <u></u>   |                                      |
| Drilling   | Co.:             | <u>ABC L</u>                     | IOVIN                                     | E                     | Easting      | g (NAD   | 83): <u>7616642.75</u>   | Client: <u>PG&amp;</u>   | E   |                                      |
| Drilling   | Metho            | od: <u>Sonic</u>                 | Drilling                                  | 1                     | otal D       | epth:  | <u>146 ft bgs</u>  | Project: Final   | GW Remedy Ph  | nase 2A                              |
| Drill Ri   | д Туре           | : <u>Terra S</u>                 | Sonic Truck N                             | <u>/lounted</u> E     | Boreho       | ole Diar   | neter: <u>8-12 inches</u>  | Location: PG&  | E Topock, Need                                      | <u>les California</u>                |
| Driller    | Name:            | <u>Eddie</u>                     | Ramos                                     | [                     | Depth        | to First   | Water: 60.0 ft bgs   |  |   |                                      |
| Drilling   | Asst:            | <u>J. Can</u>                    | delaria / F. Pe                           | erez S                | Sampli       | ng Met   | hod: <u>4 inch x 10 ft. Core Barrel</u>  | Project Numbe  | r: <u>30126255</u>                                  |                                      |
|            | r:               | <u>Grant</u>                     | VV IIITOra                                | t                     |              | ng inte  |  |  |   |                                      |
|            |                  | Seann                            |   | (                     | Jonvei       |  |  |  |   |                                      |
| Depth (ft) | Recovery<br>(ft) | Sieve<br>Sample ID               | Groundwater<br>Sample ID                  | Geologic<br>Formation | USCS<br>Code | USCS<br>Class  | Soil Description   |  | Drilling Notes                                      | Drilling Fluid                       |
| <br>141    |                  |                                  |   |                       |              |  | (129.4-145 tt) Sedimentary Rock - Conglomera<br>(2.5YR 5/4); microcrystalline to coarse grained,<br>intensely fractured; massive; most fragments of<br>and friable with a few competent rock fragment:<br>sample mostly pulverized by drilling process | te; reddish brown<br>, angular; hard; very<br>bserved are weak<br>s; dry; NOTE: Core |   |                                      |
| <br>1⊿ว    |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   | Weathered             | NI/A         |  |  |  |   |                                      |
|            | 0                | No Sieve<br>Samples<br>Collected | No<br>Groundwater<br>Samples<br>Collected | Conglomerate          | N/A          |  |  |  |   |                                      |
| <u></u>    |                  |                                  |   |                       |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                                   |  |  |   |                                      |
|            |                  |                                  |   |                       |              | $  \begin{array}{c} \times \\ \times \\ \times \\ \times \\ \times \end{array} \\ \times \end{array} $ |  |  |   |                                      |
|            |                  |                                  |   |                       |              | ×××  | (145-146 ft) No Recovery: see Drilling Notes   |  | (145.0 -  | (145.0 -                             |
|            | 0                |                                  |   |                       | NR           |  | End of Boring at 146 ft bgs.   |  | 146.0')<br>Drilled during<br>cleanout of<br>10-inch | 146.0')<br>No drilling fluid<br>used |
|            |                  |                                  |   |                       |              |  |  |  | casing.<br>Sample not<br>bagged or                  |                                      |
|            |                  |                                  |   |                       |              |  | 2  |  | logged.   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
| 150_       |                  |                                  |   | <                     |              |  | •  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
| 151        |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
|            |                  |                                  |   |                       |              |  |  |  |   |                                      |
| 159_<br>   |                  |                                  |   |                       |              |  |  |  |   |                                      |
| Abbre      | viations         | : USCS = l                       | Jnified Soil C                            | lassification         | Syster       | m, ft =  | feet, bgs = below ground surface, ams  | l = above mean   | sea level, NR = I                                   | No Recovery,                         |
| N/A =      | Not Ap           | plicable, GV                     | V = groundwa                              | ater, Notes:          | solid b      | olue an  | d hollow blue water table marks repres   | ent depth to wat   | er (ft. bgs.) first e                               | encountered                          |
| during     | drilling         | and approx                       | imate static n                            | neasured du           | uring p      | re-dev   | elopment, respectively. Apparent partia  | l recoveries can   | be the result of                                    | ootential                            |
| compa      | action o         | of sediments                     | in the core b                             | ag.                   |              |  |  |  |   |                                      |

# **Attachment 3**

Drilling Logs (for multiple diameter boreholes)

| ARC                                 | ADIS             |                                       | Drilling Log  |  | Sheet:  | 1 of 8   |
|-------------------------------------|------------------|---------------------------------------|---|--|---|--|
| Date Started:                       | 04/26/202        | 22                                    | Surface Elevation:  | 506.35 ft amsl   | Boring No · Fl  | R-02 8-inch  |
| Date Completed:                     | <u>04/27/202</u> | 22                                    | Northing (NAD83):   | 2101009.50   |   |  |
| Drilling Co.:                       | ABC LIO          | /IN                                   | Easting (NAD83):  | 7616642.75   | _ Client: <u>PG&amp;E</u>                                     |  |
| Drilling Method:                    | Roto-Son         | ic                                    | Total Depth:  | <u>145.0 ft bgs</u>  | _ Project: <u>Final GW R</u>                                  | emedy Phase 2A   |
| Drill Rig Type:                     | Terra Son        | nic Truck Mor                         | unt_Conductor Casing Diameter:                                  | <u>9 inches</u>  | _ Location: <u>PG&amp;E Topo</u>                              | ock, Needles   |
| Driller Name:                       | <u>Eddie Ra</u>  | nos                                   | Drill Casing Diameter:  | <u>8 inches</u>  | <u>California</u>   |  |
| Drilling Asst:                      | <u>J. Candel</u> | aria / F. Pere                        | ezDrill Bit:  | <u>8 inches</u>  | Project Number: 3012  | 6255   |
| Tool-Pusher:                        | N/A              |                                       | Depth to First Water:   | <u>60.0 ft bgs</u>   | -   |  |
| Rig Geologist:                      | G. Wilford       | I / A. McIntyr                        | eConverted to Well:   | 🛛 Yes 🗌 No   |   |  |
| Drilling Run                        | (ft)             | 11000                                 | Description   |  | ·   |  |
| (ft) and Ăverag<br>Penetration F    | Rate             | Class                                 | (See Pilot boring log for full geologic descriptions)           | temporary backfill m   | aterial in drill cuttings                                     | Drilling Fluid   |
|                                     | SM               | browr                                 | 5 ft) Silty sand with gravel (SM); reddish<br>n (5YR 5/4).      | (0.0 - 37.0') Flushing the 8-ir<br>the 6-inch diameter drill casi<br>temporary conductor casing. | nch diameter drill casing over<br>ing through 9-inch diameter | (0.0 - 37.0')<br>100 gallons of water<br>used; 0 gallons of water<br>recovered; 100 gallons<br>of water lost |
| _ 2 _                               |                  | × × × (1.5-7<br>× × ×<br>× × × reddis | 7 ft) Sedimentary Rock - Conglomerate;<br>sh brown (2.5YR 5/4). |  |   |  |
|                                     |                  | × × × × × × × × × × × × × × × × × × × |   |  |   |  |
| <br>_ 4                             |                  |                                       |   |  |   |  |
|                                     | N/A              | × × × × × × × × × × × × × × × × × × × |   |  |   |  |
|                                     |                  | × × × × × × × × × × × × × × × × × × × |   |  |   |  |
|                                     |                  |                                       |   |  |   |  |
|                                     |                  | × × × (7-22<br>× × ×<br>× × × reddis  | th) Sedimentary Rock - Conglomerate;<br>sh brown (2.5YR 5/4).   |  |   |  |
| 8                                   |                  | × × × × × × × × × × × × × × × × × × × | 0   |  |   |  |
| 9 Penetration<br>rates not          | for              |                                       |   |  |   |  |
| 10 sonic drilling<br>not required p | g<br>per         |                                       |   |  |   |  |
| 11 Specificatio<br>33 22 00         | n                | × × × × × × × × × × × × × × × × × × × |   |  |   |  |
| 12                                  |                  |                                       |   |  |   |  |
| 13                                  |                  |                                       |   |  |   |  |
| <br>14                              | N/A              | × × × × × × × × × × × × × × × × × × × |   |  |   |  |
| <br>15                              |                  |                                       |   |  |   |  |
|                                     |                  |                                       |   |  |   |  |
| <br>17                              |                  | × × × × × × × × × × × × × × × × × × × |   |  |   |  |
|                                     |                  |                                       |   |  |   |  |
|                                     |                  |                                       |   |  |   |  |
| 19<br>                              |                  |                                       |   |  |   |  |
| 20<br>Abbreviations: U              | <br>SCS = Unif   | ied Soil Clas                         | sification System ft = feet has -                               | <br>helow around surface, amo  | sl = above mean sea leve                                      | <br>  GW =   |
| groundwater Not                     | es: solid bl     | ue and hollow                         | w blue water table marks represe                                | nt depth to water (ft hos ) f  | irst encountered during o                                     | drilling and   |
| approximate stati                   | c measured       | during drillir                        | ng, respectively.   |  |   |  |

| 9                   | ARC   | 4                 | DIS                |   | Drilling Log   |                      |  |                                      | Shee                   | t: 2       | of 8   |
|---------------------|---|-------------------|--------------------|---|--|----------------------|--|--------------------------------------|------------------------|------------|--|
| Date S              | Started:                                    | 04                | /26/202            | 2   | Surface Elevation:   | <u>506.35 f</u>      | ft amsl  | Borin                                | a No .                 | FR-0       | )2 8-inch                                    |
| Date C              | Completed:                                  | <u>04</u>         | /27/202            | 2   | Northing (NAD83):  | 210100               | 9.50   | Bonn                                 | 9 110                  |            |  |
| Drilling            | Co.:  | <u>AB</u>         | C LIO              | /IN   | Easting (NAD83):   | <u>761664</u> 2      | 2.75   | Client:                              | PG&E                   |            |  |
| Drilling            | Method:                                     | Ro                | to-Soni            | ic  | Total Depth:   | <u>145.0 ft</u>      | bgs  | Project:                             | Final GV               | V Reme     | edy Phase 2A                                 |
| Drill Ri            | a Type:                                     | Те                | rra Son            | ic Trucł  | k Mount Conductor Casing Diameter:   | 9 inches             | 6  | Location:                            | PG&E T                 | opock,     | Needles                                      |
| Driller I           | Name:                                       | Ed                | die Rar            | nos   | Drill Casing Diameter:   | 8 inches             | 3  |                                      | Californi              | a          |  |
| Drilling            | Asst.                                       | .] (              | Candel             | aria / F  | Perez Drill Bit <sup>.</sup>   | 8 inches             | <br>3  | Project Ni                           | imber: 3               | 012625     | 5  |
| Tool-P              | usher:                                      | N//               | <u>ο αα.ο</u><br>Δ |   | Depth to First Water   | 60 0 ft b            | ns   |                                      | <u></u>                |            | •  |
| Ria Ge              | eologist:                                   | G.                | Wilford            | / A. Mo   | cintyre Converted to Well:   |                      |  |                                      |                        |            |  |
|                     | <u> </u>                                    |                   |                    |   |  |                      |  |                                      |                        |            |  |
| Depth<br>(ft)       | Drilling Run<br>and Averag<br>Penetration F | (ft)<br>e<br>tate | USCS<br>Code       | USCS<br>Class   | (See Pilot boring log for<br>full geologic descriptions)                   | Drilli               | ng notes and observation<br>temporary backfill ma      | ons confirmine<br>aterial in drill c | g presence<br>cuttings | of         | Drilling Fluid                               |
|                     |   |                   |                    | × × ×<br>× × ×  | (7-22 ft) Sedimentary Rock - Conglomerate;                                 |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times$ $\times$ $\times$ $\times$   | reddish brown (2.5YR 5/4).   |                      |  |                                      |                        |            |  |
| 21                  |   |                   | N/A                | $\times \times \times$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
| 22                  |   |                   |                    | ×××<br>×  | (22-23 ft) No Recovery: see Drilling Notes                                 |                      |  |                                      |                        |            |  |
| ╞╶┤                 |   |                   | NR                 | $ $ $\vee$  |  |                      |  |                                      |                        |            |  |
| _23_                |   |                   |                    | $\langle \rangle$   |  | _                    |  |                                      |                        |            |  |
| ╞╶╶┧                |   |                   |                    | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  | ועבט-סט זגן Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |                      |  |                                      |                        |            |  |
| 24                  |   |                   |                    | $\times \times \times$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |  |                      |  |                                      |                        |            |  |
| _25                 |   |                   |                    | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times$ $\times$ $\times$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | x x x   |  |                      |  |                                      |                        |            |  |
| 20                  |   |                   |                    | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times \times $ |  |                      |  |                                      |                        |            |  |
| 27                  |   |                   |                    | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
| 28                  |   |                   |                    | $\times$ $\times$ $\times$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |  |                      |  |                                      |                        |            |  |
| 29                  | Penetration                                 |                   |                    | $\times \times $ |  |                      |  |                                      |                        |            |  |
|                     | rates not                                   |                   |                    | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
| 30                  | documented f                                | or                |                    | $\times$ $\times$ $\times$  |  |                      |  |                                      |                        |            |  |
|                     | not required p                              | er                |                    | × × ×   |  |                      |  |                                      |                        |            |  |
| 31                  | Specification                               | 1                 |                    | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$  |  |                      |  |                                      |                        |            |  |
|                     | 33 22 00                                    |                   |                    | $\times \times \times$<br>$\times \times \times$  | •  |                      |  |                                      |                        |            |  |
| 32                  |   |                   | N/A                | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times$ $\times$ $\times$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\begin{array}{c} & & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{array}$                              |  |                      |  |                                      |                        |            |  |
| 33                  |   |                   |                    | $\times$ $\times$ $\times$ $\times$   |  |                      |  |                                      |                        |            |  |
| $\uparrow$          |   |                   |                    | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |  |                      |  |                                      |                        |            |  |
| 34                  |   |                   |                    | $\times$ $\times$ $\times$  |  |                      |  |                                      |                        |            |  |
| ┝┤                  |   |                   |                    |   |  |                      |  |                                      |                        |            |  |
| 35                  |   |                   |                    | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |  |                      |  |                                      |                        |            |  |
| ┝ ┥                 |   |                   |                    | $\times \times \times$<br>$\times \times \times$  | 2  |                      |  |                                      |                        |            |  |
| 36                  |   |                   |                    | $\times \times \times$<br>$\times \times \times$  |  |                      |  |                                      |                        |            |  |
| ╞╶╶┤                |   |                   |                    | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |  |                      |  |                                      |                        |            |  |
| 37                  |   |                   |                    |   |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |  | (37.0 -<br>  the 6-i | - 47.0') Flushing the 8-i<br>inch diameter drill casir | nch diameter<br>ng.                  | drill casing           | over       | (37.0 - 47.0')<br>100 gallons of water       |
| 38                  |   |                   |                    | $\mathbf{x} \times \mathbf{x}$  |  |                      |  | 5                                    |                        |            | used; 75 gallons of                          |
|                     |   |                   |                    | × × ×<br>× × ×  | 2  |                      |  |                                      |                        |            | valer recovered; 25<br>gallons of water lost |
| 30                  |   |                   |                    | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    | $\times$ $\times$ $\times$  |  |                      |  |                                      |                        |            |  |
|                     |   |                   |                    |   |  |                      |  |                                      |                        |            |  |
| <u>40</u><br>∆hhrev | viatione: 110                               |                   | l<br>S = I Inif    | ied Soil  | Classification System ft - feet, box - 1                                   |                      | und surface amo  | l = ahove n                          | 1ean seo               |            | \// =  |
| around              | water Not                                   | es.               | solid hlu          | le and l  | hollow blue water table marks represer                                     | t denth t            | o water (ft has ) fi                                   | rst encount                          | ered duri              | na drillir | ng and                                       |
| annroy              | vimate static                               | - m               |                    |   | drilling respectively  | n uopun t            |  | St Choourn                           |                        | ng unill   |  |
| appiox              | งกายเอ รเลเเต                               | , 116             | asureo             | uunng   |  |                      |  |                                      |                        |            |  |

| 9             | ARC   | ADIS               | )  | Drilling Log   |                |  |                                      | Sheet:                   | 3 of 8   |
|---------------|---|--------------------|--|--|----------------|--|--------------------------------------|--------------------------|--|
| Date S        | Started:  | 04/26/202          | 22   | Surface Elevation:   | 506.3          | 5 ft amsl  | Borin                                | a No.: F                 | R-02 8-inch  |
| Date C        | Completed:  | 04/27/202          | 22   | Northing (NAD83):  | <u>21010</u>   | 09.50  | Bonn                                 | <u>g non </u>            |  |
| Drilling      | Co.:  | ABC LIOV           | /IN  | Easting (NAD83):   | <u>76166</u>   | 42.75  | Client:                              | PG&E                     |  |
| Drilling      | Method:   | Roto-Son           | ic   | Total Depth:   | <u>145.0</u>   | ft bgs   | Project:                             | Final GW F               | Remedy Phase 2A  |
| Drill Ri      | д Туре:   | <u>Terra Sor</u>   | <u>iic Truc</u> ł                                      | <u>Mount</u> Conductor Casing Diameter:  | <u>9 inch</u>  | es   | Location:                            | PG&E Top                 | ock, Needles   |
| Driller       | Name:   | Eddie Ra           | mos  | Drill Casing Diameter:   | <u>8 inch</u>  | es   |                                      | <u>California</u>        |  |
| Drilling      | Asst:   | <u>J. Candel</u>   | aria / F.  | <u>Perez</u> Drill Bit:  | <u>8 inch</u>  | es   | Project Nu                           | mber: <u>3012</u>        | 26255  |
| Tool-P        | usher:  | N/A                |  | Depth to First Water:  | <u>60.0 ft</u> | bgs  |                                      |                          |  |
| Rig Ge        | eologist:   | G. Wilford         | l / A. Mo  | clntyre Converted to Well:   | X Ye           | s 🗌 No   |                                      |                          |  |
| 2             | Drilling Run  | (ft)               |  | Description  |                |  |                                      |                          |  |
| Depth<br>(ft) | and Averag<br>Penetration F   | e USCS<br>ate Code | USCS<br>Class  | (See Pilot boring log for full geologic descriptions)  | Dr             | illing notes and observation temporary backfill ma         | ons confirmine<br>aterial in drill c | g presence of<br>uttings | Drilling Fluid   |
| 41            | Penetration<br>rates not<br>documented f<br>sonic drilling<br>not required p<br>Specificatior<br>33 22 00 | or<br>er<br>N/A    | x x x x x x x x x x x x x x x x x x x                  | (23-50 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4).<br>(50-72 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). | (47.<br>the    | 0 - 57.0') Flushing the 8-i<br>6-inch diameter drill casir | nch diameter<br>ng.                  | drill casing ove         | r (47.0 - 57.0')<br>300 gallons of water<br>used; 50 gallons of<br>water recovered; 250<br>gallons of water lost |
| 58            |   |                    | × × × × × × × × × × × × × × × × × × ×                  |  | (57.<br>the    | 0 - 67.0') Flushing the 8-i<br>6-inch diameter drill casir | nch diameter<br>ng.                  | drill casing ove         | r (57.0 - 67.0')<br>200 gallons of water<br>used; 90 gallons of<br>water recovered; 110<br>gallons of water lost |
| í⊢ –          |   |                    | $\begin{vmatrix} x & x & x \\ x & x & x \end{vmatrix}$ |  |                |  |                                      |                          |  |
| 60            | viations: 110   | <br>209 – Unit     | IX X X I   | Classification System ft - fact has - 1  |                | round surface amo  | I - abovo m                          | ean coa lav              |  |
| around        | water Net   |                    |  | bollow blue water table marks roproser   | nt danth       | nound sunace, ams  |                                      | orod during              | drilling and   |
| boores        | vimate stati  |                    |  | drilling respectively  | n uepu         | i to water (it. bys.) II                                   |                                      |                          |  |
| appios        | งกายเอ รเยเต  | measured           | uuung  |  |                |  |                                      |                          |  |

| 9        | ARC                         | ٩DI            | S  | Drilling Log   |                               |                     | Sheet: 4            | 4 of 8                                      |
|----------|-----------------------------|----------------|--|--|-------------------------------|---------------------|---------------------|---|
| Date S   | Started:                    | 04/26/2        | 2022   | Surface Elevation:   | 506.35 ft amsl                | Borin               | a No.: ER           | 8-02 8-inch                                 |
| Date C   | Completed:                  | <u>04/27/2</u> | 2022   | Northing (NAD83):  | 2101009.50                    |                     | <u> </u>            |   |
| Drilling | Co.:                        | <u>ABC L</u>   | OVIN   | Easting (NAD83):   | 7616642.75                    | _ Client:           | PG&E                |   |
| Drilling | Method:                     | Roto-S         | onic   | Total Depth:   | 145.0 ft bgs                  | _ Project:          | Final GW Re         | medy Phase 2A                               |
| Drill Ri | g Type:                     | Terra S        | Sonic Tru  | <u>ick Mount</u> Conductor Casing Diameter:  | 9 inches                      | _ Location:         | PG&E Topoc          | k, Needles                                  |
| Driller  | Name:                       | <u>Eddie l</u> | Ramos  | Drill Casing Diameter:   | 8 inches                      | _                   | California          |   |
| Drilling | Asst:                       | <u>J. Can</u>  | delaria /  | F. <u>Perez</u> Drill Bit:   | 8 inches                      | _ Project Nu        | umber: <u>30126</u> | 255   |
| Tool-P   | usher:                      | <u>N/A</u>     |  | Depth to First Water:  | <u>60.0 ft bgs</u>            | -                   |                     |   |
| Rig Ge   | eologist:                   | <u>G. Wilf</u> | ord / A.   | <u>McIntyre</u> Converted to Well:   |                               |                     |                     |   |
| Dopth    | Drilling Run                | (ft)           |  | Description  | Drilling potos and observat   | iono confirmin      | a processo of       |   |
| (ft)     | and Averag<br>Penetration R | e Co           | de Clas  | s (See Pilot boring log for<br>full geologic descriptions)   | temporary backfill m          | aterial in drill c  | cuttings            | Drilling Fluid                              |
| 61       |                             |                | × ×<br>× ×<br>× ×  | <ul> <li>X (50-72 ft) Sedimentary Rock - Conglomerate;</li> <li>X (reddish brown (2.5YR 5/4).</li> <li>X (60 ft) Observed slight moisture on rock</li> <li>X (fragment.</li> </ul> |                               |                     |                     |   |
|          |                             |                |  | ×  |                               |                     |                     |   |
| 62       |                             |                |  | x x  |                               |                     |                     |   |
|          |                             |                | × ×<br>× ×   | × )<br>× )   |                               |                     |                     |   |
| 63       |                             |                |  |  |                               |                     |                     |   |
|          |                             |                | × ×<br>× ×   | × }  |                               |                     |                     |   |
| 64       |                             |                |  | × )<br>× )   |                               |                     |                     |   |
|          |                             |                | × ×  | ×  |                               |                     |                     |   |
| 65       |                             |                | × ×<br>× ×   | X }  |                               |                     |                     |   |
|          |                             |                |  | ×  |                               |                     |                     |   |
| 66       |                             | N/             |  | ×  |                               |                     |                     |   |
|          |                             |                | × ×<br>× ×   | × )  |                               |                     |                     |   |
| 67       |                             |                |  | ×  |                               |                     |                     | (07.077.0)                                  |
|          |                             |                | × ×  | x l  | the 6-inch diameter drill cas | -inch diameter ing. | drill casing over   | (67.0 - 77.0')<br>300 gallons of water      |
| 68       |                             |                | $\times \times \times \times$                                  | ×  |                               | -                   |                     | used; 270 gallons of<br>water recovered: 30 |
|          |                             |                |  | ×  |                               |                     |                     | gallons of water lost                       |
| 69       | Penetration                 |                |  |  |                               |                     |                     |   |
|          | rates not                   | or             |  | ×  |                               |                     |                     |   |
| 70       | sonic drilling              |                | × ×  | x k  |                               |                     |                     |   |
|          | not required p              | er             | × ×<br>× ×   | ×  |                               |                     |                     |   |
| 71       | 33 22 00                    |                |  | ×  |                               |                     |                     |   |
|          |                             |                | x x  | Î  |                               |                     |                     |   |
| 72       |                             |                |  | × )<br>× / (70 70 5 6) N - 5   |                               |                     |                     |   |
|          |                             |                |  | (12-13.5 ft) No Recovery; see Drilling Notes.  |                               |                     |                     |   |
| _73_     |                             | N/             | •   X  |  |                               |                     |                     |   |
|          |                             |                | _/   |  | _                             |                     |                     |   |
| 74       |                             |                | $\hat{\mathbf{x}}$   | <pre>x ((3.5-o2 ii) Sedimentary Rock - Congiomerate;<br/>x (reddish brown (2.5YR 5/4).</pre>   |                               |                     |                     |   |
|          |                             |                | × ×<br>× ×   | x 1(/4-/4.3 tt) Rock fragments are moist.  |                               |                     |                     |   |
| 75       |                             |                |  | I  |                               |                     |                     |   |
|          |                             |                | × ×<br>× ×   | × I  |                               |                     |                     |   |
| 76       |                             |                |  | ×  |                               |                     |                     |   |
|          |                             |                |  |  |                               |                     |                     |   |
| 77       |                             | N/             | $ A \begin{vmatrix} \hat{x} & \hat{x} \\ x & x \end{vmatrix} $ | x }  |                               | inch Provid         | duill an i          |   |
|          |                             |                |  | × }  | the 6-inch diameter drill cas | ing.                | uriii casing over   | (77.0 - 87.0')<br>300 gallons of water      |
| 78       |                             |                |  | ×  |                               |                     |                     | used; 270 gallons of<br>water recovered: 30 |
|          |                             |                |  | ×  |                               |                     |                     | gallons of water lost                       |
| 79       |                             |                | × ×<br>× ×   | × }  |                               |                     |                     |   |
|          |                             |                |  | ×  |                               |                     |                     |   |
| 80       |                             |                |  | x h  |                               |                     |                     |   |
| Abbre    | viations: US                | SCS = l        | Inified S  | oil Classification System, ft = feet, bgs =  | pelow ground surface, am      | sl = above n        | nean sea level      | , GW =                                      |
| ground   | dwater, Not                 | es: solic      | blue an  | d hollow blue water table marks represe  | t depth to water (ft. bgs.) f | first encount       | tered during di     | rilling and                                 |
| approx   | amate statio                | : measu        | red duri   | ng drilling, respectively.   |                               |                     |                     |   |

| 9             | ARC                         | 4[          | DIS            |   | Drilling Log  | LOG Sheet: 5 of |   |  |                         |           | of 8                                      |
|---------------|-----------------------------|-------------|----------------|---|---|-----------------|---|--|-------------------------|-----------|---|
| Date S        | Started:                    | <u>04</u> / | /26/202        | 2   | Surface Elevation:  | 506.35          | 5 ft amsl                                       | - Borin  | a No ·                  | FR-       | 02 8-inch                                 |
| Date 0        | Completed:                  | <u>04</u> / | 27/202         | 2   | Northing (NAD83):   | <u>21010</u>    | 09.50   |  | 9 110                   |           |   |
| Drilling      | g Co.:                      | <u>AB</u>   | C LIOV         | 'IN   | Easting (NAD83):  | <u>76166</u>    | 42.75   | Client:  | PG&E                    |           |   |
| Drilling      | g Method:                   | <u>Ro</u>   | <u>to-Soni</u> | с   | Total Depth:  | 145.0           | ft bgs  | Project:   | Final GW                | / Reme    | edy Phase 2A                              |
| Drill R       | ig Type:                    | Te          | rra Son        | <u>ic Truc</u> ł  | <u>Mount</u> Conductor Casing Diameter:                                     | <u>9 inche</u>  | es  | Location:  | PG&E To                 | opock,    | Needles                                   |
| Driller       | Name:                       | Ed          | die Rar        | nos   | Drill Casing Diameter:  | <u>8 inche</u>  | es  |  | California              | a         |   |
| Drilling      | g Asst:                     | <u>J. (</u> | Candela        | aria / F.   | <u>Perez</u> Drill Bit:   | <u>8 inche</u>  | es  | Project Νι                                       | umber: <u>30</u>        | 12625     | 5   |
| Tool-F        | Pusher:                     | <u>N//</u>  | 4              |   | Depth to First Water:   | <u>60.0 ft</u>  | bgs   |  |                         |           |   |
| Rig G         | eologist:                   | <u>G.</u>   | Wilford        | / A. Mo   | Intyre Converted to Well:   | 🛛 Ye            | s 🗌 No  |  |                         |           |   |
|               | Drilling Run                | (ft)        |                |   | Description   |                 |   |  |                         |           |   |
| Depth<br>(ft) | and Averag<br>Penetration F | le<br>Rate  | USCS<br>Code   | USCS<br>Class   | (See Pilot boring log for full geologic descriptions)                       | Dri             | lling notes and obse<br>temporary backf         | ervations confirming<br>fill material in drill c | g presence o<br>uttings | of        | Drilling Fluid                            |
| 5             | _                           |             |                | × × ×<br>× × ×  | (73.5-82 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |                 |   |  |                         |           |   |
| 81            | _                           |             | N/A            |   |   |                 |   |  |                         |           |   |
|               |                             |             | 11/7           | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$   |   |                 |   |  |                         |           |   |
| 82            |                             |             |                | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$                          |   |                 |   |  |                         |           |   |
|               |                             |             |                | $\backslash$  | (82-84.5 ft) No Recovery; see Drilling Notes.                               |                 |   |  |                         |           |   |
| 83            |                             |             |                | $  \setminus /  $   |   |                 |   |  |                         |           |   |
|               |                             |             | NR             | X   |   |                 |   |  |                         |           |   |
|               |                             |             |                | $  / \rangle  $   |   |                 |   |  |                         |           |   |
|               |                             |             |                | $/ \setminus$   |   |                 |   |  |                         |           |   |
| 85            |                             |             |                | × × ×<br>× × ×  | (84.5-117 ft) Sedimentary Rock - Conglomerate<br>reddish brown (2 5YR 5/4)  |                 |   |  |                         |           |   |
|               |                             |             |                | × × ×<br>× × ×<br>× × ×   |   |                 |   |  |                         |           |   |
| 86            |                             |             |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
|               |                             |             |                | × × ×<br>× × ×  | ,   | HC              |   |  |                         |           |   |
| 87            |                             |             |                |   |   |                 |   |  |                         |           |   |
|               |                             |             |                | × × ×<br>× × ×  |   | (87.)           | 0 - 97.0') Flushing tł<br>5-inch diameter drill | ne 8-inch diameter casing.                       | drill casing c          | over      | (87.0 - 97.0')<br>400 gallons of water    |
|               |                             |             |                | $\times \times \times$<br>$\times \times \times$  |   |                 |   |  |                         |           | used; 360 gallons of water recovered: 40  |
|               | _                           |             |                | × × × × × ×   |   |                 |   |  |                         |           | gallons of water lost                     |
|               | Penetration                 |             |                | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$                          |   |                 |   |  |                         |           |   |
|               | rates not                   |             |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
| 90            | documented f                | or          |                | $\times \times \times$  |   |                 |   |  |                         |           |   |
|               | not required p              | er          |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
| 91            | Specification<br>33 22 00   | וו          |                | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$  |   |                 |   |  |                         |           |   |
|               | -                           |             |                | $\hat{x} \times \hat{x}$  |   |                 |   |  |                         |           |   |
| 92            | -                           |             | NUA            | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
|               | -                           |             | IN/A           |   |   |                 |   |  |                         |           |   |
| <u>93</u> 93  | -                           |             |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
| 5             | -                           |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                 |   |  |                         |           |   |
| 94            | -                           |             |                | × × ×<br>× × ×  | (94 ft) Slight increase in competent rock                                   |                 |   |  |                         |           |   |
|               | -                           |             |                | $\begin{array}{c} & & \times & \times \\ \times & \times & \times & \times \\ \times & \times & \times &$ | fragments.  |                 |   |  |                         |           |   |
| <u>95</u>     | 1                           |             |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
|               | -                           |             |                | × × ×<br>× × ×<br>× × ×   |   |                 |   |  |                         |           |   |
|               | -                           |             |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
|               | 1                           |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \\ \times \times \end{array}$              |   |                 |   |  |                         |           |   |
| -91_          | 1                           |             |                | × × × ×   |   | (97.            | 0 - 107.0') Flushing                            | the 8-inch diamete                               | r drill casing          | over      | (97.0 - 107.0')                           |
| 08            | 1                           |             |                | × × ×<br>× × ×  |   |                 | o-mon diameter d'ill                            | casing.  |                         |           | used; 270 gallons of                      |
|               | -                           |             |                | $\hat{\mathbf{x}}$  |   |                 |   |  |                         |           | water recovered; 30 gallons of water lost |
| <br>00        | 1                           |             |                | × × ×<br>× × ×  |   |                 |   |  |                         |           |   |
|               | 1                           |             |                | × × ×<br>× × ×<br>× × ×   |   |                 |   |  |                         |           |   |
| 100           | 1                           |             |                |   |   |                 |   |  |                         |           |   |
| Abbre         | viations: US                | scs         | s = Unif       | ied Soil  | Classification System, ft = feet, bgs = I                                   | elow g          | round surface,                                  | amsl = above n                                   | nean sea l              | evel, G   | SW =                                      |
| groun         | dwater, Not                 | es: s       | solid blu      | le and l  | nollow blue water table marks represer                                      | t depth         | to water (ft. bg                                | s.) first encount                                | ered durir              | ng drilli | ng and                                    |
| appro         | ximate statio               | : me        | easured        | during  | drilling, respectively.   |                 |   |  |                         |           |   |

| 9          | ARC            | ADI:            | S   | Drilling Log   |  | Sheet:  | 6 of 8                                      |
|------------|----------------|-----------------|---|--|--|---|---|
| Date S     | Started:       | 04/26/2         | 022   | Surface Elevation:                                       | 506.35 ft amsl                                   | Boring No.  | ER-02 8-inch                                |
| Date 0     | Completed:     | <u>04/27/2</u>  | 022   | Northing (NAD83):  | 2101009.50                                       |   |   |
| Drilling   | g Co.:         | ABC LI          | DVIN  | Easting (NAD83):   | 7616642.75                                       | Client: <u>PG&amp;E</u>                                   |   |
| Drilling   | g Method:      | Roto-So         | onic  | Total Depth:   | <u>145.0 ft bgs</u>                              | Project: <u>Final GW</u>                                  | Remedy Phase 2A                             |
| Drill R    | ig Type:       | <u>Terra S</u>  | onic Truc   | <u>k Mount</u> Conductor Casing Diameter:                | 9 inches   | Location: <u>PG&amp;E To</u>                              | pock, Needles                               |
| Driller    | Name:          | Eddie R         | amos  | Drill Casing Diameter:                                   | 8 inches   | <u>California</u>   |   |
| Drilling   | g Asst:        | J. Cand         | elaria / F.   | <u>Perez</u> Drill Bit:                                  | 8 inches   | Project Number: <u>30</u> 2                               | 126255                                      |
|            | usher:         |                 |   | Depth to First Water:                                    |  |   |   |
|            | eologist:      | <u>G. WIIIC</u> | ra / A. Mi  |  |  |   |   |
| Depth      | Drilling Run   | (ft) USC        | s uscs  | Description  | Drilling notes and ob                            | servations confirming presence of                         |   |
| (ft)       | Penetration F  | le<br>Rate Cod  | e Class   | (See Pilot boring log for<br>full geologic descriptions) | temporary bac                                    | ckfill material in drill cuttings                         | Drilling Fluid                              |
| 5<br>      |                |                 | × × ×   | (84.5-117 ft) Sedimentary Rock - Conglomerate            | ;  |   |   |
|            | -              |                 | $\hat{\times} \hat{\times} \hat{\times}$                                    | reddish brown (2.5YR 5/4).                               | _  |   |   |
| 101        | -              |                 | <u>× × ×</u><br>× × ×   | (100.7-1011t) Rock fragments are moist.                  |  |   |   |
|            | -              |                 |   |  |  |   |   |
| s102       |                |                 |   |  |  |   |   |
|            | -              |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |  |  |   |   |
| 103        | -              |                 |   |  |  |   |   |
|            | -              |                 | × × × ×   | 2  |  |   |   |
| 104        |                |                 |   |  |  |   |   |
|            | -              |                 | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                                  |  |  |   |   |
| <u>105</u> | -              |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        | 2  |  |   |   |
|            | -              |                 |   |  |  |   |   |
| 106        | -              |                 | × × ×<br>× × ×  |  |  |   |   |
|            | -              |                 | $\begin{array}{c} \times \times \times \\ \times \times \\ \end{array}$     |  |  |   |   |
| 1U/        | -              |                 | $\hat{\times}$ $\hat{\times}$ $\hat{\times}$                                |  | (107.0 - 117.0') Flushi                          | ing the 8-inch diameter drill casing                      | (107.0 - 117.0')                            |
| 100        | -              |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |  | over the 6-inch diame                            | ter drill casing.   | used; 200 gallons of water                  |
| =IUa<br>s  |                |                 |   |  |  |   | water recovered; 0<br>gallons of water lost |
| 100        |                | N/A             | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |  |  |   |   |
|            | Penetration    |                 |   |  |  |   |   |
| 110        | documented f   | or              | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |  |  |   |   |
|            | sonic drilling | )<br>er         |   |  |  |   |   |
|            | Specification  | 1               | $\hat{\times} \hat{\times} \hat{\times} \hat{\times}$                       |  |  |   |   |
|            | 33 22 00       |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        | •  |  |   |   |
| 112        |                |                 |   |  |  |   |   |
|            |                |                 | × × × × ×   | <b>k</b>   |  |   |   |
| 113        |                |                 | $\times \times \times$  |  |  |   |   |
|            |                |                 | × × ×   | 2<br>2   |  |   |   |
| 114        |                |                 | $\times \times \times$  |  |  |   |   |
|            |                |                 |   |  |  |   |   |
|            |                |                 | × × ×<br>× × ×  | 2  |  |   |   |
|            |                |                 |   |  |  |   |   |
|            |                |                 | $\times \times \times \times$   | 2  |  |   |   |
|            |                |                 | $\times \times \times$  | 2  |  |   |   |
|            | -              |                 | $\hat{\mathbf{x}} \hat{\mathbf{x}} \hat{\mathbf{x}}$                        |  |  |   | (447.0                                      |
|            | -              |                 | \ /   | ((117-120 ft) No Recovery; see Drilling Notes.           | (117.0 - 127.0') Flushi<br>over the 6-inch diame | ing the 8-inch diameter drill casing<br>ter drill casing. | (117.0 - 127.0')<br>150 gallons of water    |
|            | -              |                 | $  \rangle /$   |  |  |   | used; 150 gallons of<br>water recovered: 0  |
|            | -              | NR              | $ $ $\vee$  |  |  |   | gallons of water lost                       |
|            | -              |                 |   |  |  |   |   |
|            | -              |                 | $ / \rangle$  |  |  |   |   |
| 120        |                |                 |   |  |  |   |   |
| Abbre      | viations: U    | SCS = U         | nified Soi  | Classification System, ft = feet, bgs = I                | below ground surface                             | e, amsl = above mean sea le                               | evel, GW =                                  |
| groun      | awater, Not    | es: solid       | blue and  | nollow blue water table marks represer                   | it depth to water (ft. b                         | gs.) first encountered during                             | g drilling and                              |
| approx     | ximate static  | ; measur        | ea auring   | arilling, respectively.                                  |  |   |   |

| 9            | ARC            | ٩D           | IS             |  | Drilling Log  |  |                    | Sheet:              | 7 of 8                                    |
|--------------|----------------|--------------|----------------|--|---|--|--------------------|---------------------|---|
| Date S       | Started:       | 04/26        | 6/202          | 2  | Surface Elevation:  | 506.35 ft amsl   | Borin              | a No.: ER           | 2-02 8-inch                               |
| Date C       | Completed:     | <u>04/27</u> | 7/202          | 2  | Northing (NAD83):   | 2101009.50   |                    | <u> </u>            |   |
| Drilling     | J Co.:         | <u>ABC</u>   | LIOV           | 'IN  | Easting (NAD83):  | 7616642.75   | Client:            | PG&E                |   |
| Drilling     | Method:        | Roto-        | -Soni          | С  | Total Depth:  | <u>145.0 ft bgs</u>  | Project:           | <u>Final GW Re</u>  | medy Phase 2A                             |
| Drill Ri     | g Type:        | <u>Terra</u> | a Son          | ic Truck   | <u>K Mount</u> Conductor Casing Diameter:                                   | 9 inches   | Location:          | PG&E Topoc          | k, Needles                                |
| Driller      | Name:          | <u>Eddie</u> | e Ran          | nos  | Drill Casing Diameter:  | 8 inches   |                    | California          | _   |
| Drilling     | Asst:          | <u>J. Ca</u> | andela         | aria / F.  | <u>Perez</u> Drill Bit:   | <u>8 inches</u>  | Project Nu         | imber: <u>30126</u> | 255                                       |
|              | 'usner:        | <u>N/A</u>   | / : l£ = 1 = d | / ^  | Depth to First Water:   |  |                    |                     |   |
|              | eologist.      | <u>G. w</u>  |                | / A. IVIC  |   |  |                    |                     |   |
| Depth        | Drilling Run   | (ft) U       | ISCS           | USCS   | Description   | Drilling notes and observation                               | ons confirming     | presence of         |   |
| (ft)         | Penetration R  | e C          | Code           | Class  | (See Pilot boring log for<br>full geologic descriptions)                    | temporary backfill ma  | iterial in drill c | uttings             | Drilling Fiuld                            |
| 5            |                |              |                |  | (120-127 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |  |                    |                     |   |
| 121          |                |              |                | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$                               | (120.01-122 π) Rock fragments are moist.                                    |  |                    |                     |   |
|              |                |              |                | $\hat{x} \times \hat{x}$   |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              |                |  |   |  |                    |                     |   |
| 123          |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              | N/A            | × × ×<br>× × ×<br>× × ×  |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
| <u> </u>     |                |              |                | × × × × ×  |   |  |                    |                     |   |
| 125_         |                |              |                |  |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
| 126          |                |              |                | $\begin{array}{c} X \times X \\ X \times X \\ X \times X \end{array}$                        |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              | Penetration    |              |                | $\times \times \times$   | (127-129.4 ft) No Recovery; see Drilling Notes.                             | (127.0 - 137.0') Approximately                               | y 20 ft of drill o | casing was          | (127.0 - 137.0')                          |
|              | rates not      |              |                | $\setminus$ /  |   | retracted to free up the casing advance 8-inch diameter casi | g, prior to coni   | tinuing to          | 300 gallons of water used; 270 gallons of |
| 128<br>      | sonic drilling |              | NR             | $\mathbf{V}$   |   |  | 5                  |                     | water recovered; 30                       |
|              | not required p | er           |                |  |   |  |                    |                     | gailons of water lost                     |
| 129_         | 33 22 00       |              |                | $/ \setminus$  |   |  |                    |                     |   |
| 120          |                |              |                | × × ×<br>× × ×   | (129.4-145 ft) Sedimentary Rock -   |  |                    |                     |   |
| 5ISU         |                |              |                | $\times \times \times$   |   |  |                    |                     |   |
| 5 – –<br>131 |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              |                | $\times$    | <b>•</b>  |  |                    |                     |   |
| 132          |                |              |                |  |   |  |                    |                     |   |
|              |                |              |                | $\begin{array}{c} \times \times \times \\ \times \times \times \\ \times \times \end{array}$ |   |  |                    |                     |   |
| 133          |                |              |                |  |   |  |                    |                     |   |
|              |                |              |                | $\begin{array}{c} \times \times \times \\ \times \times \times \\ \times \times \end{array}$ |   |  |                    |                     |   |
| 134          |                |              |                |  |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              | N/A            | × × ×<br>× × ×<br>× × ×  |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×<br>× × ×  |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              |                | $\begin{array}{c} \times \times \times \\ \times \times \times \\ \times \times \end{array}$ |   | (1270 1150) Eluching the -                                   | 9 inch diamat      | or drill opping     | (137.0 145.0)                             |
|              |                |              |                | × × × ×  |   | over the 6-inch diameter drill                               | casing. Trippe     | ed out the 6-inch   | 250 gallons of water                      |
| 138_         |                |              |                | × × ×<br>× × ×   |   | aiameter arili casing.                                       |                    |                     | used, 225 gallons of water recovered; 25  |
| - –          |                |              |                | $\hat{\mathbf{x}}$   |   |  |                    |                     | gallons of water lost                     |
|              |                |              |                | × × ×<br>× × ×   |   |  |                    |                     |   |
|              |                |              |                | × × ×<br>× × ×<br>× × ×  |   |  |                    |                     |   |
| 140          | viationa: 11   |              | - Linif        |  | Classification System ft - fast here - h                                    |  |                    |                     | CW/ -                                     |
|              | dwater Not     |              | lid hli        | ieu 3011<br>je and F   | ollow blue water table marks represent                                      | t depth to water (ft. bos ) fir                              | st encount         | ered during d       | , Gvv –<br>rilling and                    |
| approv       | kimate static  | ; meas       | sured          | durina   | drilling, respectively  |  |                    |                     |   |
|              |                | moue         | 24100          | aanny  |   |  |                    |                     |   |

| 9          | ARC                       | 4[           | DIS           |   |               | Drilling Log                       |                  |          |               |                                      | Shee              | et: 8          | of 8           |
|------------|---------------------------|--------------|---------------|---|---------------|------------------------------------|------------------|----------|---------------|--------------------------------------|-------------------|----------------|----------------|
| Date S     | Started:                  | 04/2         | 26/202        | 2   |               | _Surface Elevation:                | <u>506.35 f</u>  | ft amsl  |               | Borin                                | a No.:            | FR-(           | 02 8-inch      |
| Date C     | Completed:                | <u>04/</u>   | 27/202        | 2   |               | _Northing (NAD83):                 | 210100           | 9.50     |               | Bonni                                | 9 110             |                |                |
| Drilling   | Co.:                      | <u>AB</u>    | C LIOV        | /IN   |               | _Easting (NAD83):                  | <u>761664</u> 2  | 2.75     |               | Client:                              | PG&E              |                |                |
| Drilling   | Method:                   | <u>Rot</u>   | <u>o-Soni</u> | с   |               | _Total Depth:                      | <u>145.0 ft</u>  | bgs      |               | Project:                             | Final G           | N Reme         | edy Phase 2A   |
| Drill Ri   | д Туре:                   | Ter          | ra Son        | <u>ic Truc</u> ł  | <u> Mount</u> | _Conductor Casing Diameter:        | <u>9 inches</u>  | 6        |               | Location:                            | <u>PG&amp;E 1</u> | <u>Fopock,</u> | Needles        |
| Driller    | Name:                     | <u>Edc</u>   | die Ran       | nos   |               | Drill Casing Diameter:             | <u>8 inches</u>  | 6        |               |                                      | <u>Californ</u>   | ia             |                |
| Drilling   | Asst:                     | <u>J. C</u>  | Candela       | aria / F.   | Perez         | _Drill Bit:                        | <u>8 inches</u>  | 6        |               | Project Nu                           | mber: 3           | 012625         | 5              |
| Tool-F     | usher:                    | <u>N/A</u>   | ۱             |   |               | _Depth to First Water:             | <u>60.0 ft b</u> | gs       |               |                                      |                   |                |                |
| Rig Ge     | eologist:                 | <u>G. \</u>  | Wilford       | / A. Mo   | Intyre        | Converted to Well:                 | $\times$ Yes     | No       | D             |                                      |                   |                |                |
|            | Drilling Pup              | (ft)         |               |   |               | Description                        |                  |          |               |                                      |                   |                |                |
| Depth      | and Averag                | le           | USCS<br>Code  | USCS<br>Class   |               | (See Pilot boring log for          | Drilli           | ng notes | and observati | ons confirming<br>aterial in drill c | presence          | of             | Drilling Fluid |
|            | Penetration R             | late         | • • • • •     |   |               | full geologic descriptions)        |                  |          |               |                                      | 3-                |                |                |
| 5          |                           |              |               | × × × × × ×   | (129.4-14     | 5 ft) Sedimentary Rock -           |                  |          |               |                                      |                   |                |                |
| 1/1        |                           |              |               | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  | Congrom       | erate, redustrbrown (2.5 f K 5/4). |                  |          |               |                                      |                   |                |                |
| 141        | Penetration               |              |               | $\times$ $\times$ $\times$  |               |                                    |                  |          |               |                                      |                   |                |                |
|            | rates not                 | ior I        |               | $\hat{x} \hat{x} \hat{x}$   |               |                                    |                  |          |               |                                      |                   |                |                |
| s142       | sonic drilling            | 1            |               | $\times$ $\times$ $\times$ $\times$   |               |                                    |                  |          |               |                                      |                   |                |                |
|            | not required p            | er           | N/A           | $\times \times $ |               |                                    |                  |          |               |                                      |                   |                |                |
| 143        | Specification<br>33 22 00 | י            |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            | 55 EE 00                  |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               | × × ×<br>× × ×  |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$   |               |                                    |                  |          |               |                                      |                   |                |                |
| 145        |                           |              |               | $\mathbf{x} \mathbf{x} \mathbf{x}$  | End of Bo     | pring at 145 ft bos                |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   | Lind of De    | ning at 140 it bgs.                |                  |          |               |                                      |                   |                |                |
| 146        |                           |              |               |   |               |                                    | Uh               |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 147        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 148        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 151        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               | •                                  |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 153        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 1.54       |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 155        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 150        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 15/        |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| <u>158</u> |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
|            |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| <u> </u>   |                           |              |               |   |               |                                    |                  |          |               |                                      |                   |                |                |
| 160        | viotiona: 110             | 200          | - 11-:0       | ind C-"   | Close         | notion System ft - fact har -      | holow            |          | urface are -  |                                      | 000 c==           |                | γ\Λ/ —         |
|            | vialions: US              | 505<br>00: 7 |               |   |               | cauon System, II = Teel, bgs =     | below gro        | ouna su  | (ft bac) f    | n = above m                          | iean sea          | ievel, G       | avv =          |
| ground     | uwaler, NOte              | es: s        |               | ue and l  | drillin -     | reapostively                       | n depth t        | o water  | (ii. bgs.) fi | rst encount                          | erea aur          | ny arilli      | ng anu         |
| approx     | kimate static             | ; me         | asured        | auring  | arilling,     | respectively.                      |                  |          |               |                                      |                   |                |                |

|  | of 8                                    |  |
|--|---|--|
| Started: 04/24/2022 Surface Elevation: 506.35 ft amsl Boring No · FR-0   | 02 9-inch                               |  |
| Completed: 05/03/2022 Northing (NAD83): 2101009.50   |   |  |
| ng Co.: <u>ABC LIOVIN</u> Easting (NAD83): <u>7616642.75</u> Client: <u>PG&amp;E</u>   |   |  |
| ng Method: <u>Roto-Sonic</u> Total Depth: <u>145.0 ft bgs</u> Project: <u>Final GW Reme</u>  | edy Phase 2A                            |  |
| Rig Type:         Terra Sonic Truck Mount         Conductor Casing Diameter:         N/A         Location:         PG&E Topock,  | Needles                                 |  |
| er Name: <u>Eddie Ramos</u> Drill Casing Diameter: <u>9 inches</u> <u>California</u>   |   |  |
| ng Asst: <u>J. Candelaria / F. Perez</u> Drill Bit: <u>9 inches</u> Project Number: <u>3012625</u>   | 5                                       |  |
| -Pusher: <u>N/A</u> Depth to First Water: <u>60.0 ft bgs</u>   |   |  |
| Geologist: <u>G. Wilford / A. McIntyre</u> Converted to Well: <u>X</u> Yes No  |   |  |
| th Drilling Run (ft) USCS USCS Description   |   |  |
| and Average Code Class (See Pilot boring log for temporary backfill material in drill cuttings   | Drilling Fluid                          |  |
| Tull geologic descriptions)  | (0.0                                    |  |
| 0.0 - 25.0 ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ ) Drilled to act as temporary conductor casing for $  0.0 - 25.0 $ . | (0.0 - 25.0 )<br>No drilling fluid used |  |
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| X X X (4 5 7 ft) Sadimentary Back, Constamentary   |   |  |
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| $\times \times \times $ {(7-22 ft) Sedimentary Rock - Conglomerate;<br>$\times \times \times $ } reddish brown (2 5YR 5/4)   |   |  |
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| rates not  |   |  |
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| not required per   |   |  |
| Specification     Image: Specification   |   |  |
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| reviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level. G   | W =                                     |  |
| indwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drillin   | ng and                                  |  |
| oximate static measured during drilling, respectively.   |   |  |

| 9                                      | ARC                         | 4           | DIS            |   | Drilling Log  |                    |   |                                      | Shee                | t: 2      | of 8   |
|--|-----------------------------|-------------|----------------|---|---|--------------------|---|--------------------------------------|---------------------|-----------|--|
| Date S                                 | Started:                    | 04          | /24/202        | 2   | Surface Elevation:                                    | <u>506.35 ft a</u> | msl   | Boring                               | a No ·              | ER-       | 02 9-inch                                    |
| Date C                                 | Completed:                  | <u>05</u> / | /03/202        | 2   | Northing (NAD83):                                     | <u>2101009.5</u>   | 0   | Douni                                | y 110               |           | <u>52 5-men</u>                              |
| Drilling                               | J Co.:                      | <u>AB</u>   | C LIO          | /IN   | Easting (NAD83):                                      | <u>7616642.7</u>   | 5   | Client:                              | PG&E                |           |  |
| Drilling                               | Method:                     | Ro          | to-Son         | ic  | Total Depth:  | <u>145.0 ft bg</u> | S   | Project:                             | Final GV            | V Reme    | edy Phase 2A                                 |
| Drill Ri                               | g Type:                     | Te          | rra Son        | <u>ic Trucl</u>   | <u>k Mount</u> Conductor Casing Diameter:             | N/A                |   | Location:                            | <u>PG&amp;E T</u>   | opock,    | Needles                                      |
| Driller                                | Name:                       | Ed          | <u>die Rar</u> | nos   | Drill Casing Diameter:                                | <u>9 inches</u>    |   |                                      | <u>Californi</u>    | а         |  |
| Drilling                               | Asst:                       | <u>J. (</u> | Candela        | aria / F.   | <u>Perez</u> Drill Bit:                               | <u>9 inches</u>    |   | Project Nu                           | mber: <u>3(</u>     | 012625    | 5  |
| Tool-F                                 | Pusher:                     | <u>N//</u>  | 4              |   | Depth to First Water:                                 | <u>60.0 ft bgs</u> |   |                                      |                     |           |  |
| Rig Ge                                 | eologist:                   | <u>G.</u>   | Wilford        | / A. Mo   | cIntyre Converted to Well:                            | 🛛 Yes 🗌            | No  |                                      |                     |           |  |
|  | Drilling Pup                | (ft)        |                |   | Description   |                    |   |                                      |                     |           |  |
| Depth<br>(ft)                          | and Averag<br>Penetration R | e<br>late   | USCS<br>Code   | USCS<br>Class   | (See Pilot boring log for full geologic descriptions) | Drilling r<br>te   | notes and observatic<br>mporary backfill ma | ons confirming<br>terial in drill cu | presence<br>uttings | of        | Drilling Fluid                               |
| 5                                      |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                | (7-22 ft) Sedimentary Rock - Conglomerate;            |                    |   |                                      |                     |           |  |
| 21                                     |                             |             | N1/A           | $\times$ $\times$ $\times$  |   |                    |   |                                      |                     |           |  |
|  |                             |             | N/A            | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                    |   |                                      |                     |           |  |
| <br>2                                  |                             |             |                | × × ×<br>× × ×  |   |                    |   |                                      |                     |           |  |
|  |                             |             |                | ŇĬ  | (22-23 ft) No Recovery; see Drilling Notes.           |                    |   |                                      |                     |           |  |
| 2 23                                   |                             |             | INK            |   |   |                    |   |                                      |                     |           |  |
|  | 1                           |             |                | $\left[ \begin{array}{c} \times \times \times \\ \times \times \end{array} \right]$ | (23-50 ft) Sedimentary Rock - Conglomerate;           | 71                 |   |                                      |                     |           |  |
| 24                                     | 1                           |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$         |   |                    |   |                                      |                     |           |  |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 1                           |             |                |   |   |                    |   |                                      |                     |           |  |
| 25                                     |                             |             |                | × × ×<br>× × ×  |   |                    |   |                                      |                     |           |  |
|  |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                | 2   | (25.0 - 37         | .0') Flush 9-inch dia                       | meter drill cas                      | sing over 8-        | inch      | (25.0 - 37.0')                               |
|  |                             |             |                | $\times \times \times$  |   | diameter           | drill casing to free it                     | up.                                  |                     |           | used; 150 gallons of water                   |
| 26                                     |                             |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                    |   |                                      |                     | 1         | water recovered; 200                         |
|  |                             |             |                | × × ×<br>× × ×  |   |                    |   |                                      |                     |           | ganono or wator loot                         |
| 27                                     |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$         |   |                    |   |                                      |                     |           |  |
|  |                             |             |                | $\times \times \times$  |   |                    |   |                                      |                     |           |  |
| 28                                     |                             |             |                |   |   |                    |   |                                      |                     |           |  |
|  |                             |             |                |   |   |                    |   |                                      |                     |           |  |
| 29                                     | Penetration                 |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$         |   |                    |   |                                      |                     |           |  |
| =                                      | rates not                   |             |                |   |   |                    |   |                                      |                     |           |  |
| 30                                     | sonic drilling              |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                    |   |                                      |                     |           |  |
|  | not required p              | er          |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                |   |                    |   |                                      |                     |           |  |
| 31                                     | Specification<br>33 22 00   | ו           |                | $\times$ $\times$ $\times$  |   |                    |   |                                      |                     |           |  |
|  | 00 22 00                    |             | N/A            |   |   |                    |   |                                      |                     |           |  |
| 32                                     |                             |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                    |   |                                      |                     |           |  |
|  |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                | 2   |                    |   |                                      |                     |           |  |
| 33                                     |                             |             |                | $\times$ $\times$ $\times$  |   |                    |   |                                      |                     |           |  |
|  |                             |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                    |   |                                      |                     |           |  |
| 34                                     |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                |   |                    |   |                                      |                     |           |  |
| NOMA-                                  |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$         |   |                    |   |                                      |                     |           |  |
| 35                                     |                             |             |                |   |   |                    |   |                                      |                     |           |  |
|  |                             |             |                |   |   |                    |   |                                      |                     |           |  |
| 36                                     | 1                           |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                | 2   |                    |   |                                      |                     |           |  |
|  | 1                           |             |                | $\times$ $\times$ $\times$  |   | (36.0') 8-i        | nch diameter drill ca                       | asing became                         | stuck.              |           | (36.0')<br>No drilling fluid and a           |
| 27                                     | 1                           |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |                    |   |                                      |                     |           | no anning huid used                          |
| <u>-</u> 3/_                           |                             |             |                |   |   | (37.0 - 47         | .0') Flush 9-inch dia                       | meter drill cas                      | sing over 8-        | inch      | (37.0 - 47.0')                               |
|  |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$         | 2   | diameter           | arili casing.                               |                                      |                     |           | ວ∠ວ gaiions of water<br>used; 293 gallons of |
| ვ <b></b> აბ                           |                             |             |                |   |   |                    |   |                                      |                     |           | water recovered; 32                          |
|  |                             |             |                |   |   |                    |   |                                      |                     |           | ganono or water lost                         |
| 39                                     |                             |             |                |   |   |                    |   |                                      |                     |           |  |
|  |                             |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                | 2   |                    |   |                                      |                     |           |  |
| 40<br>Abbrev                           | viations: 110               |             | <br>2 – 1 Inif |   | Classification System ft - fact has - 1               |                    | d surface ama                               | - abovo m                            |                     |           | 210/ -                                       |
|  | dwater Not                  |             |                | IDC UDI   | hollow blue water table marks represent               | t denth to v       | vater (ft. hae ) fir                        |                                      |                     | na drilli | na and                                       |
| approx                                 | vimate static               | - m         |                |   | drilling respectively                                 |                    | valei (il. bys.) III                        |                                      |                     | ng unill  |  |
|  | งแกลเย รเสเต                | , 1116      | asureo         | uunng   | นาแแบ่, เออุตอนเขยเง.                                 |                    |   |                                      |                     |           |  |

| 9            | ARC   | ADIS           | ,                                     |                             | Drilling Log   |             |                      |   |                    | Sheet:            | 3 of 8  |  |
|--------------|---|----------------|---------------------------------------|-----------------------------|--|-------------|----------------------|---|--------------------|-------------------|---|--|
| Date S       | started:                                    | 04/24/202      | 22                                    |                             | Surface Elevation:                                       | 5           | 06.35 ft             | amsl  | Borin              | g No.: E          | R-02 9-inch   |  |
| Date C       | completed:                                  | 05/03/202      | 22                                    |                             | Northing (NAD83):  | 2           | 101009               | .50   |                    | <u> </u>          |   |  |
| Drilling     | Co.:  | ABC LIO        | /IN                                   |                             | Easting (NAD83):   | 7           | 616642               | .75   | Client:            | PG&E              |   |  |
| Drilling     | Method:                                     | Roto-Son       | ic                                    |                             | Total Depth:   | 1           | <u>45.0 ft k</u>     | ogs   | Project:           | Final GW I        | Remedy Phase 2A   |  |
| Drill Ri     | д Туре:                                     | Terra Sor      | <u>iic Truck</u>                      | <u>k Mount</u>              | Conductor Casing Diameter                                | :: <u>N</u> | I/A                  |   | Location:          | PG&E Top          | ock, Needles  |  |
| Driller      | Name:                                       | Eddie Ra       | mos                                   |                             | Drill Casing Diameter:                                   | <u>9</u>    | inches               |   |                    | <u>California</u> |   |  |
| Drilling     | Asst:                                       | J. Candel      | aria / F.                             | Perez                       | Drill Bit:   | <u>9</u>    | inches               |   | Project Nu         | mber: <u>301</u>  | 26255   |  |
| Tool-P       | usher:                                      | <u>N/A</u>     |                                       |                             | Depth to First Water:                                    | 6           | <u>0.0 ft bc</u>     | js  |                    |                   |   |  |
| Rig Ge       | eologist:                                   | G. Wilford     | 1 / A. Mo                             | Intyre                      | Converted to Well:                                       | <u>&gt;</u> | Yes                  | No  |                    |                   |   |  |
| Denth        | Drilling Run                                | (ft) USCS      | 11909                                 |                             | Description  |             | Drillin              | a notes and observati                       | ons confirmin      | n presence of     |   |  |
| (ft)         | and Averag<br>Penetration R                 | e Code         | Class                                 |                             | (See Pilot boring log for<br>full geologic descriptions) |             |                      | temporary backfill ma                       | aterial in drill c | uttings           | Drilling Fluid  |  |
| 41           |   |                | × × × × × × × × × × × × × × × × × × × | (23-50 ft) \$<br>reddish br | Sedimentary Rock - Conglomerate;<br>own (2.5YR 5/4).     |             |                      |   |                    |                   |   |  |
| 42           |   |                | × × × × × × × × × × × × × × × × × × × |                             |  |             |                      |   |                    |                   |   |  |
| 43_<br>      |   |                | × × × × × × × × × × × × × × × × × × × |                             |  |             |                      | <b>N</b>                                    |                    |                   |   |  |
| <br>         |   | N1/A           | <pre></pre>                           |                             |  |             |                      | <b>9</b> \'                                 | -                  |                   |   |  |
| 46           |   | N/A            | * * *<br>* * *<br>* * *               |                             |  |             |                      |   |                    |                   |   |  |
| 47           |   |                | × × ×<br>× × ×<br>× × ×<br>× × ×      |                             |  |             | 0                    |   |                    |                   |   |  |
| 48           |   |                | × × ×<br>× × ×<br>× × ×<br>× × ×      |                             |  |             | (47.0 - 4<br>diamete | 57.0') Flush 9-inch dia<br>er drill casing. | ameter drill ca    | sing over 8-inc   | h (47.0 - 57.0')<br>325 gallons of water<br>used; 293 gallons of<br>water recovered: 32 |  |
| 49           | Penetration                                 |                | × × ×<br>× × ×<br>× × ×<br>× × ×      |                             |  |             |                      |   |                    |                   | gallons of water lost   |  |
| 50           | rates not<br>documented f<br>sonic drilling | or             | × × ×<br>× × ×<br>× × ×               | (50.70.0)                   |  |             | 7                    |   |                    |                   |   |  |
| 51           | not required p<br>Specificatior<br>33 22 00 | er<br>I        | × × × × × × × × × × × × × × × × × × × | reddish br                  | own (2.5YR 5/4).   |             | *                    |   |                    |                   |   |  |
| 52           |   |                | × × ×<br>× × ×<br>× × × ×             |                             |  |             |                      |   |                    |                   |   |  |
| _53_         |   |                | × × × × × × × × × × × × × × × × × × × |                             |  |             |                      |   |                    |                   |   |  |
| 54           |   |                | × × × × × × × × × × × × × × × × × × × |                             |  |             |                      |   |                    |                   |   |  |
| 55           |   | N/A            | × × × × × × × × × × × × × × × × × × × |                             |  |             |                      |   |                    |                   |   |  |
| 56           |   |                | × × × × × × × × × × × × × × × × × × × |                             |  |             |                      |   |                    |                   |   |  |
| 57           |   |                |                                       |                             |  |             | (57.0 - 0<br>diamete | 67.0') Flush 9-inch dia<br>er drill casing. | ameter drill ca    | sing over 8-inc   | h (57.0 - 67.0')<br>175 gallons of water  |  |
| 58<br>       |   |                | × × ×<br>× × ×<br>× × ×<br>× × ×      |                             |  |             |                      |   |                    |                   | recovered; 175 gallons<br>of water lost   |  |
| 59           |   |                | × × ×<br>× × ×<br>× × × ×<br>× × ×    |                             |  |             |                      |   |                    |                   |   |  |
| 60<br>Abbrev | viatione. 119                               | <br>SCS = Unit | ied Soil                              | Classific                   | ation System ft = feet has -                             | = bo        |                      | ind surface amo                             | l = ahove n        | iean sea loi      | el GW =   |  |
| around       | water. Not                                  | es: solid hl   | ue and H                              | nollow hl                   | ue water table marks represe                             | ent         | depth to             | water (ft. has ) fi                         | rst encount        | ered during       | drilling and  |  |
| approx       | kimate static                               | measured       | d during                              | drilling, r                 | espectively.   |             |                      |   |                    | unity             |   |  |

| 9        | ARC                         | ADIS             | 5  | Drilling Log  |                             |                       | Sheet:             | 4 of 8   |
|----------|-----------------------------|------------------|--|---|-----------------------------|-----------------------|--------------------|--|
| Date S   | Started:                    | 04/24/20         | 22   | Surface Elevation:  | 506.35 ft amsl              | - Borin               | a No.: EF          | R-02 9-inch  |
| Date C   | Completed:                  | <u>05/03/20</u>  | 22   | Northing (NAD83):   | 2101009.50                  |                       | <u> </u>           |  |
| Drilling | J Co.:                      | ABC LIO          | VIN  | Easting (NAD83):  | 7616642.75                  | Client:               | PG&E               |  |
| Drilling | Method:                     | Roto-Sor         | nic  | Total Depth:  | <u>145.0 ft bgs</u>         | Project:              | Final GW Re        | medy Phase 2A  |
| Drill Ri | д Туре:                     | <u>Terra So</u>  | <u>nic Truc</u>  | <u>k Mount</u> Conductor Casing Diameter:   | <u>N/A</u>                  | Location:             | PG&E Topod         | ck, Needles  |
| Driller  | Name:                       | Eddie Ra         | mos  | Drill Casing Diameter:  | 9 inches                    |                       | California         |  |
| Drilling | Asst:                       | J. Cande         | laria / F.   | <u>Perez</u> Drill Bit:   | 9 inches                    | Project Nu            | mber: <u>30126</u> | 255  |
| Tool-F   | usher:                      | <u>N/A</u>       |  | Depth to First Water:   | <u>60.0 ft bgs</u>          |                       |                    |  |
| Rig Ge   | eologist:                   | <u>G. Wilfor</u> | d / A. Mo  | clntyre Converted to Well:  |                             |                       |                    |  |
|          | Drilling Run                | (ft)             | 11000  | Description   | Drilling notes and show     |                       |                    |  |
| (ft)     | and Āverag<br>Penetration F | e Code           | Class  | (See Pilot boring log for full geologic descriptions)   | temporary backfill          | l material in drill c | uttings            | Drilling Fluid   |
| 61       |                             |                  |  | (50-72 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4).<br>(60 ft) Observed slight moisture on rock |                             |                       |                    |  |
|          |                             |                  | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ |   |                             |                       |                    |  |
| 62       |                             |                  |  |   |                             |                       |                    |  |
|          |                             |                  |  |   |                             |                       |                    |  |
| 63       |                             |                  | × × ×<br>× × ×<br>× × ×  |   |                             |                       |                    |  |
| 64       |                             |                  |  |   |                             |                       |                    |  |
|          |                             |                  |  |   |                             | •                     |                    |  |
| 05<br>   |                             |                  | × × ×<br>× × ×<br>× × ×  |   |                             |                       |                    |  |
| 66       |                             | N/A              | × × ×<br>× × ×<br>× × ×<br>× × ×                                     |   | 6                           |                       |                    |  |
| 67       |                             |                  | × × ×<br>× × ×<br>× × ×  |   | (67.0 - 77.0') Flush 9-inch | n diameter drill cas  | sing over 8-inch   | (67.0 - 77.0')   |
| 68       |                             |                  | × × ×<br>× × ×<br>× × ×<br>× × ×                                     |   | diameter unit casing.       |                       |                    | used; 0 gallons of water<br>recovered; 125 gallons                         |
| 69       | Penetration                 |                  | × × ×<br>× × ×<br>× × ×  |   |                             |                       |                    |  |
|          | rates not<br>documented f   | or               |  |   |                             |                       |                    |  |
|          | not required p              | er               | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                           |   |                             |                       |                    |  |
| 71       | Specificatior<br>33 22 00   |                  | × × ×<br>× × ×<br>× × ×  |   |                             |                       |                    |  |
| _72_     |                             |                  |  |   |                             |                       |                    |  |
| 72       |                             | N/A              |  | (72-73.5 ft) No Recovery; see Drilling Notes.   |                             |                       |                    |  |
|          |                             |                  |  | (73.5-82 ft) Sedimentary Rock - Conglomerate;   |                             |                       |                    |  |
| 74<br>   |                             |                  |  | (reddish brown (2.5YR 5/4).<br>(74-74.3 ft) Rock fragments are moist.   |                             |                       |                    |  |
| 75       |                             |                  |  |   |                             |                       |                    |  |
| 76       |                             |                  |  |   |                             |                       |                    |  |
| 77       |                             | N/A              |  |   | (77.0 - 87.0') Flush 9-inch | n diameter drill ca   | sing over 8-inch   | (77 0 - 87 0')   |
| 78       |                             |                  |  |   | diameter drill casing.      |                       | . <u></u>          | 225 gallons of water<br>used; 0 gallons of water<br>recovered: 225 gallons |
|          |                             |                  |  |   |                             |                       |                    | of water lost  |
| 279<br>8 |                             |                  |  |   |                             |                       |                    |  |
| 80       |                             |                  |  |   |                             |                       |                    |  |
| Abbre    | viations: US                | SCS = Un         | ified Soil   | Classification System, ft = feet, bgs =   | pelow ground surface, a     | msl = above m         | nean sea level     | , GW =   |
| ground   | dwater, Not                 | es: solid b      | lue and  | hollow blue water table marks represer  | t depth to water (ft. bgs.  | .) first encount      | ered during d      | rilling and  |
| approx   | kimate statio               | measure          | d during   | drilling, respectively.   |                             |                       |                    |  |

| Date Started:       04/24/2022       Surface Elevation:       508.35 ft amsl       Boring No::       ER-02.9-Int         Date Completed:       06/03/2022       Northing No.83):       7610642.75       Client:       Project:       Enable         Drilling Addition       Rate-Sonic       Total Depth:       145.0 ft Bga       Project:   | 9              | ARC            | 4[          | DIS       |   | Drilling Log   |  |                            |                    | Sheet         | t: 5   | 5 of 8                   |
|---|----------------|----------------|-------------|-----------|---|--|--|----------------------------|--------------------|---------------|--------|--------------------------|
| Date Completed:       05/30/2022       Northing (NADB3):       2101008-50       Clearting (NC):       Exceeded in the control of the control  | Date St        | tarted:        | <u>04</u> / | /24/202   | 2   | Surface Elevation:                                       | 506.35   | i ft amsl                  | Borin              | a No .        | FR     | -02 9-inch               |
| Drilling Coc: ABC_LOVIN Easting (NADS3): 7616642.75 Client: PG&E<br>Drilling Ventor: Roto-Sonic Truck Mount Conductor Casing Diameter: MA<br>Drilling Astronome Eddie Ramos. Drill Casing Diameter: 9 Inches Client: PG&E Topock. Needles.<br>Drilling Astronome Eddie Ramos. Drill Casing Diameter: 9 Inches Project: Final GWR Remedy Phase<br>Location: PG&E Topock. Needles.<br>Drilling Astronome Eddie Ramos. Drill Casing Diameter: 9 Inches Project: Number: 30126255<br>Too-Pusher: N/ADepth to First Water: 8 Inches Project Number: 30126255<br>Too-Pusher: N/ADepth to First Water: 8 Inches Project Number: 30126255<br>Reg Geologist.<br>Societ Casing Code (See Pilot Comp Reg Pilot Com   | Date C         | ompleted:      | <u>05/</u>  | /03/202   | 2   | Northing (NAD83):  | 210100   | 09.50                      | Bonn               | 9 110         |        |                          |
| Drilling Method:         Roto-Sonic         Total Depth:         145.0 ft bps         Project:         Final CW Remedy Phase           Drill Rig Type:         Tarra Sonic Truck Mount Conductor Casing Diameter:         NA         Location:         PC64EL         California  | Drilling       | Co.:           | <u>AB</u>   | C LIOV    | /IN   | Easting (NAD83):   | <u>761664</u>  | 42.75                      | Client:            | PG&E          |        |                          |
| Driller Name       Tords Zonic Truck Mount, Conductor Casing Diameter:       NA   | Drilling       | Method:        | <u>Ro</u>   | to-Soni   | с   | Total Depth:   | <u>145.0 f</u>   | ft bgs                     | Project:           | Final GV      | V Re   | medy Phase 2A            |
| Driller Name:       Edde Ramos       Drill Casing Diameter:       9.inches       California         Drilling Asst:       J. Candelaria / F. Perez       Drill Bit:       9.inches       Project Number: 30126255         ToolPusher:       NA       Depth to First Water:       60.0 ft.ggs       Project Number: 30126255         Rg Geologist:       G. Wilford / A. McIntyre.       Converted to Well:       Y Yes       No         Depth Drilling Run (ft)       Description       Description       Description       Drilling readers       Drilling Readers         81       Via Statution Readers       Code:       Code:       Code:       Code:       Drilling Readers         83       N/A       Statution       (25YR 24).       Drilling Notes.       Code:       Drilling Readers         84       N/A       Statution       (25YR 24).       Code:       Congiomenate:       Code:       Drilling Robes.       Code:       Code:       Drilling Robes.       Code:       Code:       Drilling Robes.       Code:       Code  | Drill Ric      | g Type:        | Tei         | rra Son   | ic Trucł  | <u>Mount</u> Conductor Casing Diameter:                  | N/A  | -                          | Location:          | PG&E T        | opoc   | k, Needles               |
| Drilling Ast:         J. Candelaria / E. Perez         Drill Bit:         9 inches         Project Number:         30126255           Tool-Pusher:         N/A  | Driller N      | Name:          | Ed          | die Rar   | nos   | Drill Casing Diameter:                                   | <u>9 inche</u>   | es                         |                    | California    | a      |                          |
| Tool-Pusher:       NA       Depth to First Water:       60.0 ft bgs         Rig Geologist:       C.Wilford / A. McIntyre       Converted to Well:       Yee       No         Depth printing Run (ft)       USCS       USCS       Description       Description         Bestingtion       Geologist:       Color (isso)       Description       Description         Bestingtion       (isso Plate boring bg for<br>full geologic descriptions)       Dolling notes and observations confirming presence of<br>temporary backfill material in drill cuttings       Drilling F         81       NA       ************************************  | Drilling       | Asst:          | J. (        | Candela   | aria / F.   | Perez Drill Bit:   | 9 inche  | es                         | Project Nu         | umber: 30     | )126   | 255                      |
| Rig Geologist:       G. Wilford / A. McIntyre       Converted to Well:       Yes       No         Detting Franching<br>(h)       USCS       USCS       Description       Description       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)       Defining notes and observations confirming presence of<br>full geologic description)         82       NR       Image: second secon  | Tool-Pi        | usher:         | N/A         | 4         |   | Depth to First Water:                                    | 60.0 ft  | bgs                        | ,                  |               |        |                          |
| 0         | Rig Ge         | ologist:       | G.          | Wilford   | / A. Mc   | Intyre Converted to Well:                                |  |                            |                    |               |        |                          |
| Degin     Description     Description       1000000000000000000000000000000000000   |                | 0              |             |           |   | Description  |  |                            |                    |               |        |                          |
| (f)       Penetration Role       Code       Class       (f) Step Plat boring Lig Gr<br>(J) Step Plat borin   | Depth          | Drilling Run   | (ft)        | USCS      | USCS  | Description  | Drilling notes and observations confirming presence of |                            |                    |               |        | Drilling Fluid           |
| 81     N/A     (23-84.5 ft) No Recovery; see Drilling Notes.       82     (82-84.5 ft) No Recovery; see Drilling Notes.       83     NR       84     (84.5 ft) No Recovery; see Drilling Notes.       85     (84.5 ft) No Recovery; see Drilling Notes.       86     (87.0 - 97.0) Fbush 9-inch diameter drill casing over 8-inch       87     (84.5 ft) No Recovery; see Drilling Notes.       88     (84.5 ft) No Recovery; see Drilling Notes.       89     Penetration rates not some drilling Notes.       99     Occumentation rates not some drilling Notes.       91     33 22 00       92     N/A       93     (94.1) Slight Increase in competent rock.       94     (94.1) Slight Increase in competent rock.       95     (97.0 - 107.0) Fbush 9-inch diameter drill casing over       97     (97.0 - 107.0) Fbush 9-inch diameter drill casing over       97     (97.0 - 107.0) Fbush 9-inch diameter drill casing over       98     (94.1) Slight increase in competent rock.   | (ft)           | Penetration F  | Rate        | Code      | Class   | (See Pilot boring log for<br>full geologic descriptions) |  | temporary backfill ma      | aterial in drill c | uttings       |        | Drining Flaid            |
| 81       NA       Redidab forom (2.5YR 5/4).         82       (82-84.5 ft) No Recovery, see Drilling Notes.         83       NR         84       (82-84.5 ft) No Recovery, see Drilling Notes.         85       (84-5-117 ft) Sedimentary Rock - Congiomerate;         86       (87.0 - 97.0) Flush 4-Inch diameter drill casing over 8-Inch rates not documented for size not received per size not rec  |                |                |             |           | ×××   | (73.5-82 ft) Sedimentary Rock - Conglomerate:            | +  |                            |                    |               |        |                          |
| 81       N/A  |                |                |             |           | $\times$ $\times$ $\times$ $\times$   | reddish brown (2.5YR 5/4).                               |  |                            |                    |               |        |                          |
| 82     NR     (82-84.5 ft) No Recovery; see Drilling Notes.       83     NR       84     NR       85     NR       86     NR       87     (84.5-117 ft) Sedimentary Rock - Conglomerate;       88     NR       89     Penetration rates not occurrente for social occurrente for soci  | 81             |                |             | N/A       | $\times$ $\times$ $\times$  |  |  |                            |                    |               |        |                          |
| 82       X × ×       (82-84.5 ft) No Recovery; see Drilling Notes.         83       NR       (82-84.5 ft) No Recovery; see Drilling Notes.         84       85       (84-5-117 ft) Sedimentary Rock - Conglomerate:         86       87       (84-5-117 ft) Sedimentary Rock - Conglomerate:         88       88       88         87       88         88       88         90       box x x x trip relation rates not sonic drilling Notes.         90       box x x x trip relation rates not sonic drilling Notes.         91       33 22 00         92       NKA         93       X X X trip relation rates not sonic drilling Notes.         93       X X X trip relation rates not sonic drilling Notes.         94       X X X X trip relation rates not sonic drilling Notes.         93       X X X X trip relation rates not sonic drilling Notes.         94       X X X X X X X X X X X X X X X X X X X   |                |                |             |           | $\hat{x} \hat{x} \hat{x}$   |  |  |                            |                    |               |        |                          |
| 83       NR       (82-5-5 ti) No recovery; see Drilling Noies.         84   | 82             |                |             |           | ×××   |  | _  |                            |                    |               |        |                          |
| 83       NR         84  |                |                |             |           | $\land$ /   | (82-84.5 ft) No Recovery; see Drilling Notes.            |  |                            |                    |               |        |                          |
| .84       .85       .86       .86       .86       .86       .86       .86       .86       .86       .86       .87       .87       .86       .86       .87       .87       .87       .87       .88       .   | 83             |                |             |           | $  \setminus /  $   |  |  |                            |                    |               |        |                          |
|   |                |                |             | NR        | X   |  |  |                            |                    |               |        |                          |
| <ul> <li>85</li> <li>86</li> <li>88</li> <li>88</li> <li>88</li> <li>88</li> <li>99</li> <li>90</li> <li>90</li> <li>90</li> <li>90</li> <li>90</li> <li>90</li> <li>90</li> <li>90</li> <li>90</li> <li>91</li> <li>92</li> <li>92</li> <li>93</li> <li>94</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> <li>98</li> <li>98</li> <li>99</li> <li>90</li> &lt;</ul>  | 84             |                |             |           | $ / \rangle$  |  |  |                            |                    |               |        |                          |
| <ul> <li>85</li> <li>86</li> <li>87</li> <li>88</li> <li>88</li> <li>88</li> <li>89</li> <li>90</li> <li>sonic drilling<br/>sonic drilling<br/>and required per<br/>sonic drilling<br/>33 22 00</li> <li>91</li> <li>94</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> <li>98</li> <li>98</li> </ul>  |                |                |             |           | /   |  |  |                            |                    |               |        |                          |
| -03       -   |                |                |             |           | $\times \times \times$  | (84.5-117 ft) Sedimentary Rock - Conglomerate            |  |                            |                    |               |        |                          |
| <ul> <li>Be and a second secon</li></ul>  | 00             |                |             |           | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$   | readish brown (2.5YR 5/4).                               |  |                            |                    |               |        |                          |
| <ul> <li>86</li> <li>87</li> <li>88</li> <li>88</li> <li>99</li> <li>90</li> <li>documented for sonic drilling not create in competent rock</li> <li>91</li> <li>92</li> <li>94</li> <li>94</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> <li>98</li> <li>98</li> </ul>  |                |                |             |           | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$   |  |  |                            |                    |               |        |                          |
| <ul> <li>Bar</li></ul>  | 86             |                |             |           | $\times$ $\times$ $\times$ $\times$   |  |  |                            |                    |               |        |                          |
| <ul> <li>87</li> <li>88</li> <li>89</li> <li>Penetration rates not documented for soperation diameter drill casing over 8-inch diameter drill casing.</li> <li>90</li> <li>91</li> <li>92</li> <li>93</li> <li>93</li> <li>94</li> <li>94</li> <li>94</li> <li>95</li> <li>96</li> <li>97</li> <li>98</li> <li>98</li> </ul>  |                |                |             |           | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$  |  |  |                            |                    |               |        |                          |
|   | 87             |                |             |           | $\hat{x} \times \hat{x}$  |  | (87.0  | ) - 97 0') Flush 9-inch di | ameter drill ca    | sina over 8-i | inch   | (87 0 - 97 0')           |
| Benetration rates not diameter drill casing.          -88 <td></td> <td></td> <td></td> <td></td> <td><math display="block">\begin{array}{c} \times \times \times \\ \times \times \end{array}</math></td> <td></td> <td>diam</td> <td>eter drill casing.</td> <td></td> <td>g</td> <td></td> <td>75 gallons of water</td>  |                |                |             |           | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |  | diam   | eter drill casing.         |                    | g             |        | 75 gallons of water      |
| <ul> <li>Penetration rates not documented for sonic drilling not required per sonic drilling as a 200</li> <li>92</li> <li>93</li> <li>94</li> <li>94</li> <li>95</li> <li>96</li> <li>96</li> <li>98</li> <li>98</li> </ul>  | 88             |                |             |           | $\times$ $\times$ $\times$ $\times$   |  |  |                            |                    |               |        | recovered; 75 gallons of |
| <ul> <li>B9 Penetration rates not documented for sonic drilling not required per sonic drillin</li></ul>  |                |                |             |           | $\hat{x} \hat{x} \hat{x}$   |  |  |                            |                    |               |        | water lost               |
| - rates not<br>documented for<br>ont required per<br>specification<br>33 22 00  | 89             | Penetration    |             |           | × × ×<br>× × ×  |  |  |                            |                    |               |        |                          |
| 90       documenter for<br>sonic drilling<br>not required per<br>33 22 00       X X X<br>X X X<br>Y X X X<br>Y X X<br>Y X X X X |                | rates not      |             |           | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |  |  |                            |                    |               |        |                          |
| not required per Specification 33 22 00       92     N/A     X X X X X X X X X X X X X X X X X X X  | 90             | sonic drillinc | or          |           | $\times$ $\times$ $\times$  |  |  |                            |                    |               |        |                          |
| 91 Specification<br>33 22 00<br>92 N/A<br>93 93 93 93 94 94 N/A<br>94 94 94 94 95 95 95 95 95 95 95 95 95 95 95 95 95   | r              | not required p | er          |           | $\hat{x} \hat{x} \hat{x}$   |  |  |                            |                    |               |        |                          |
| -92       N/A       X × X × X × X × X × X × X × X × X × X ×   | 91             | Specification  | וו          |           | × × ×<br>× × ×  |  |  |                            |                    |               |        |                          |
| 92_<br>93_<br>93_<br>94_<br>94_<br>95_<br>95_<br>95_<br>96_<br>97_<br>97_<br>98_<br>98_   |                | 55 22 00       |             |           | $\times \times \times$<br>$\times \times \times$  | ¥  |  |                            |                    |               |        |                          |
| 93_<br>94_<br>94_<br>95_<br>95_<br>96_<br>97_<br>98_<br>98_<br>98_<br>98_<br>98_<br>98_<br>98_<br>98  | 92             |                |             |           | $\times$ $\times$ $\times$ $\times$   |  |  |                            |                    |               |        |                          |
| 93_<br>94_<br>94_<br>95_<br>95_<br>96_<br>97_<br>98_<br>98_<br>98_<br>93_<br>93_<br>93_<br>93_<br>93_<br>93_<br>93_<br>93_<br>93_<br>93   |                |                |             | N/A       | $\hat{x} \hat{x} \hat{x}$   |  |  |                            |                    |               |        |                          |
| 94<br>94<br>94<br>95<br>95<br>95<br>96<br>97<br>97<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>90<br>98<br>98<br>98<br>90<br>98<br>98<br>90<br>98<br>90<br>95<br>95<br>95<br>95<br>95<br>95<br>95<br>95<br>95<br>95  | 93             |                |             |           | $\times \times $ |  |  |                            |                    |               |        |                          |
| 94_<br>94_<br>95_<br>95_<br>96_<br>97_<br>97_<br>98_<br>98_<br>98_<br>98_<br>98_<br>99_<br>98_<br>99_<br>98_<br>90<br>90<br>90<br>90<br>90<br>90<br>90<br>90<br>90<br>90  |                |                |             |           | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$   |  |  |                            |                    |               |        |                          |
| 95_<br>95_<br>96_<br>97_<br>98_<br>98_<br>98_<br>96_<br>97_<br>98_<br>98_<br>96_<br>97_<br>98_<br>98_<br>96_<br>97_<br>98_<br>98_<br>96_<br>97_<br>98_<br>96_<br>97.<br>97.<br>98_<br>97.<br>98_<br>98_<br>98_<br>97.<br>98_<br>98_<br>98_<br>98_<br>97.<br>98_<br>98_<br>98_<br>98_<br>97.<br>98_<br>98_<br>98_<br>98_<br>97.<br>98_<br>98_<br>98_<br>98_<br>97.<br>98_<br>98_<br>98_<br>98_<br>97.<br>98_<br>98_<br>98_<br>98_<br>98_<br>98_<br>97.<br>97.<br>97.<br>97.<br>97.<br>97.<br>97.<br>97.  | ο <sub>Λ</sub> |                |             |           |   |  |  |                            |                    |               |        |                          |
| 95       -  |                |                |             |           | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$   | (94 ft) Slight increase in competent rock                |  |                            |                    |               |        |                          |
| 96<br>97<br>97<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>98  |                |                |             |           | × × ×<br>× × ×  | nagments.  |  |                            |                    |               |        |                          |
| 96<br>96<br>97<br>97<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>98<br>98  | əɔ             |                |             |           | × × ×<br>× × ×  |  |  |                            |                    |               |        |                          |
| 90  |                |                |             |           | $\begin{array}{c} & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{array}$                                |  |  |                            |                    |               |        |                          |
| 97  | 96             |                |             |           |   |  |  |                            |                    |               |        |                          |
| 97 - (97.0 - 107.0') Flush 9-inch diameter drill casing over<br>(97.0 - 107.0') Flush 9-inch diameter drill casing over<br>8-inch diameter drill casing. (97.0 - 10.0')<br>8-inch diameter drill casing. (97.0 - 10.0')<br>used; 0 gallons<br>used; 0 gallons<br>recovered; 100   |                |                |             |           | $\begin{array}{c} X \times X \\ X \times X \end{array}$   |  |  |                            |                    |               |        |                          |
| 98_     8-inch diameter drill casing.     100 gallons c       used; 0 gallons     used; 0 gallons   | 97             |                |             |           | × × ×<br>× × ×  |  | (97.0  | ) - 107.0') Flush 9-inch d | liameter drill c   | asing over    |        | (97.0 - 107.0')          |
|   |                |                |             |           |   |  | 8-inc  | ch diameter drill casing.  |                    | 5             |        | 100 gallons of water     |
|   | 98             |                |             |           | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |  |  |                            |                    |               |        | recovered; 100 gallons   |
| of water l  | ┝┤             |                |             |           | $\mathbf{X} \mathbf{X} \mathbf{X}$  |  |  |                            |                    |               |        | of water lost            |
|   | 99             |                |             |           | × × ×<br>× × ×  |  |  |                            |                    |               |        |                          |
|   |                |                |             |           | $\begin{array}{c} X \times X \\ X \times X \end{array}$   |  |  |                            |                    |               |        |                          |
|   | _ 100 _        |                |             |           | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$   |  |  |                            |                    |               |        |                          |
| Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, GW =  | Abbrev         | iations: US    | scs         | s = Unif  | ied Soil  | Classification System, ft = feet, bgs = I                | pelow gr   | round surface, ams         | sl = above n       | nean sea      | level, | GW =                     |
| groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and  | ground         | water, Not     | es: s       | solid blu | ue and I  | nollow blue water table marks represer                   | t depth  | to water (ft. bgs.) fi     | irst encount       | tered durin   | ng dr  | illing and               |
| approximate static measured during drilling, respectively.  | approx         | imate statio   | : me        | easured   | during  | drilling, respectively.                                  |  |                            |                    |               |        |                          |

| 9                  | ARC                             | ADIS                     | 5   | Drilling Log                                  |                          |                         | Sheet:             | 6 of 8                                   |
|--------------------|---------------------------------|--------------------------|---|---|--------------------------|-------------------------|--------------------|--|
| Date S             | Started:                        | 04/24/20                 | )22   | Surface Elevation:                            | 506.35 ft amsl           | Boring                  |                    | R-02 9-inch                              |
| Date C             | Completed:                      | <u>05/03/20</u>          | )22   | Northing (NAD83):                             | 2101009.50               |                         | , NO <u></u>       |  |
| Drilling           | g Co.:                          | ABC LIC                  | VIN   | Easting (NAD83):                              | 7616642.75               | Client:                 | PG&E               |  |
| Drilling           | g Method:                       | Roto-So                  | nic   | Total Depth:                                  | <u>145.0 ft bgs</u>      | Project:                | Final GW Re        | emedy Phase 2A                           |
| Drill Ri           | ig Type:                        | <u>Terra Sc</u>          | nic Truc  | <u>k Mount</u> Conductor Casing Diameter:     | <u>N/A</u>               | Location:               | PG&E Topo          | ck, Needles                              |
| Driller            | Name:                           | <u>Eddie Ra</u>          | amos  | Drill Casing Diameter:                        | 9 inches                 |                         | California         |  |
| Drilling           | g Asst:                         | J. Cande                 | elaria / F.   | <u>Perez</u> Drill Bit:                       | <u>9 inches</u>          | Project Nur             | mber: <u>30126</u> | 6255                                     |
| Tool-F             | Pusher:                         | N/A                      |   | Depth to First Water:                         | <u>60.0 ft bgs</u>       |                         |                    |  |
| Rig Ge             | eologist:                       | <u>G. Wilfo</u>          | rd / A. M   | clntyre Converted to Well:                    | × Yes No                 |                         |                    |  |
|                    | Deillie e Due                   | (6)                      |   | Description                                   | $\overline{\Box}$        |                         |                    |  |
| Depth              | and Average                     |                          | USCS  | (See Pilot boring log for                     | Drilling notes and obs   | servations confirming   | presence of        | Drilling Fluid                           |
| 3 (IL)             | Penetration F                   | Rate                     | Class   | full geologic descriptions)                   | temporary back           |                         | uings              | _  |
| 5                  |                                 |                          |   | (84.5-117 ft) Sedimentary Rock - Conglomerate |                          |                         |                    |  |
|                    | -                               |                          |   | reddish brown (2.5YR 5/4).                    | _                        |                         |                    |  |
|                    | -                               |                          | <u>× × ×</u><br>× × ×   |   |                          |                         |                    |  |
|                    |                                 |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                          |                         |                    |  |
| §102               | -                               |                          |   |   |                          |                         |                    |  |
| 17                 | -                               |                          | x x x   |   |                          |                         |                    |  |
|                    | -                               |                          | × × ×<br>× × ×  | 2<br>2  |                          |                         |                    |  |
|                    | -                               |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        | 2   |                          |                         |                    |  |
| 104                |                                 |                          | $\times \times \times$  |   |                          |                         |                    |  |
|                    | -                               |                          |   |   |                          |                         |                    |  |
| 105_               |                                 |                          |   |   |                          |                         |                    |  |
|                    |                                 |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                          |                         |                    |  |
| 106                |                                 |                          | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ | }   |                          |                         |                    |  |
|                    |                                 |                          |   |   |                          |                         |                    |  |
| 107                |                                 |                          |   |   |                          |                         |                    |  |
|                    |                                 |                          |   |   | (107.0 - 117.0') Flush 9 | 9-inch diameter drill c | asing over         | (107.0 - 117.0')                         |
| 100                | -                               |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   | 8-inch diameter drill ca | asıng.                  |                    | used; 0 gallons of water                 |
| IUo                | -                               |                          |   |   |                          |                         |                    | recovered; 125 gallons<br>of water lost  |
|                    | -                               | N/A                      | $\hat{\mathbf{x}} \hat{\mathbf{x}} \hat{\mathbf{x}}$                        |   |                          |                         |                    |  |
|                    | Penetration                     |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                          |                         |                    |  |
|                    | documented f                    | or                       |   |   |                          |                         |                    |  |
| <u>110</u>         | sonic drilling                  |                          | $\hat{\mathbf{x}} \hat{\mathbf{x}} \hat{\mathbf{x}}$                        |   |                          |                         |                    |  |
|                    | not required p<br>Specification | er<br>1                  | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                          |                         |                    |  |
| <u>    111    </u> | 33 22 00                        |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                          |                         |                    |  |
|                    | -                               |                          |   |   |                          |                         |                    |  |
|                    | -                               |                          | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                                  |   |                          |                         |                    |  |
|                    | -                               |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                          |                         |                    |  |
| 2                  | -                               |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        | 2   |                          |                         |                    |  |
|                    | -                               |                          |   |   |                          |                         |                    |  |
|                    | -                               |                          | × × × × ×   |   |                          |                         |                    |  |
|                    | -                               |                          | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ | 2   |                          |                         |                    |  |
|                    | -                               |                          | $\begin{array}{c} \times \times \times \\ \times \times \\ \end{array}$     |   |                          |                         |                    |  |
|                    |                                 |                          |   |   |                          |                         |                    |  |
| 116                |                                 |                          | $\mathbf{x} \times \mathbf{x}$  |   |                          |                         |                    |  |
| 5<br>2<br>3        |                                 |                          | × × ×<br>× × ×  | 2   |                          |                         |                    |  |
| 117                |                                 |                          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        | 2   |                          |                         |                    |  |
|                    |                                 |                          | \/  | (117-120 ft) No Recovery; see Drilling Notes. | (117.0 - 127.0') Flush 9 | 9-inch diameter drill c | asing over         | (117.0 - 127.0')<br>175 gallops of water |
| 110                | 1                               |                          | $  \rangle /$   |   |                          | aomy.                   |                    | used; 0 gallons of water                 |
|                    | 1                               |                          | $  \rangle /$   |   |                          |                         |                    | recovered; 175 gallons<br>of water lost  |
|                    | -                               | NR                       | ΙX  |   |                          |                         |                    |  |
| 119_               | -                               |                          | $ / \rangle$  |   |                          |                         |                    |  |
| j – –              | -                               |                          | $ / \rangle$  |   |                          |                         |                    |  |
| 120                | l<br>viatione: 119              | <u>   </u><br>SC:S = !!r | lified Sci  | Classification System ft - feet bac - b       |                          | amsl = ahove m          | ean eea levo       | <br>  GW =                               |
| around             | dwater Not                      | es: solid k              | lue and   | hollow blue water table marks represen        | t depth to water (ft ho  | and - above me          | ered during d      | rilling and                              |
| approv             | ximate static                   | measure                  |   | drilling, respectively                        |                          | <u></u>                 |                    |  |
|                    |                                 | mousure                  |   |   |                          |                         |                    |  |

| 9               | ARC                         | ٩C           | DIS          |   | Drilling Log  |  |                   | Sheet:           | 7 of 8   |
|-----------------|-----------------------------|--------------|--------------|---|---|--|-------------------|------------------|--|
| Date S          | Started:                    | <u>04/2</u>  | 4/202        | 2   | Surface Elevation:                                    | 506.35 ft amsl                                       | Boring            | No.: I           | ER-02 9-inch                                       |
| Date C          | Completed:                  | <u>05/0</u>  | 3/202        | 2   | Northing (NAD83):                                     | 2101009.50   | g                 | -                |  |
| Drilling        | J Co.:                      | <u>ABC</u>   | LIOV         | /IN   | Easting (NAD83):                                      | 7616642.75   | Client: <u>F</u>  | PG&E             |  |
| Drilling        | Method:                     | <u>Roto</u>  | o-Soni       | с   | Total Depth:  | <u>145.0 ft bgs</u>                                  | Project: <u>F</u> | inal GW          | Remedy Phase 2A                                    |
| Drill Ri        | g Type:                     | Terra        | <u>a Son</u> | <u>ic Truc</u> ł  | <u>K Mount</u> Conductor Casing Diameter:             | N/A  | Location: E       | PG&E To          | pock, Needles                                      |
| Driller         | Name:                       | <u>Edd</u>   | ie Rar       | nos   | Drill Casing Diameter:                                | <u>9 inches</u>                                      | <u>C</u>          | California       |  |
| Drilling        | Asst:                       | <u>J. Ca</u> | andela       | aria / F.   | <u>Perez</u> Drill Bit:                               | 9 inches   | Project Num       | nber: <u>301</u> | 26255  |
| Tool-P          | usher:                      | <u>N/A</u>   |              |   | Depth to First Water:                                 | <u>60.0 ft bgs</u>                                   |                   |                  |  |
| Rig Ge          | eologist:                   | <u>G. V</u>  | Vilford      | / A. Mo   | <u>cIntyre</u> Converted to Well:                     | × Yes No   |                   |                  |  |
| 5               | Drilling Pup                | (ft)         |              |   | Description   |  |                   |                  |  |
| Depth<br>(ft)   | and Averag<br>Penetration F | ate          | USCS<br>Code | USCS<br>Class   | (See Pilot boring log for full geologic descriptions) | Drilling notes and observation temporary backfill ma | Drilling Fluid    |                  |  |
|                 |                             |              |              | × × ×<br>× × ×  | (120-127 ft) Sedimentary Rock - Conglomerate;         |  |                   |                  |  |
| 121             |                             |              |              | $\times$ $\times$ $\times$ $\times$ $\times$                                | (120.01-122 ft) Rock fragments are moist.             |  |                   |                  |  |
|                 |                             |              |              | $\times$ $\times$ $\times$ $\times$   |   |  |                   |                  |  |
|                 |                             |              |              | $\hat{x} \hat{x} \hat{x}$   |   |  |                   |                  |  |
|                 |                             |              |              | × × ×<br>× × ×  |   |  |                   |                  |  |
|                 |                             |              |              | $\times$ $\times$ $\times$ $\times$   |   |  |                   |                  |  |
| 123_            |                             |              |              |   |   |  |                   |                  |  |
|                 |                             |              | N/A          | $\times \times \times$  |   |  |                   |                  |  |
|                 |                             |              |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |  |                   |                  |  |
|                 |                             |              |              | $\times$ $\times$ $\times$ $\times$   |   |  |                   |                  |  |
| 125             |                             |              |              | $\hat{x} \hat{x} \hat{x}$   |   |  |                   |                  |  |
|                 |                             |              |              | $\times \times \times$<br>$\times \times \times$                            |   |  |                   |                  |  |
| _126_           |                             |              |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |  |                   |                  |  |
|                 |                             |              |              |   |   |  |                   |                  |  |
| _127_           |                             |              |              | x x x   | (127, 120, 4 ft) No Recovery: and Drilling Notes      | (127.0 127.0') Eluch 0 inch.                         | diamatar drill aa |                  | (127.0 127.0)                                      |
|                 |                             |              |              | $\backslash$ /  | (127-129.4 It) NO Recovery, see Drining Notes.        | 8-inch diameter drill casing.                        | ulameter unit ca  | Ising over       | 100 gallons of water                               |
| _128_           |                             |              |              |   |   |  |                   |                  | used; 0 gallons of water<br>recovered; 100 gallons |
|                 |                             |              | NR           | Ň   |   |  |                   |                  | of water lost                                      |
| _129_           | Penetration                 |              |              | $ / \rangle$  |   |  |                   |                  |  |
|                 | rates not                   |              |              | $\times \times \times$  | (129 4-145 ft) Sedimentary Bock -                     | -  |                   |                  |  |
| _130_           | documented f                | or           |              | $\times$ $\times$ $\times$ $\times$ $\times$                                | Conglomerate; reddish brown (2.5YR 5/4).              |  |                   |                  |  |
|                 | not required p              | er           |              |   |   |  |                   |                  |  |
| _131_           | Specification               |              |              |   |   |  |                   |                  |  |
|                 | 00 22 00                    |              |              | × × ×<br>× × ×  | •   |  |                   |                  |  |
| _132_           |                             |              |              | $\times \times \times$  |   |  |                   |                  |  |
|                 |                             |              |              | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                                  |   |  |                   |                  |  |
| _133_           |                             |              |              | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |  |                   |                  |  |
|                 |                             |              |              | $\times \times \times$  |   |  |                   |                  |  |
| _134_           |                             |              |              | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                                  |   |  |                   |                  |  |
|                 |                             |              |              | × × ×<br>× × ×  |   |  |                   |                  |  |
|                 |                             |              | N/A          | $\times \times \times$  |   |  |                   |                  |  |
|                 |                             |              |              |   |   |  |                   |                  |  |
| 136             |                             |              |              | × × ×<br>× × ×  |   |  |                   |                  |  |
|                 |                             |              |              | $\mathbf{X} \mathbf{X} \mathbf{X}$  |   |  |                   |                  |  |
| 137             | 1                           |              |              |   |   |  |                   |                  |  |
|                 | 1                           |              |              |   |   | (137.0 - 145.0') Flush 9-inch                        | diameter drill ca | ising over       | (137.0 - 145.0')                                   |
| 129             |                             |              |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   | casing.  | mpped out & dia   | ameter ariil     | used; 0 gallons of water                           |
|                 |                             |              |              | $\times \times \times$  |   |  |                   |                  | recovered; 300 gallons<br>of water lost            |
| 400             |                             |              |              | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ |   |  |                   |                  |  |
| 139             |                             |              |              |   |   |  |                   |                  |  |
|                 |                             |              |              | × × ×<br>× × ×  |   |  |                   |                  |  |
| _ 140<br>Abbrev | viations <sup>.</sup> 119   |              | =   Inifi    | ied Soil  | Classification System ft = feet_bos = h               | elow ground surface ame                              | l = ahove me      | an sea le        | vel GW =   |
| around          | dwater. Not                 | es: so       | olid hlu     | Je and I  | hollow blue water table marks represen                | t depth to water (ft has ) fi                        | rst encounter     | red during       | drilling and                                       |
| approv          | kimate static               | : mea        | sured        | durina  | drilling, respectively                                |  |                   |                  |  |
| PPPIO           |                             |              | .50100       | aanny   | animity, roopootivoly.                                |  |                   |                  |  |

| 9           | ARC/                             | ADIS            | 5  | Drilling Log                              |                                |  | Sheet:             | 8 of 8          |
|-------------|----------------------------------|-----------------|--|---|--------------------------------|--|--------------------|-----------------|
| Date S      | tarted:                          | 04/24/20        | 22   | Surface Elevation:                        | 506.35 ft amsl                 | Borin                                    | a No.: F           | R-02 9-inch     |
| Date C      | completed:                       | 05/03/20        | 22   | Northing (NAD83):                         | 2101009.50                     |  | <u> </u>           |                 |
| Drilling    | Co.:                             | ABC LIO         | VIN  | Easting (NAD83):                          | 7616642.75                     | _ Client:                                | PG&E               |                 |
| Drilling    | Method:                          | Roto-Sor        | nic  | Total Depth:                              | <u>145.0 ft bgs</u>            | Project:                                 | Final GW F         | Remedy Phase 2A |
| Drill Ri    | д Туре:                          | Terra Sol       | nic Truc   | <u>k Mount</u> Conductor Casing Diameter: | <u>N/A</u>                     | _ Location:                              | PG&E Top           | ock, Needles    |
| Driller I   | Name:                            | <u>Eddie Ra</u> | mos  | Drill Casing Diameter:                    | 9 inches                       | _  | California         |                 |
| Drilling    | Asst:                            | J. Cande        | <u>laria / F.</u>  | <u>Perez</u> Drill Bit:                   | <u>9 inches</u>                | Project Nu                               | ımber: <u>3012</u> | 26255           |
| Tool-P      | usher:                           | <u>N/A</u>      |  | Depth to First Water:                     | <u>60.0 ft bgs</u>             | _  |                    |                 |
| Rig Ge      | eologist:                        | G. Wilfor       | d / A. Mo  | cIntyre Converted to Well:                | 🛛 Yes 🗌 No                     |  |                    |                 |
|             | Drilling Dup                     | ·#\             |  | Description                               |                                |  |                    |                 |
| Depth       | and Average                      | e USCS          | USCS   | (See Pilot boring log for                 | Drilling notes and observation | ations confirming<br>material in drill c | g presence of      | Drilling Fluid  |
|             | Penetration R                    | ate             | 0.000  | full geologic descriptions)               |                                |  | attingo            |                 |
| ,<br>j      |                                  |                 | × × ×<br>× × ×   | (129.4-145 ft) Sedimentary Rock -         |                                |  |                    |                 |
| 1/1         |                                  |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ |   |                                |  |                    |                 |
| 141         |                                  |                 | $\times$ $\times$ $\times$   |   |                                |  |                    |                 |
|             | Penetration                      |                 |  |   |                                |  |                    |                 |
| 142_        | documented for                   | or              |  |   |                                |  |                    |                 |
|             | sonic drilling                   | N/A             | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ | 2   |                                |  |                    |                 |
| 143         | not required pe<br>Specification | er              |  |   |                                |  |                    |                 |
|             | 33 22 00                         |                 |  |   |                                |  |                    |                 |
| 144         |                                  |                 | × × ×<br>× × ×   |   |                                |  |                    |                 |
| ;           |                                  |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ |   |                                |  |                    |                 |
| _145_       |                                  |                 |  | End of Boring at 145 ft bas               |                                |  |                    |                 |
|             |                                  |                 |  | End of boining at 140 h bgs.              |                                |  |                    |                 |
| _146_       |                                  |                 |  |   | Ch                             |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 147         |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| _148_       |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| _149_       |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 150         |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 151         |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  | •   |                                |  |                    |                 |
| _152        |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 153         |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 154         |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 155         |                                  |                 |  |   |                                |  |                    |                 |
| _100_       |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
|             |                                  |                 |  |   |                                |  |                    |                 |
| 158         |                                  |                 |  |   |                                |  |                    |                 |
| {           |                                  |                 |  |   |                                |  |                    |                 |
| 159         |                                  |                 |  |   |                                |  |                    |                 |
| 8 <b> -</b> |                                  |                 |  |   |                                |  |                    |                 |
| 160         |                                  |                 |  |   |                                |  |                    | 1 014/          |
| Abbre       | /lations: US                     | SCS = Uni       | med Soil   | I Classification System, ft = feet, bgs = | below ground surface, an       | nsl = above n                            | nean sea lev       | el, GVV =       |
| ground      | water, Note                      | es: solid b     | iue and  | nollow blue water table marks represe     | it depth to water (ft. bgs.)   | urst encount                             | erea auring        | aniling and     |
| approx      | umate static                     | measure         | a during   | i ariiling, respectively.                 |                                |  |                    |                 |

| βA  | RC/   | <b>ADIS</b>        |                                       | Drilling Log  |  |                                       | Sh                   | ieet: 1            | of 8   |  |
|---|---|--------------------|---------------------------------------|---|--|---------------------------------------|----------------------|--------------------|--|--|
| Date Star   | rted:   | 05/03/202          | 2                                     | Surface Elevation:  | 506.35 ft amsl   | Boring                                | No.:                 | ER-02 10 & 12-inch |  |  |
| Date Con  | npleted:  | 05/08/202          | 2                                     | Northing (NAD83):   | 2101009.50   |                                       |                      |                    |  |  |
| Drilling Co   | o.:   | ABC LIOV           | /IN                                   | Easting (NAD83):  | 7616642.75   | Client:                               | PG&E                 | <u> </u>           |  |  |
| Drilling M  | lethod:   | Roto-Soni          | с                                     | Total Depth:  | <u>146.0 ft bgs</u> Project: <u>Fir</u>                          |                                       |                      | GW Rer             | medy Phase 2A  |  |
| Drill Ria T   | Tvpe:   | Terra Son          | ic Trucł                              | Mount Conductor Casing Diameter:  | 12 inches  | k. Needles                            |                      |                    |  |  |
| Driller Na  | me:   | Eddie Rar          | nos                                   | Drill Casing Diameter:  | 10.5-12 inches California  |                                       |                      |                    |  |  |
| Drilling As   | eet <sup>.</sup>  | L Candela          | aria / F                              | Perez Drill Bit:  | 10.5-12 inches Droject Number: 20126255                          |                                       |                      |                    |  |  |
|   | bor   |                    | <u>ana / i .</u>                      | <u>Terez</u> Drill Dit.<br>Dopth to First Water:  | 60 0 ft bas  |                                       |                      |                    |  |  |
|   | ner.  | N/A<br>Alexía Mel  |                                       | Depth to First Water.   |  |                                       |                      |                    |  |  |
|   | ogist.  |                    | ntyre                                 |   |  |                                       |                      |                    |  |  |
| Depth<br>(ft) Pe  | rilling Run (f<br>and Average<br>enetration Ra  | t)<br>uscs<br>Code | USCS<br>Class                         | Description<br>(See Pilot boring log for<br>full geologic descriptions)   | Drilling notes and observati<br>temporary backfill ma            | ions confirming<br>aterial in drill c | g presen<br>cuttings | ce of              | Drilling Fluid   |  |
| <br>1   |   | SM                 |                                       | (0-1.5 ft) Silty sand with gravel (SM); reddish<br>brown (5YR 5/4).   | (0.0 - 16.0') Flushed 12-inch<br>10.5-inch diameter drill casir  | diameter drill<br>ng.                 | casing o             | ver                | (0.0 - 16.0')<br>150 gallons of water<br>used; 30 gallons of<br>water recovered; 120<br>gallons of water lost  |  |
| 2<br>3<br>4<br>5<br>5<br>6<br>7<br>7<br>7<br>8<br>9 P<br>10sc<br>11<br>11<br>12<br>13<br>13<br>14<br>15<br>15<br>16<br>17 | Penetration<br>rates not<br>sumented fo<br>onic drilling<br>required pe<br>pecification<br>33 22 00 | r<br>r<br>r        |                                       | (1.5-7 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4).<br>(7-22 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). | (16.0 - 26.0') Flushed 12-incl<br>10.5-inch diameter drill casir | h diameter dril                       | Il casing o          | over               | (16.0 - 26.0')<br>350 gallons of water<br>used; 295 gallons of<br>water recovered; 55<br>gallons of water lost |  |
|   |   |                    | × × × × × × × × × × × × × × × × × × × |   |  |                                       |                      |                    | 0.11   |  |
| Abbreviat   | tions: US   | CS = Unif          | ied Soil                              | Classification System, ft = feet, bgs =   | below ground surface, ams  | si = above n                          | nean se              | ea level,          | GW =   |  |
| groundwa  | ater, Note  | s: solid blu       | ue and I                              | hollow blue water table marks represer  | nt depth to water (ft. bgs.) fi                                  | irst encount                          | tered d              | uring dri          | illing and   |  |
| ipproxim  | ate static  | measured           | during                                | drilling, respectively.   |  |                                       |                      |                    |  |  |

| 9  | ARC  | 4[   | DIS          |   | Drilling Log  |              |  |                           | Sh                   | ieet: 2               | 2 of 8                                      |
|--|--|--|--------------|---|---|--------------|--|---------------------------|----------------------|-----------------------|---|
| Date S   | Started:   | 05/  | 03/202       | 22  | Surface Elevation:  | <u>506.</u>  | 35 ft amsl   | – Borina                  | No.:                 | ER-0                  | 2 10 & 12-inch                              |
| Date C   | Completed:   | <u>05/</u>   | 08/202       | 22  | Northing (NAD83):   | <u>2101</u>  | 1009.50  |                           |                      |                       |   |
| Drilling   | Co.:   | <u>AB</u>  | <u>C LIO</u> | /IN   | Easting (NAD83):  | <u>7616</u>  | 642.75   | _ Client:                 | PG&E                 |                       |   |
| Drilling   | Method:  | Ro   | to-Soni      | ic  | Total Depth:  | <u>146.</u>  | 0 ft bgs   | Project:                  | Final (              | GW Re                 | medy Phase 2A                               |
| Drill Ri   | g Type:  | Ter  | rra Son      | ic Trucł  | <u>k Mount</u> Conductor Casing Diameter:                                 | <u>12 in</u> | iches  | _ Location:               | PG&E                 | <u>E Topoc</u>        | k, Needles                                  |
| Driller  | Name:  | Ede  | die Rar      | nos   | Drill Casing Diameter:  | <u>10.5</u>  | -12 inches   | _                         | <u>Califo</u>        | rnia                  |   |
| Drilling   | Asst:  | <u>J. (</u>  | Candela      | aria / F.   | <u>Perez</u> Drill Bit:   | <u>10.5</u>  | -12 inches   | Project Nu                | umber:               | 301262                | 255   |
| Tool-F   | usher:   | <u>N/A</u>   | ۹            |   | Depth to First Water:   | <u>60.0</u>  | ft bgs   | _                         |                      |                       |   |
| Rig Ge   | eologist: <u>Alexis McIntyre</u> Converted to Well: X Yes No |  |              |   |   |              |  |                           |                      |                       |   |
| Depth<br>(ft)  | Drilling Run<br>and Averag<br>Penetration R                  | ing Run (ft)<br>d Average<br>etration Rate USCS USCS<br>class Class (See Pilot boring log for<br>full geologic descriptions) |              |   |   |              |  |                           | g presen<br>cuttings | ce of                 | Drilling Fluid                              |
|  |  | _  |              | XXX   | full geologic descriptions)   | <u> </u>     |  |                           |                      |                       |   |
| 5  |  |  |              | × × × × ×   | reddish brown (2.5YR 5/4).  |              |  |                           |                      |                       |   |
| ž21  |  |  | N/A          | $\times$ $\times$ $\times$ $\times$   |   |              |  |                           |                      |                       |   |
|  |  |  |              | $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$ $\hat{\mathbf{x}}$  |   |              |  |                           |                      |                       |   |
|  |  |  |              | XXX   | (22.22.ft) No December 4 and Drilling Nates                               |              |  |                           |                      |                       |   |
| - 1  |  |  | NR           |   | LZZ-ZO ILI NO RECOVELY, SEE DRIIING NOLES.                                |              |  |                           |                      |                       |   |
| 23   |  |  |              | $\langle \rangle$   |   |              |  |                           |                      |                       |   |
|  |  |  |              |   | (23-50 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |              |  |                           |                      |                       |   |
| ∄24  |  |  |              | $\times \times \times$<br>$\times \times \times$  |   |              |  |                           |                      |                       |   |
| на<br>м.   |  |  |              | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$  |   |              |  |                           |                      |                       |   |
| <u></u> 25   |  |  |              | $\hat{\times}$ $\hat{\times}$ $\hat{\times}$  |   |              |  |                           |                      |                       |   |
|  |  |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       |   |
| 26   |  |  |              | $\times$ $\times$ $\times$ $\times$   |   |              |  |                           |                      |                       |   |
|  |  |  |              |   |   | (2           | :6.0 - 36.0') Flushed 12-ir<br>0.5-inch diameter drill cas | nch diameter dri<br>sina. | Il casing            | over                  | (26.0 - 36.0')<br>400 gallons of water      |
| 27_  |  |  |              | $\times$ $\times$ $\times$ $\times$   |   |              |  |                           |                      |                       | used; 135 gallons of                        |
|  |  |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       | gallons of water lost                       |
| 28   |  |  |              | $\times$ $\times$ $\times$  |   |              |  |                           |                      |                       |   |
|  |  |  |              | $\hat{\times}$ $\hat{\times}$ $\hat{\times}$  |   |              |  |                           |                      |                       |   |
| 29   | <b>D</b>   |  |              | $\times \times $ |   |              |  |                           |                      |                       |   |
|  | rates not  |  |              | $\times$ $\times$ $\times$  |   |              |  |                           |                      |                       |   |
| 30   | documented f   | or   |              |   |   |              |  |                           |                      |                       |   |
|  | sonic drilling<br>not required p                             | er   |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       |   |
|  | Specification  |  |              |   |   |              |  |                           |                      |                       |   |
|  | 33 22 00   |  |              | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  | •   |              |  |                           |                      |                       |   |
| 11SNG 22   |  |  | N/A          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       |   |
|  |  |  |              |   |   |              |  |                           |                      |                       |   |
| 22 ONS   |  |  |              | $\hat{\times} \hat{\times} \hat{\times}$  |   |              |  |                           |                      |                       |   |
| 2 <b>- 33 -</b>  |  |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       |   |
| 5  |  |  |              |   |   |              |  |                           |                      |                       |   |
|  |  |  |              |   |   |              |  |                           |                      |                       |   |
|  |  |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       |   |
| 04<br>04<br>04<br>04<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>05<br>04<br>04<br>04<br>04<br>04<br>04<br>04<br>04<br>04<br>04<br>04<br>04<br>04 |  |  |              | $\times \times \times$  |   |              |  |                           |                      |                       |   |
|  |  |  |              | $ \begin{array}{c}                                     $  |   |              |  |                           |                      |                       |   |
|  |  |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   | (3           | 6.0 - 46.0') Advancing 10                                  | ).5-inch diamete          | r drill cas          | sing.                 | (36.0 - 46.0')                              |
|  |  |  |              | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$   |   |              |  |                           |                      |                       | 350 gallons of water<br>used; 80 gallons of |
| z3/  |  |  |              | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |              |  |                           |                      |                       | water recovered; 270 gallons of water lost  |
|  |  |  |              | $\times \times \times$<br>$\times \times \times$  | 2   |              |  |                           |                      |                       | Janene of Mator 1001                        |
| <u>38</u>  |  |  |              | $\times \times \times$  |   |              |  |                           |                      |                       |   |
|  |  |  |              |   |   |              |  |                           |                      |                       |   |
| ¥39  |  |  |              | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$  |   |              |  |                           |                      |                       |   |
|  |  |  |              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$  |   |              |  |                           |                      |                       |   |
|  | viations: 110  |  | - Unif       |   | Classification System ft - fact has -                                     |              | around surface an  | nel – abovo n             |                      |                       | GW -  |
|  | water Not  | -<br>  | solid blu    | ieu 3011<br>je and I  | hollow blue water table marks represent                                   | nt den       | th to water (ft boe)                                       | i first encount           | tered di             | za ievel,<br>urina dr | illing and                                  |
| approv   | (imate static  | : me   | asured       | l durina  | drilling respectively   | ii uep       | to water (it. by5.)  |                           |                      | anny u                |   |
|  | Sinale stall   |  | asureu       | aunny   |   |              |  |                           |                      |                       |   |

| 9            | ARC  | ADIS                    | 5  | Drilling Log  |                    |                       |                | Sh          | ieet: 3   | of 8                   |  |
|--------------|--|-------------------------|--|---|--------------------|-----------------------|----------------|-------------|-----------|------------------------|--|
| Date S       | started:   | 05/03/20                | )22  | Surface Elevation:  | <u>506.35 ft a</u> | msl                   | Borina         | No.:        | ER-0      | 2 10 & 12-inch         |  |
| Date C       | completed:   | <u>05/08/20</u>         | )22  | Northing (NAD83):   | <u>2101009.5</u>   | 0                     | 209            |             |           |                        |  |
| Drilling     | Co.:   | ABC LIC                 | IVIN   | Easting (NAD83):  | <u>7616642.7</u>   | 5                     | Client:        | PG&E        |           |                        |  |
| Drilling     | Method:  | Roto-Sc                 | nic  | Total Depth:  | <u>146.0 ft ba</u> | s                     | Project:       | Final (     | GW Rei    | nedy Phase 2A          |  |
| Drill Ri     | q Type:  | Terra So                | nic Truc   | k Mount Conductor Casing Diameter:  | 12 inches          |                       | Location:      | PG&E        | E Topoc   | k, Needles             |  |
| Driller      | Name:  | Eddie R                 | amos   | Drill Casing Diameter:  | 10.5-12 inc        | ches                  |                | Califo      | rnia      |                        |  |
| Drilling     | Asst   | 301262                  | 255  |   |                    |                       |                |             |           |                        |  |
| Tool-P       | $\frac{1000}{1000}$                                      |                         |  |   |                    |                       |                |             |           |                        |  |
|              | via Goologiet: Alexis Melaturo Converted to Well: Vea No |                         |  |   |                    |                       |                |             |           |                        |  |
| i tig Ge     | ologist.   |                         |  |   |                    |                       |                |             |           |                        |  |
| Depth        | Drilling Run<br>and Averag                               | (ft) USC                | S USCS   | Description   | Drilling r         | notes and observation | ons confirming | g presen    | ce of     | Drilling Fluid         |  |
| (11)         | Penetration F  | ate Cour                |  | full geologic descriptions)   |                    |                       |                | uungs       |           |                        |  |
|              |  |                         |  | (23-50 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |                    |                       |                |             |           |                        |  |
| 41           |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          |   |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
| 42           |  |                         |  |   |                    |                       |                |             |           |                        |  |
|              |  |                         |  |   |                    |                       |                |             |           |                        |  |
| 42           |  |                         | × × ×  |   |                    |                       |                |             |           |                        |  |
| 43           |  |                         |  |   |                    |                       |                |             |           |                        |  |
|              |  |                         |  | 2   |                    |                       |                |             |           |                        |  |
| 44           |  |                         | × × ×<br>× × ×   | 2<br>2  |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | 2   |                    |                       |                |             |           |                        |  |
| 45           |  | N/A                     | × × ×<br>× × ×   |   |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          |   |                    |                       |                |             |           |                        |  |
| 46           |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          |   |                    |                       |                |             |           |                        |  |
|              |  |                         |  |   | (46.0 - 56         | .0') Advancing 10.5-  | inch diamete   | r drill cas | sing.     | (46.0 - 56.0')         |  |
| 47           |  |                         |  |   |                    |                       |                |             |           | used; 90 gallons of    |  |
| 47           |  |                         | × × ×  |   |                    |                       |                |             |           | water recovered; 10    |  |
|              |  |                         | × × ×  |   |                    |                       |                |             |           | galions of water lost  |  |
| 48           |  |                         |  |   |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
| 49           | Penetration  |                         | × × ×<br>× × ×   |   |                    |                       |                |             |           |                        |  |
| L _          | rates not  |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
| 50           | documented f   | or                      |  |   |                    |                       |                |             |           |                        |  |
|              | not required p   | er                      | × × ×<br>× × ×   | (50-72 ft) Sedimentary Rock - Conglomerate;                               | Ā                  |                       |                |             |           |                        |  |
| 51           | Specification  | n                       | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          |   |                    |                       |                |             |           |                        |  |
|              | 33 22 00   |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
|              |  |                         |  |   |                    |                       |                |             |           |                        |  |
| 52           |  |                         | × × ×  |   |                    |                       |                |             |           |                        |  |
|              |  |                         | × × ×  |   |                    |                       |                |             |           |                        |  |
| 53           |  |                         |  |   |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
| 54           |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          | }   |                    |                       |                |             |           |                        |  |
| 55           |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          | }   |                    |                       |                |             |           |                        |  |
|              |  | N/A                     |  |   |                    |                       |                |             |           |                        |  |
|              |  |                         |  |   |                    |                       |                |             |           |                        |  |
| 56           |  |                         | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$   |   | (56.0 - 66         | .0') Advanced 10.5-i  | inch diameter  | casing b    | by dry    | (56.0 - 66.0')         |  |
|              |  |                         |  | }   | drilling an        | d cleaning out casir  | ng with 8-inch | diamete     | r core    | No drilling fluid used |  |
| 57           |  |                         |  |   | 9-inch dia         | meter casing to dril  | l dry.         | neu. Trip   | iped out  |                        |  |
|              |  |                         |  | 2   |                    | -                     |                |             |           |                        |  |
| 58           |  |                         | $\times \times \times$<br>$\times \times \times$                                     |   |                    |                       |                |             |           |                        |  |
|              |  |                         | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$                               | *   |                    |                       |                |             |           |                        |  |
| 50           |  |                         | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$                               | *   |                    |                       |                |             |           |                        |  |
| 39           |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$          | 2   |                    |                       |                |             |           |                        |  |
| L _          |  |                         | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$                 |   |                    |                       |                |             |           |                        |  |
| 60<br>Abbrev | viations: 110  | <u>   </u><br>209 - 11- |  | /<br>Classification System ft - fact has - !                              |                    | d surface ama         | - ahovo ~      | 1000 0      |           | GW/ -                  |  |
|              | water Net  |                         |  | bollow blue weter table merite register                                   | t donth to         |                       |                |             | ta ievel, | UVV -                  |  |
| ground       | water, NO  | es. solid i             | nue and  | nonow plue water table marks represer                                     | n depth to M       | vater (It. bgs.) fil  | SI ENCOUNT     | ered d      | uning ar  | iiii iy and            |  |
| approx       | umate statio   | measure                 | a during   | arilling, respectively.   |                    |                       |                |             |           |                        |  |

| 9             | ARC                       | 4[          | DIS            |  | Drilling Log   |                |   |                                       | Sh                  | eet: 4         | of 8                                     |  |
|---------------|---------------------------|-------------|----------------|--|--|----------------|---|---------------------------------------|---------------------|----------------|--|--|
| Date S        | started:                  | 05/0        | 03/202         | 2  | Surface Elevation:   | <u>506.</u>    | 35 ft amsl  | Boring                                | No.:                | ER-0           | 2 10 & 12-inch                           |  |
| Date C        | Completed:                | <u>05/(</u> | 08/202         | 2  | Northing (NAD83):  | <u>210′</u>    | 1009.50   |                                       |                     |                |  |  |
| Drilling      | Co.:                      | <u>AB</u>   | C LIOV         | 'IN  | Easting (NAD83):   | <u>7616</u>    | 6642.75   | _ Client:                             | PG&E                |                |  |  |
| Drilling      | Method:                   | <u>Rot</u>  | o-Soni         | С  | Total Depth:   | <u>146.</u>    | 0 ft bgs  | Project:                              | Final (             | <u>GW Re</u> r | medy Phase 2A                            |  |
| Drill Ri      | g Type:                   | Ter         | ra Son         | ic Trucł   | <u>k Mount</u> Conductor Casing Diameter:                                    | <u>12 ir</u>   | nches   | Location:                             | PG&E                | Topoc          | k, Needles                               |  |
| Driller       | Name:                     | <u>Edc</u>  | <u>lie Ran</u> | nos  | Drill Casing Diameter:   | <u>10.5</u>    | -12 inches  | rnia                                  |                     |                |  |  |
| Drilling      | Asst:                     | <u>J. C</u> | Candela        | aria / F.  | <u>Perez</u> Drill Bit:  | <u>10.5</u>    | -12 inches  | 301262                                | 255                 |                |  |  |
| Tool-P        | usher:                    | <u>N/A</u>  |                | Depth to First Water: <u>60.0 ft bgs</u>   |  |                |   |                                       |                     |                |  |  |
| Rig Ge        | eologist:                 | <u>Alex</u> | <u>xis Mcl</u> | ntyre  | Converted to Well:   | ×Υ             | ′es 🗌 No  |                                       |                     |                |  |  |
|               | Drilling Pup              | (ft)        |                |  | Description  |                |   |                                       |                     |                |  |  |
| Depth<br>(ft) | and Averag                | e           | USCS<br>Code   | USCS<br>Class  | (See Pilot boring log for  |                | Drilling notes and observat<br>temporary backfill m | ions confirmine<br>aterial in drill c | g presen<br>uttings | ce of          | Drilling Fluid                           |  |
|               |                           |             |                | × × × 1  | tull geologic descriptions)  | <u> </u>       |   |                                       |                     |                |  |  |
| <u>;</u>      |                           |             |                | × × ×<br>× × ×   | reddish brown (2.5YR 5/4).   |                |   |                                       |                     |                |  |  |
| 61            |                           |             |                |  | fragment.  |                |   |                                       |                     |                |  |  |
|               |                           |             |                |  |  |                |   |                                       |                     |                |  |  |
| 62            |                           |             |                | × × × × ×  |  |                |   |                                       |                     |                |  |  |
| 7777          |                           |             |                | $\begin{array}{c} \times \ \times \ \times \\ \times \ \times \ \end{array}$     |  |                |   |                                       |                     |                |  |  |
| 63            |                           |             |                | × × × × ×  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | ^ ^ X X<br>X X X<br>X X X  |  |                |   |                                       |                     |                |  |  |
| 64            |                           |             |                | × × × ×  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$      |  |                |   | •                                     |                     |                |  |  |
| 65            |                           |             |                | $\times \times \times$   |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                                       |  |                |   |                                       |                     |                |  |  |
| 66            |                           |             |                | × × ×<br>× × ×   |  |                |   |                                       |                     |                |  |  |
| 00            |                           |             | N/A            | × × ×<br>× × ×   |  | (6             | 6.0 - 76.0') Advanced 10.5                          | -inch diameter                        | casing b            | y dry          | (66.0 - 76.0')                           |  |
|               |                           |             |                | × × × ×  |  | di             | rilling and cleaning out cas<br>arrel.              | ing with 8-inch                       | diamete             | r core         | No drilling fluid used                   |  |
| 67            |                           |             |                |  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | × × × ×  |  |                |   |                                       |                     |                |  |  |
| 68            |                           |             |                | × × ×<br>× × ×   |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$             |  |                |   |                                       |                     |                |  |  |
| 69            | Penetration               |             |                |  |  |                |   |                                       |                     |                |  |  |
|               | rates not                 |             |                | × × × × ×  |  |                |   |                                       |                     |                |  |  |
| 70            | sonic drilling            |             |                | × × × × × ×  |  |                |   |                                       |                     |                |  |  |
|               | not required p            | er          |                | $\times \times \times$   |  |                |   |                                       |                     |                |  |  |
| 71            | Specification<br>33 22 00 | 1           |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$                                       |  |                |   |                                       |                     |                |  |  |
|               | 00 22 00                  |             |                |  |  |                |   |                                       |                     |                |  |  |
| 72            |                           |             |                | × × × ;  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | $\setminus$ /  | (רב-רג.ס זו) ואס הפכטיפרץ; see Drilling Notes.                               |                |   |                                       |                     |                |  |  |
| 73            |                           |             | N/A            | Х  |  |                |   |                                       |                     |                |  |  |
| 8 -           |                           |             |                |  |  |                |   |                                       |                     |                |  |  |
| 74            |                           |             |                | × × × × × × × × × × × × × × × × × × ×  | ((73.5-82 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |                |   |                                       |                     |                |  |  |
|               |                           |             |                |  | (74-74.3 ft) Rock fragments are moist.                                       | $\exists \mid$ |   |                                       |                     |                |  |  |
|               |                           |             |                | × × ×<br>× × ×   | 2  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | × × × ×  |  |                |   |                                       |                     |                |  |  |
| 76            |                           |             |                | ~ × ×<br>× × ×<br>× × ×  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | × × × × ×  |  | (7             | 76.0 - 86.0') Advanced 10.5                         | -inch diameter                        | casing b            | y dry          | (76.0 - 86.0')<br>No drilling fluid used |  |
| 77            |                           |             | N/A            | × × ×<br>× × ×   |  | ba             | arrel.  | my with o-inch                        | uamete              |                | no animg nula used                       |  |
|               |                           |             |                | × × × × ×  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | × × × × × × × × × × × × × × × × × × ×  |  |                |   |                                       |                     |                |  |  |
| /δ            |                           |             |                |  |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | × × ×<br>× × ×   | 2  |                |   |                                       |                     |                |  |  |
| 79            |                           |             |                | × × ×<br>× × ×   |  |                |   |                                       |                     |                |  |  |
|               |                           |             |                | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ $\times$ |  |                |   |                                       |                     |                |  |  |
| 80<br>Abbro   | viationa: 110             |             | - 11:-         |  | Classification System ft - fast has -  |                | around ourfees                                      |                                       | 1000 a              |                | GW/ -                                    |  |
|               | water Net                 | 303<br>2013 |                | eu JOII  | bollow blue water table marks roproset                                       | nt dor         | yrounu sunace, ams                                  | irst encount                          | ored d              | uring dr       | illing and                               |  |
| boores        | vimate static             |             |                |  | drilling respectively  | πuep           | ni io water (it. bys.) i                            |                                       |                     | unny ur        |  |  |
| approx        | unate statio              | , me        | asured         | uunng  |  |                |   |                                       |                     |                |  |  |
| 9        | ARC/           | 4  | DIS            |  | Drilling Log  |   |   |                                  | Sh                   | eet: 5           | 5 of 8                                    |  |
|----------|----------------|--|----------------|--|---|---|---|----------------------------------|----------------------|------------------|---|--|
| Date S   | Started:       | 05   | /03/202        | 2  | Surface Elevation:  | <u>506</u>  | .35 ft amsl   | Boring                           | No.:                 | ER-0             | 2 10 & 12-inch                            |  |
| Date C   | Completed:     | <u>05</u>  | /08/202        | 2  | Northing (NAD83):   | <u>210</u>  | 1009.50   |                                  |                      |                  |   |  |
| Drilling | g Co.:         | <u>AB</u>  |                | /IN  | Easting (NAD83):  | <u>761</u>  | 6642.75   | Client:                          | PG&E                 |                  |   |  |
| Drilling | Method:        | <u>Ro</u>  | to-Soni        | с<br>  | Total Depth:  | <u>146</u>  | <u>.0 ft bgs</u>  | Project:                         | Final (              | <u>W Re</u>      | medy Phase 2A                             |  |
| Drill Ri | ig Type:       | <u>le</u>  | rra Son        | IC I ruck  | <u>Conductor Casing Diameter:</u>   | luctor Casing Diameter: <u>12 inches</u> Location: <u>PG&amp;E Topo</u> |   |                                  |                      |                  |   |  |
| Driller  | Name:          | <u>Ed</u>  | <u>die Rar</u> | nos  | Drill Casing Diameter:  | 10.5  | <u>5-12 inches</u>  |                                  | Califor              | rnia             | ~~~                                       |  |
| Drilling | j Asst:        | <u>J. (</u>  |                | aria / F.  | <u>Perez</u> Drill Bit:   | <u>10.5</u>   | 5-12 inches   | Project Nu                       | imber:               | 301262           | 255                                       |  |
|          | usner:         | <u>IN//</u>  | 4<br>Wie Mel   | nt ro  | Depth to First Water:   | <u>60.</u>  |   |                                  |                      |                  |   |  |
|          | eologist.      |  |                |  |   |   |   |                                  |                      |                  |   |  |
| Depth    | Drilling Run   | (ft)   | USCS           | USCS   | Description   |   | Drilling notes and observation                                  | ons confirming                   | g presen             | ce of            | Deilling Christ                           |  |
| (ft)     | Penetration R  | ge<br>Rate         Code         Class         (See Pilot boring log for<br>full geologic descriptions)         temporary backfill material in drill cuttings |                |  |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$   | (73.5-82 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4). |   |   |                                  |                      |                  |   |  |
| 81       | -              |  | N/A            | × × × × × ×  |   |   |   |                                  |                      |                  |   |  |
| L _      |                |  |                | $\times$ $\times$ $\times$ $\times$  |   |   |   |                                  |                      |                  |   |  |
| 82       |                |  |                | $\begin{array}{c} X \times X \\ X \times X \\ Y \times Y \end{array}$                                    |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | $\Lambda$ /  | (82-84.5 ft) No Recovery; see Drilling Notes.                               |   |   |                                  |                      |                  |   |  |
| 83       |                |  |                | $  \setminus /  $  |   |   |   |                                  |                      |                  |   |  |
|          |                |  | NR             | X  |   |   |   |                                  |                      |                  |   |  |
| 84       |                |  |                | $ / \rangle$   |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | $/ \setminus$  |   |   |   |                                  |                      |                  |   |  |
| 85       |                |  |                | × × ×<br>× × ×   | (84.5-117 ft) Sedimentary Rock - Conglomerate<br>reddish brown (2 5YR 5/4)  | ;   |   |                                  |                      |                  |   |  |
|          |                |  |                | $\times \times \times$   |   |   |   |                                  |                      |                  |   |  |
| 86       |                |  |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$   |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | × × ×<br>× × ×   |   | ()  | 86.0 - 96.0') Advanced 10.5-                                    | inch diameter                    | casing b             | y dry            | (86.0 - 96.0')<br>No drilling fluid used  |  |
| 87       |                |  |                | $\times \times \times$<br>$\times \times \times$   |   | b   | parrel.   | ng with 0-men                    | ulamete              |                  | No uning haid used                        |  |
|          |                |  |                |  |   |   |   |                                  |                      |                  |   |  |
| 88       |                |  |                | × × ×<br>× × ×   |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | $ \begin{array}{c}                                     $   |   |   |   |                                  |                      |                  |   |  |
| 89       | Demotion       |  |                | × × × × × ×  |   |   |   |                                  |                      |                  |   |  |
|          | rates not      |  |                | $\times$ $\times$ $\times$ $\times$  |   |   |   |                                  |                      |                  |   |  |
| 90       | documented fo  | or   |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$   |   |   |   |                                  |                      |                  |   |  |
|          | not required p | ər   |                | × × ×<br>× × ×   |   |   |   |                                  |                      |                  |   |  |
| 91       | Specification  |  |                | $\times \times \times$<br>$\times \times \times$   |   |   |   |                                  |                      |                  |   |  |
|          | 33 22 00       |  |                | × × ×<br>× × ×   | •   |   |   |                                  |                      |                  |   |  |
| 92       |                |  |                | × × ×<br>× × ×   |   |   |   |                                  |                      |                  |   |  |
|          |                |  | N/A            | $\begin{array}{c} & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{array}$ |   |   |   |                                  |                      |                  |   |  |
| _93      |                |  |                | × × ×<br>× × ×   |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                |  |   |   |   |                                  |                      |                  |   |  |
| 94       |                |  |                |  |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | $X \times X$<br>$X \times X$   | (94 ft) Slight increase in competent rock                                   |   |   |                                  |                      |                  |   |  |
| 95       | ļ              |  |                | $\begin{array}{c} & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{array}$ |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | × × ×<br>× × ×   |   |   |   |                                  |                      |                  |   |  |
| 96       |                |  |                | $\times$ $\times$ $\times$ $\times$ $\times$ $\times$  |   |   |   |                                  |                      |                  |   |  |
|          |                |  |                | $\begin{array}{c} & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{array}$ |   | ()<br>h   | 96.0 - 116.0') Advanced 10.5<br>Irilling and cleaning out casis | 5-inch diamete                   | er casing<br>diamete | by dry<br>r core | (96.0 - 116.0')<br>No drilling fluid used |  |
| 97       |                |  |                | × × ×<br>× × ×   |   | b   | parrel. A hydraulic line on the                                 | drill head rup                   | tured rel            | asing            |   |  |
|          |                |  |                | × × ×<br>× × ×   |   |   | Confirmed hydraulic fluid did                                   | not go down b                    | orehole.             | Once             |   |  |
| 98       | ]              |  |                | $\begin{array}{c} & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{array}$ |   | d<br>  c  | Initing resumed hard materia<br>cleaned out with 8-inch diame   | al was encoun<br>eter core barre | tered and<br>el.     | 3                |   |  |
|          |                |  |                | $\begin{array}{c} X \times X \\ X \times X \end{array}$  |   |   |   |                                  |                      |                  |   |  |
| 99       | 1              |  |                | $\begin{array}{c} X \times X \\ X \times X \end{array}$  |   |   |   |                                  |                      |                  |   |  |
|          | 1              |  |                |  |   |   |   |                                  |                      |                  |   |  |
| 100      | 1              |  |                |  |   |   |   |                                  |                      |                  |   |  |
| Abbre    | viations: US   | SCS  | s = Unif       | ied Soil   | Classification System, ft = feet, bgs = I                                   | belov   | v ground surface, ams   | l = above m                      | nean se              | ea level,        | GW =                                      |  |
| ground   | dwater, Note   | es:  | solid blu      | le and l   | nollow blue water table marks represer                                      | nt dep  | pth to water (ft. bgs.) fi                                      | rst encount                      | ered d               | uring dr         | illing and                                |  |
| approx   | ximate static  | me   | easured        | during   | drilling, respectively.   |   |   |                                  |                      |                  |   |  |

| 9             | ARC                          | ADIS            | 5   | Drilling Log  |                    |   |                                       | Sh                   | ieet: 6               | 6 of 8                                     |
|---------------|------------------------------|-----------------|---|---|--------------------|---|---------------------------------------|----------------------|-----------------------|--|
| Date S        | Started:                     | 05/03/20        | 22  | Surface Elevation:                                    | 506.35             | ft amsl                                       | Borina                                | No.:                 | ER-0                  | 2 10 & 12-inch                             |
| Date (        | Completed:                   | <u>05/08/20</u> | 22  | Northing (NAD83):                                     | 210100             | 9.50  |                                       |                      |                       |  |
| Drilling      | g Co.:                       | ABC LIO         | VIN   | Easting (NAD83):                                      | 761664             | 2.75  | _ Client:                             | PG&E                 |                       |  |
| Drilling      | g Method:                    | Roto-Sol        | <u>nic</u><br>nic Truc  | I otal Depth:   | <u>146.0 ft</u>    | bgs   | _ Project:                            | Final C              | <u>GVV Re</u>         | medy Phase ZA                              |
| Drillor       | ig Type.<br>Nomo:            | Eddio Dr        | me me   | <u>k Mount</u> Conductor Casing Diameter.             |                    | inchos  | _ Location.                           | <u>rua</u>           | <u>rnia</u>           | K, INCEUIES                                |
| Drilling      | n Asst                       | L Cande         | arria / F   | Perez Drill Bit                                       | 10.5-12            | inches  | -<br>Proiect Ni                       | imber:               | 30126                 | 255  |
| Tool-F        | Pusher:                      | N/A             | <u>, ana / i .</u>  | Depth to First Water:                                 | 60.0 ft b          | as  | _ 1 10,000110                         |                      | 00120                 | 200  |
| Rig Ge        | eologist:                    | Alexis Mo       | cIntyre   | Converted to Well:                                    | × Yes              | No  | -                                     |                      |                       |  |
|               | Drilling Dun                 | (#)             |   | Description   |                    |   |                                       |                      |                       |  |
| Depth<br>(ft) | and Average<br>Penetration F | ate USCS        | USCS<br>Class   | (See Pilot boring log for full geologic descriptions) | Drilli             | ng notes and observat<br>temporary backfill m | ions confirming<br>aterial in drill c | g presen<br>cuttings | ce of                 | Drilling Fluid                             |
| 5             |                              |                 | × × ×<br>× × ×  | (84.5-117 ft) Sedimentary Rock - Conglomerate         | ;                  |   |                                       |                      |                       |  |
| [             |                              |                 |   | (100.7-101 ft) Rock fragments are moist.              |                    |   |                                       |                      |                       |  |
|               |                              |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                    |   |                                       |                      |                       |  |
| _102_         | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                    |   |                                       |                      |                       |  |
| 103           | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
| 105           | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | × × ×<br>× × ×  |   |                    |   |                                       |                      |                       |  |
| 106           | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
| <u>107</u>    | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
| 108           | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
|               |                              |                 |   |   |                    |   |                                       |                      |                       |  |
| 109           | Demotration                  | N/A             | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
| 5<br>         | rates not                    |                 |   |   |                    |   |                                       |                      |                       |  |
|               | documented f                 | or              |   |   |                    |   |                                       |                      |                       |  |
|               | not required p               | er              | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                    |   |                                       |                      |                       |  |
|               | Specification<br>33 22 00    | 1               |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$        |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
| 3 <b>113</b>  | -                            |                 | $ \begin{vmatrix} \hat{x} & \hat{x} & \hat{x} \\ x & x & x \end{vmatrix} $  |   |                    |   |                                       |                      |                       |  |
| 5             | -                            |                 | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$                      |   |                    |   |                                       |                      |                       |  |
| /114          | 1                            |                 | $ \begin{vmatrix} \hat{x} & \hat{x} & \hat{x} \\ x & x & x \end{vmatrix} $  |   |                    |   |                                       |                      |                       |  |
| 115           |                              |                 |   |   |                    |   |                                       |                      |                       |  |
|               | ]                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   |                    |   |                                       |                      |                       |  |
| _116_         |                              |                 | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$                      |   |                    |   |                                       |                      |                       |  |
|               | _                            |                 | $\begin{array}{c} \times \times \times \\ \times \times \times \end{array}$ |   | (116.0<br>drilling | - 145.0') Advanced 10<br>and cleaning out cas | 0.5-inch diame<br>ing with 8-inch     | ter casin<br>diamete | g by dry<br>r core    | (116.0 - 145.0')<br>No drilling fluid used |
|               |                              |                 |   |   | barrel             |   | J 2                                   |                      |                       | J  |
|               |                              |                 | / /   | (117-120 ft) No Recovery; see Drilling Notes.         |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $  \rangle /$   |   |                    |   |                                       |                      |                       |  |
|               | -                            | NR              |   |   |                    |   |                                       |                      |                       |  |
| 119           | -                            |                 |   |   |                    |   |                                       |                      |                       |  |
|               | -                            |                 | $ / \rangle$  |   |                    |   |                                       |                      |                       |  |
| 120           | viations: 14                 |                 |   | Classification System ft - fast here - 1              |                    | aund aurface. area                            |                                       | 0000 00              |                       | CW -                                       |
| aroun         | dwater Not                   | es: solid h     | lue and   | hollow blue water table marks represer                | nt denth t         | o water (ft hos ) f                           | irst encount                          | tered d              | za ievel,<br>urina dr | illing and                                 |
| appro         | ximate static                | measure         | d durina  | drilling, respectively.                               |                    | - 114101 (11. 090.) 1                         |                                       | u                    | annig ui              |  |
| <u> </u>      |                              |                 |   |   |                    |   |                                       |                      |                       |  |

| 9                   | ARC   | 4[               | DIS            | 1  | Drilling Log   |                 |  |                                      | Sh                   | eet: 7               | of              | 8        |
|---------------------|---|------------------|----------------|--|--|-----------------|--|--------------------------------------|----------------------|----------------------|-----------------|----------|
| Date S              | Started:                                    | 05/              | 03/202         | 2  | Surface Elevation:   | <u>506.35 t</u> | ft amsl  | Borina                               | No.:                 | ER-02                | 2 10 &          | 12-inch  |
| Date C              | Completed:                                  | <u>05/</u>       | 08/202         | 2  | Northing (NAD83):  | 210100          | 9.50   |                                      |                      |                      |                 |          |
| Drilling            | g Co.:                                      | <u>AB</u>        | C LIOV         | 'IN  | Easting (NAD83):   | <u>761664</u>   | 2.75   | Client:                              | PG&E                 |                      |                 | ~ •      |
| Drilling            | Method:                                     | <u>Ro</u> t      | to-Soni        | <u>с</u>                                   | Total Depth:   | <u>146.0 ft</u> | bgs  | Project:                             | Final (              | <u>JW Ren</u>        | hedy Pha        | ase 2A   |
| Drill Ri            | ig Type:                                    | <u>ler</u>       | <u>ra Son</u>  | IC I ruck                                  | <u>Mount</u> Conductor Casing Diameter:  | 12 inche        | ès ,   | Location:                            | PG&E                 | <u>Iopock</u>        | <u>, Needle</u> | es       |
| Driller             | Name:                                       |                  | <u>die Rar</u> | nos<br>prio / E                            | Drill Casing Diameter:   | 10.5-12         | inches   | Draiget Nu                           | <u>Califor</u>       | <u>nia</u><br>201262 | E E             |          |
|                     | ) ASSI:<br>Pushor:                          | J. C             |                | ana / F.                                   | Perez Drill Bit:<br>Dopth to First Water:  | 10.5-12         |  | Project NL                           | imper:               | 301262               | 55              |          |
| Rig Ge              |   |                  | n<br>vis McI   | ntvre                                      | Converted to Well:   |                 |  |                                      |                      |                      |                 |          |
|                     |   |                  |                | intyre                                     |  |                 |  |                                      |                      |                      |                 |          |
| Depth<br>(ft)       | Drilling Run<br>and Averag<br>Penetration R | (ft)<br>e<br>ate | USCS<br>Code   | USCS<br>Class                              | Description<br>(See Pilot boring log for<br>full geologic descriptions)  | Drilli          | ng notes and observatio<br>temporary backfill ma | ons confirminq<br>aterial in drill c | g presenc<br>uttings | ce of                | Drillir         | ng Fluid |
|                     |   |                  |                | × × × × × × × × × × × × × × × × × × ×      | (120-127 ft) Sedimentary Rock - Conglomerate;<br>reddish brown (2.5YR 5/4).<br>(120.01-122 ft) Rock fragments are moist. |                 |  |                                      |                      |                      |                 |          |
|                     |   |                  |                | × × ×<br>× × ×<br>× × ×                    |  |                 |  |                                      |                      |                      |                 |          |
|                     | {   |                  |                | ~ ~ × ×<br>× × × ×                         |  |                 |  |                                      |                      |                      |                 |          |
| _123_               | -   |                  |                | × × × × ×                                  |  |                 |  |                                      |                      |                      |                 |          |
|                     |   |                  | N/A            | * * * * * * * * * * * * * * * * * * *      |  |                 | SV   |                                      |                      |                      |                 |          |
| 125                 |   |                  |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$ |  |                 | 6  |                                      |                      |                      |                 |          |
|                     |   |                  |                | × × ×<br>× × ×<br>× × ×                    |  |                 |  |                                      |                      |                      |                 |          |
| 126                 |   |                  |                |  |  | 4A              |  |                                      |                      |                      |                 |          |
| 107                 |   |                  |                | × × × × × × × × × × × × × × × × × × ×      | •  |                 |  |                                      |                      |                      |                 |          |
| /                   |   |                  |                | $\hat{\mathbf{x}}$                         | (127-129.4 ft) No Recovery; see Drilling Notes.  | -               |  |                                      |                      |                      |                 |          |
| 128_<br>128_<br>129 |   |                  | NR             |  |  |                 |  |                                      |                      |                      |                 |          |
|                     | Penetration<br>rates not                    | or               |                | <u> </u>                                   | (129.4-145 ft) Sedimentary Rock -  | _               |  |                                      |                      |                      |                 |          |
| 130                 | sonic drilling                              |                  |                | × × × × × × × × × × × × × × × × × × ×      | Conglomerate; reddish brown (2.5YR 5/4).   |                 |  |                                      |                      |                      |                 |          |
|                     | not required p<br>Specification<br>33 22 00 | er<br>I          |                | × × × × × × × × × × × × × × × × × × ×      |  |                 |  |                                      |                      |                      |                 |          |
| 132                 |   |                  |                | × × ×<br>× × ×<br>× × ×                    |  |                 |  |                                      |                      |                      |                 |          |
|                     |   |                  |                | × × × × × × × × × × × × × × × × × × ×      |  |                 |  |                                      |                      |                      |                 |          |
|                     |   |                  |                | × × × × × × × × × × × × × × × × × × ×      |  |                 |  |                                      |                      |                      |                 |          |
|                     | -   |                  | N/A            | × × ×<br>× × ×<br>× × ×                    |  |                 |  |                                      |                      |                      |                 |          |
| 135                 | 1   |                  |                | × × × ×                                    |  |                 |  |                                      |                      |                      |                 |          |
| 136                 |   |                  |                | × × × × × × × × × × × × × × × × × × ×      |  |                 |  |                                      |                      |                      |                 |          |
|                     | 1   |                  |                | × × ×<br>× × ×<br>× × ×                    |  |                 |  |                                      |                      |                      |                 |          |
| 5                   |   |                  |                | × × × ×                                    |  |                 |  |                                      |                      |                      |                 |          |
| _138_               |   |                  |                | $\hat{\mathbf{x}} \times \hat{\mathbf{x}}$ |  |                 |  |                                      |                      |                      |                 |          |
|                     |   |                  |                | × × × ×                                    |  |                 |  |                                      |                      |                      |                 |          |
|                     | ļ   |                  |                | × × ×<br>× × ×<br>× × ×                    |  |                 |  |                                      |                      |                      |                 |          |
|                     | ļ   |                  |                | × × ×<br>× × ×                             |  |                 |  |                                      |                      |                      |                 |          |
| 140                 |   |                  |                | × × ×<br>× × ×                             |  | <u> </u>        |  |                                      |                      |                      |                 |          |
| Abbre               | viations: US                                | SCS              | = Unif         | ied Soil                                   | Classification System, ft = feet, bgs = b  | elow gro        | bund surface, ams                                | I = above n                          | nean se              | ea level, (          | GW =            |          |
| ground              | awater, Note                                | es: s            | solid blu      | le and h                                   | nollow blue water table marks represen   | t depth t       | o water (tt. bgs.) fi                            | rst encount                          | ered du              | uring dril           | iing and        |          |
| approx              | ximate static                               | me               | asured         | auring                                     | aniing, respectively.  |                 |  |                                      |                      |                      |                 |          |

| 9             | ARC/           | ADIS             | 5  | Drilling Log   |   |                                       | Sh                  | neet: 8         | of 8                   |
|---------------|----------------|------------------|--|--|---|---------------------------------------|---------------------|-----------------|------------------------|
| Date S        | Started:       | 05/03/202        | 22   | Surface Elevation:   | 506.35 ft amsl  | Borina                                | No.:                | ER-02           | 2 10 & 12-inch         |
| Date C        | Completed:     | 05/08/202        | 22   | Northing (NAD83):  | 2101009.50  |                                       |                     |                 |                        |
| Drilling      | J Co.:         | ABC LIO          | VIN  | Easting (NAD83):   | 7616642.75  | Client:                               | PG&E                | -               |                        |
| Drilling      | Method:        | <u>Roto-Son</u>  | lic  | Total Depth:   | <u>146.0 ft bgs</u>                                   | Project:                              | Final (             | GW Rem          | nedy Phase 2A          |
| Drill Ri      | д Туре:        | <u>Terra Sor</u> | <u>nic Trucl</u>   | <u>k Mount</u> Conductor Casing Diameter:                                      | <u>12 inches</u>                                      | Location:                             | PG&E                | <u>E Topock</u> | , Needles              |
| Driller       | Name:          | <u>Eddie Ra</u>  | mos  | Drill Casing Diameter:   | 10.5-12 inches  | -                                     | <u>Califo</u>       | rnia            |                        |
| Drilling      | Asst:          | <u>J. Candel</u> | laria / F.   | <u>Perez</u> Drill Bit:  | 10.5-12 inches  | Project Nu                            | mber:               | 301262          | 55                     |
| Tool-F        | Pusher:        | N/A              |  | Depth to First Water:  | 60.0 ft bgs   |                                       |                     |                 |                        |
| Rig Ge        | eologist:      | <u>Alexis Mc</u> | Intyre   | Converted to Well:   | X Yes No  |                                       |                     |                 |                        |
|               |                | <b>6</b> )       |  | Description  |   |                                       |                     |                 |                        |
| Depth<br>(ft) | and Average    | USCS<br>Code     | USCS<br>Class  | (See Pilot boring log for  | Drilling notes and observati<br>temporary backfill ma | ions confirmino<br>aterial in drill c | g presen<br>uttings | ce of           | Drilling Fluid         |
|               | T eneration to |                  |  | full geologic descriptions)  |   |                                       |                     |                 |                        |
|               |                |                  |  | ((129.4-145 ft) Sedimentary Rock -<br>Conglomerate; reddish brown (2.5YR 5/4). |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               | Depatration    |                  | × × ×<br>× × ×   |  |   |                                       |                     |                 |                        |
| 142           | rates not      |                  | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$     |  |   |                                       |                     |                 |                        |
|               | documented for | or               | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$     |  |   |                                       |                     |                 |                        |
| 440           | sonic drilling | N/A              |  |  |   |                                       |                     |                 |                        |
| 143           | Specification  |                  | $\begin{vmatrix} \hat{x} & \hat{x} & \hat{x} \\ x & x & x \end{vmatrix}$ |  |   |                                       |                     |                 |                        |
|               | 33 22 00       |                  |  |  |   |                                       |                     |                 |                        |
| 144           |                |                  | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$     |  |   |                                       |                     |                 |                        |
| <u> </u>      |                |                  | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$     |  |   |                                       |                     |                 |                        |
|               |                |                  | $\times \times \times$   | (145, 146 ft) No Possyony and Drilling Notes                                   | (145.0 146.0') Advanced wi                            | th Q inch diam                        | otor oor            | borrol          | (145.0 146.0')         |
|               |                | NR               |  | (145-146 II) NO Recovery, see Drilling Notes.                                  | to plug the core barrel to clea                       | an out prior to                       | well insta          | allation.       | No drilling fluid used |
| 146           |                |                  |  |  | Core not bagged or logged.                            |                                       |                     |                 |                        |
|               |                |                  |  | End of Boring at 146 ft bgs.   |   |                                       |                     |                 |                        |
| 147           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 148           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 149           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 150           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 151           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 152_          |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 153           |                |                  |  |  |   |                                       |                     |                 |                        |
| 5 – –         |                |                  |  |  |   |                                       |                     |                 |                        |
| 154           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 157           | 1              |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| 450           |                |                  |  |  |   |                                       |                     |                 |                        |
| 158           |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
|               |                |                  |  |  |   |                                       |                     |                 |                        |
| <u> </u>      |                |                  |  |  |   |                                       |                     |                 |                        |
| 160           |                | 00               |  |  |   | 1 1                                   |                     |                 | 0)4/                   |
| Abbre         | viations: US   | CS = Uni         | tied Soil  | Classification System, tt = feet, bgs =  | below ground surface, ams                             | si = above m                          | nean se             | ea level, (     | VV =<br>ای موجود       |
| ground        | awater, Note   | es: solid bl     | ue and l   | nollow blue water table marks represer   | nt depth to water (ft. bgs.) f                        | irst encount                          | ered d              | uring dril      | ling and               |
| approx        | kimate static  | measured         | d during   | drilling, respectively.  |   |                                       |                     |                 |                        |

# **Attachment 4**

Well Construction Log

| 9              | ARC                                       | ADIS                                   |              |   | Well Consti  | ruction Log   | S                              | Sheet: 1 of 8   |
|----------------|---|--|--------------|---|--|---|--------------------------------|---|
| Date S         | Started:                                  | 05/08/2022                             |              |   | _Surface Elevation:  | 506.35 ft amsl  |                                | 2_02  |
| Date (         | Completed:                                | 05/10/2022                             |              |   | _Shallow Well Elevation:   | 506.02 ft amsl  |                                | 1-02  |
| Drilling       | g Co.:                                    | ABC LIOVIN                             |              |   | _Deep Well Elevation:  | N/A   | Client: <u>PG&amp;E</u>        |   |
| Drilling       | g Method:                                 | Sonic Drilling                         |              |   | _Northing (NAD83):   | 2101009.50  | Project: <u>Final</u>          | GW Remedy Phase 2A  |
| Driller        | Name:                                     | <u>Eddie Ramos</u>                     |              |   | _Easting (NAD83):  | 7616642.75  | Location: <u>PG&amp;E</u>      | Topock, Needles California  |
| Drilling       | g Asst:                                   | J. Candelaria                          | F. Per       | ez                                      | _Borehole Diameter:  | 8-12 inches   |                                |   |
| Logge          | er:                                       | Alexis McIntyr                         | 9            |   | Static Water Level:  | See Log for Depths  | Project Number                 | r: <u>30126255</u>  |
| Editor         | :   | Sean McGran                            | e            |   | _Development End Date:   | 6/28/2022   |                                |   |
|                | Depth:                                    | <u>146 ft bgs</u>                      |              |   | _Well Completion:<br>Construc  | tion Details  | To Be Completed                | in Well Vault   |
| Depth (ft)     | Groundwate<br>Sample ID                   | Geologi<br>Formatic                    | USCS<br>Code | USCS<br>Class                           |  |   | Calculated<br>Material Volumes | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume   |
|                | -   | Fill                                   | SM           |   | (0.0 - 1.0')<br>Temporary Surface<br>Completion<br>(1.0 - 2.0')<br>Cemex #2/16 | (0.0 - 36.0') 12"<br>Diameter Borehole  |                                | (0.0 - 1.0') 7 bags<br>Note: 2.5 x 2.5 ft. concrete pad<br>with 18 inch diameter lockable<br>vault, High Sped 4,500 PSI<br>Concrete.<br>Note: Cemex #2/16 (16x30) Lapis |
| 2 2            | -   |  |              | ^ ^ ^ × × × × × × × × × × × × × × × × × | (16x30) Lapis Lustre<br>Sand   |   | 2                              | Lustre Sand extended into skirt of<br>vault.  |
| 4 _ 4 5        | -   | Weathered<br>Bedrock -<br>Conglomerate | N/A          | × × × × × × × × × × × × × × × × × × ×   | (2.0 - 5.0')<br>Navite Material<br>(0.3 - 47.1')<br>6" Sch. 80 PVC<br>Casing   |   |                                | was from the SPY.   |
|                |   |  |              | × × × × × × × × × × × × × × × × × × ×   |  |   |                                |   |
|                | -   |  |              | × × × × × × × × × × × × × × × × × × ×   |  |   |                                |   |
|                | No<br>Groundwater<br>Samples<br>Collected |  |              | × × × × × × × × × × × × × × × × × × ×   |  |   |                                |   |
| 12             | -   |  |              | × × × × × × × × × × × × × × × × × × ×   | (5.0 - 39.6')<br>Portland Cement<br>5% Bentonite Type                          |   | (5.0 - 39.6')<br>139.4 gallons | (5.0 - 39.6') 175 gallons (126%)<br>Note: Grout seal, used >20% of<br>the caculated voume due to  |
| ; 13<br><br>14 | -   | Weathered<br>Bedrock -<br>Conglomerate | N/A          | × × × × × × × × × × × × × × × × × × ×   | I, II, and V with<br>Hydrogel  |   |                                | drilling and grout migration.   |
| 15<br>15       | -   |  |              | · · · · · · · · · · · · · · · · · · ·   |  |   |                                |   |
| 9 16<br>17     | -   |  |              | × × × × × × × × × × × × × × × × × × ×   |  |   |                                |   |
|                | -   |  |              | × × × × × × × × × × × × × × × × × × ×   |  |   |                                |   |
| 19             | -   |  |              | × × × × × × × × × × × × × × × × × × ×   |  |   |                                |   |
| 20<br>Abbre    | l<br>viations: 11                         | <br>SCS = Unified                      | Soil Cl      | <u>× × × </u><br>assificat              | ion System ft = feet bas   | = below ground surface an   | nsl = above mean               | sea level SS = Stainless  |
| Steal          | NR = No R                                 | ecoverv. N/A =                         | Not A        | oplicabl                                | e. GW = aroundwater. No  | tes: solid blue and hollow h  | lue water table ma             | arks represent depth to water   |
| (ft. ba        | s.) static wa                             | ter measured                           | durina a     | develop                                 | ment and approximate sta   | tic measured during drilling  | , respectively.                |   |
|                | ,   |  |              |   |  | unit of the second of t | , <u>-</u>                     |   |

| 9                       | ARC                   | ADIS                      |          |  | Well Cons                        | truction Log                       | Ę                     | Sheet: 2 of 8  |
|-------------------------|-----------------------|---------------------------|----------|--|----------------------------------|------------------------------------|-----------------------|--|
| Date S                  | Started:              | 05/08/2022                |          |  | Surface Elevation:               | 506.35 ft amsl                     |                       | 2.02   |
| Date (                  | Completed             | 05/10/2022                |          |  | Shallow Well Elevation           | : 506.02 ft amsl                   |                       | <u> </u>   |
| Drilling                | q Co.:                | ABC LIOVIN                |          |  | Deep Well Elevation:             | N/A                                | Client: PG&B          | _  |
| Drilling                | g Method:             | Sonic Drilling            |          |  | Northing (NAD83):                | 2101009.50                         | Project: Final        | GW Remedy Phase 2A   |
| Driller                 | Name:                 | Eddie Ramos               | ;        |  | _Easting (NAD83):                | 7616642.75                         | Location: PG&         | E Topock, Needles California                                       |
| Drilling                | g Asst:               | J. Candelaria             | / F. Pe  | rez  | _Borehole Diameter:              | 8-12 inches                        |                       | •  |
| Logge                   | er:                   | Alexis McInty             | re       |  | Static Water Level:              | See Log for Depths                 | Project Numbe         | r: <u>30126255</u>   |
| Editor                  | :                     | Sean McGrar               | ne       |  | _Development End Dat             | e: <u>6/28/2022</u>                |                       |  |
| Total                   | Depth:                | <u>146 ft bgs</u>         |          |  | _Well Completion:                | 🔀 Flush 🗌 Stick-up 🗌               | To Be Completed       | in Well Vault  |
| epth<br>(ft)            | Groundwa              | al ologic ha              | SCS      | SCS<br>lass  | Const                            | ruction Details                    | Calculated            | Material Volumes Installed<br>Note: percentages are the actual     |
|                         |                       | For                       | 50       | × × ×  | (0.3 - 47.1')                    |                                    |                       | volume vs the calculated volume                                    |
| <br>21_                 | -                     | Weathered                 | Ν/Δ      | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \\ \times & \times &$                  | 6" Sch. 80 PVC<br>Casing         |                                    |                       |  |
| 19                      |                       | Conglomerate              |          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$   |                                  |                                    |                       |  |
| 22                      |                       |                           | L        | $\times \times \times$   |                                  |                                    |                       |  |
|                         | -                     |                           | NR       |  |                                  |                                    |                       |  |
| 23_                     | _                     |                           |          |  |                                  |                                    |                       |  |
| ан<br>м – –             | -                     |                           |          |  |                                  |                                    |                       |  |
| 242                     | -                     |                           |          |  |                                  |                                    |                       |  |
|                         | -                     |                           |          |  |                                  |                                    |                       |  |
| 20 <u>-</u> 20 <u>-</u> |                       |                           |          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$   | SS Centralizer                   |                                    |                       |  |
| 26                      |                       |                           |          | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$                         |                                  |                                    |                       |  |
|                         | _                     |                           |          | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$                         |                                  |                                    |                       |  |
| 27                      | _                     |                           |          |  |                                  |                                    |                       |  |
|                         | _                     |                           |          |  |                                  |                                    |                       |  |
|                         |                       |                           |          |  |                                  |                                    |                       |  |
| 29                      | _                     |                           |          |  |                                  |                                    |                       |  |
|                         | No                    |                           |          | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  | (5.0 - 39.6')<br>Portland Cement |                                    | (5.0 - 39.6')         | (5.0 - 39.6') 175 gallons (126%)<br>Note: Grout seal, used >20% of |
| <u>_</u> 30_            | Groundwate<br>Samples | r                         |          |  | 5% Bentonite Type                |                                    | 139.4 gallons         | potential voids that formed during                                 |
|                         | Collected             |                           |          | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$   | Hydrogel                         |                                    |                       | drilling and grout migration.                                      |
| H31                     | -                     | Weathered                 |          |  |                                  |                                    |                       |  |
| <br>                    | -                     | Bedrock -<br>Conglomerate | N/A      | × × ×<br>× × ×   |                                  |                                    |                       |  |
|                         |                       |                           |          | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  |                                  |                                    |                       |  |
| 33                      | _                     |                           |          |  |                                  |                                    |                       |  |
|                         | -                     |                           |          |  |                                  |                                    |                       |  |
|                         | -                     |                           |          | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  |                                  |                                    |                       |  |
| 35                      | 1                     |                           |          | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  |                                  |                                    |                       |  |
|                         | 1                     |                           |          | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$                         |                                  |                                    |                       |  |
|                         | ]                     |                           |          |  |                                  | (36.0 - 145.0')<br>10.75" Diameter |                       |  |
|                         | 4                     |                           |          |  |                                  | Borehole                           |                       |  |
| -HAH                    | -                     |                           |          | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$                         |                                  |                                    |                       |  |
|                         | -                     |                           |          |  |                                  |                                    |                       |  |
| - ARC                   | -                     |                           |          | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  |                                  |                                    |                       |  |
|                         | 1                     |                           |          | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  |                                  |                                    |                       |  |
| 40                      | 1                     |                           |          | $  \times \times$ | <b></b>                          |                                    | (39.6 - 45.2')        | (39.6 - 45.2') 4 bags (89%)  |
| Abbre                   | eviations: L          | SCS = Unified             | l Soil C | lassificat   | ion System, ft = feet, bg        | s = below ground surface,          | amsl = above mean     | sea level, SS = Stainless  |
| Steal,                  | NR = No F             | Recovery, N/A             | = Not A  | pplicabl   | e, GW = groundwater, I           | Notes: solid blue and hollov       | v blue water table ma | arks represent depth to water                                      |
| g (ft. bg               | s.) static w          | ater measured             | during   | develop  | ment and approximate s           | static measured during drilli      | ng, respectively.     |  |
| 5                       |                       |                           |          |  |                                  |                                    |                       |  |

| 9              | ARC                          | ADIS                      |                      |  | Well Constr  | ruction Log                  | (                                      | Sheet: 3 of 8   |
|----------------|------------------------------|---------------------------|----------------------|--|--|------------------------------|--|---|
| Date S         | Started:                     | 05/08/2022                |                      |  | _Surface Elevation:  | 506.35 ft amsl               |  | 2 02  |
| Date 0         | Completed:                   | 05/10/2022                |                      |  |  | 506.02 ft amsl               |  | <u> </u>  |
| Drilling       | Co.:                         | ABC LIOVIN                |                      |  | _Deep Well Elevation:  | N/A                          | Client: PG&E                           |   |
| Drilling       | Method:                      | Sonic Drilling            |                      |  | _Northing (NAD83):   | 2101009.50                   | Project: <u>Final</u>                  | GW Remedy Phase 2A  |
| Driller        | Name:                        | Eddie Ramos               |                      |  | _Easting (NAD83):  | 7616642.75                   | Location: PG&E                         | E Topock, Needles California  |
| Drilling       | Asst:                        | J. Candelaria             | / F. Pe              | rez  | Borehole Diameter:   | 8-12 inches                  |  |   |
| Logge          | r:                           | Alexis McIntyr            | e                    |  | Static Water Level:  | See Log for Depths           | Project Numbe                          | r: <u>30126255</u>  |
| Editor         |                              | <u>Sean McGran</u>        | е                    |  | _Development End Date:   | 6/28/2022                    |  |   |
| Total [        | Depth:                       | 146 ft bgs                |                      |  | _Well Completion:  | × Flush Stick-up             | To Be Completed                        | in Well Vault   |
| Depth (ft)     | Groundwate<br>Sample ID      | Geologic                  | USCS<br>Code         | USCS<br>Class  | Construct  |                              | Calculated<br>Material Volumes         | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume   |
|                |                              | Weathered                 |                      | × × × × × × × × × × × × × × × × × × ×  | (0.3 - 47.1')<br>6" Sch. 80 PVC<br>Casing<br>(39.6 - 45.2')<br>Cemex #0/30<br>(30x50) Lapis Lustre<br>Sand<br>(42.5 - 43.5')<br>SS Centralizer |                              | 4.5 bags<br>(39.6 - 45.2')<br>4.5 bags | Note: Transition sand seal<br>(39.6 - 45.2') 4 bags (89%)<br>Note: Transition sand seal   |
| 45             |                              | Bedrock -<br>Conglomerate | N/A                  |  | (45.2 - 45.7')   |                              | (45.2 - 45.7')                         | (45.2 - 45.7') 0.25 bags (83%)  |
| 46             |                              |                           |                      |  | Chips  |                              | 0.3 bags                               | Note: Bentonite seal  |
| 47             |                              |                           |                      | × × × × × × × × × × × × × × × × × × ×  | (47.1 - 138.0') —<br>6" 0.02-Slot 316 SS   |                              |  |   |
| 48<br>49<br>49 | No<br>Groundwater<br>Samples |                           |                      | · · · · · · · · · · · · · · · · · · ·  | Wire Wrap Screen   |                              |  |   |
| 51             | Collected                    |                           |                      | <pre>x x x x x x x x x x x x x x x x x x x</pre>   | (45.7 - 146.0')<br>Cemex #2/16<br>(16x30) Lapis Lustre<br>Sand   |                              | (45.7 - 146.0')<br>80.9 bags           | (45.7 - 146.0') 83 bags (103%)<br>Note: Filter pack. Ran dummy tool<br>and swabbed filter pack for<br>approximately 20 minutes prior to<br>the installation of the<br>bentonite/transition sand seal.<br>Grain-size analysis of the filter<br>pack sand showed a higher |
| <u> </u>       |                              |                           |                      |  |  |                              |  | percentage of fine-grained sand.  |
| 55             |                              | Weathered                 | <b>N</b> 1/ <b>A</b> | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$  |  |                              |  |   |
|                | 1                            | Bedrock -                 | N/A                  |  |  |                              |  |   |
| 56             |                              |                           |                      | $\begin{vmatrix} \mathbf{x} & \mathbf{x} & \mathbf{x} \\ \mathbf{x} & \mathbf{x} & \mathbf{x} \\ \mathbf{x} & \mathbf{x} & \mathbf{x} \end{vmatrix}$   |  |                              |  |   |
|                |                              |                           |                      | $\begin{vmatrix} \mathbf{x} & \mathbf{x} & \mathbf{x} \\ \mathbf{x} & \mathbf{x} & \mathbf{x} \\ \mathbf{x} & \mathbf{x} & \mathbf{x} \\ \mathbf{x} & \mathbf{x} & \mathbf{x} \end{vmatrix}$ |  |                              |  |   |
|                |                              |                           |                      | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$   |  |                              |  |   |
| 58             |                              |                           |                      | × × ×<br>× × ×<br>× × ×  |  |                              |  |   |
| 59             |                              |                           |                      |  |  |                              |  |   |
|                |                              |                           |                      |  |  |                              |  |   |
| 60             |                              |                           | 0.1.0                |  |  |                              | <br>                                   |   |
| Abbre          | VIATIONS: U                  |                           |                      | assificat  | $\cos System, tt = teet, bgs$  | = pelow ground surface, al   | msi = above mean                       | sea level, SS = Stainless   |
| Steal,         | NR = NOR                     | ter mossured              | - INOLA<br>durina    | hbiicapi<br>devolor  | e, Gvv = groundwater, No   | nes: solid blue and hollow l | ulue water table ma                    | arks represent depth to water   |
|                | s.) static wa                |                           | aunng                | uevelop  |  | ณะ การสรมเรีย นนากฎ นาทิก(   |  |   |

| 9          | ARC   | ADIS  |                   |               | Well Const   | ruction Log                   | 5                              | Sheet: 4 of 8   |  |  |  |
|------------|---|---|-------------------|---------------|--|-------------------------------|--------------------------------|---|--|--|--|
| Date S     | Started:  | 05/08/2022  |                   |               | Surface Elevation:   | 506.35 ft amsl                |                                | 2.02  |  |  |  |
| Date (     | Completed:  | 05/10/2022  |                   |               |  | 506.02 ft amsl                |                                | <u> </u>  |  |  |  |
| Drilling   | a Co.:  | ABC LIOVIN  |                   |               | Deep Well Elevation:   | N/A                           | Client: PG&E                   |   |  |  |  |
| Drilling   | y Method:   | Sonic Drilling  |                   |               | Northing (NAD83):  | 2101009.50                    | Project: Final                 | GW Remedy Phase 2A  |  |  |  |
| Driller    | ,<br>Name:  | Eddie Ramos   | ;                 |               | Easting (NAD83):   | 7616642.75                    | Location: PG&E                 | E Topock. Needles California  |  |  |  |
| Drilling   | a Asst:   | J. Candelaria   | / F. Pe           | rez           | Borehole Diameter:   | 8-12 inches                   |                                |   |  |  |  |
|            | er:   | Alexis McIntv   | re                |               |  | See Log for Depths            | Proiect Numbe                  | r: 30126255   |  |  |  |
| Editor     | :   | Sean McGrar   | ne                |               | Development End Date:  | 6/28/2022                     |                                |   |  |  |  |
| Total I    | Depth:  | 146 ft bgs  | 1                 | 1 1           | Well Completion:   | ───────────────────────────── | To Be Completed                | in Well Vault   |  |  |  |
| Depth (ft) | Groundwat<br>Sample II  | Geologic<br>Formation   | USCS<br>Code      | USCS<br>Class | Constru  | ction Details                 | Calculated<br>Material Volumes | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume   |  |  |  |
|            | No<br>Groundwate<br>Samples<br>Collected  | r<br>Weathered<br>Bedrock -<br>Conglomerate<br>Weathered<br>Bedrock -<br>Conglomerate<br>Weathered<br>Bedrock -<br>Conglomerate | N/A<br>N/A<br>N/A |               | (47.1 - 138.0')<br>6" 0.02-Slot 316 SS<br>Wire Wrap Screen<br>(45.7 - 146.0')<br>Cemex #2/16<br>(16x30) Lapis Lustre<br>Sand |                               | (45.7 - 146.0')<br>80.9 bags   | (45.7 - 146.0') 83 bags (103%)<br>Note: Filter pack. Ran dummy tool<br>and swabbed filter pack for<br>approximately 20 minutes prior to<br>the installation of the<br>bentonite/transition sand seal.<br>Grain-size analysis of the filter<br>pack sand showed a higher<br>percentage of fine-grained sand. |  |  |  |
| Abbre      | viations: U   | SCS = Unified   | I Soil C          | assificat     | tion System, ft = feet, bgs  | = below ground surface,       | amsl = above mean              | sea level, SS = Stainless   |  |  |  |
| Steal,     | NR = No F   | ecovery, N/A  | = Not A           | pplicabl      | le, GW = groundwater, Ne   | otes: solid blue and hollow   | v blue water table ma          | arks represent depth to water   |  |  |  |
| (ft. bg    | s.) static wa   | ater measured   | during            | develop       | ment and approximate st  | atic measured during drill    | ng, respectively.              |   |  |  |  |
|            | ft. bgs.) static water measured during development and approximate static measured during drilling, respectively. |   |                   |               |  |                               |                                |   |  |  |  |

| 9  | ARC                         | ADIS                                   |              |   | Well Constr  | ruction Log                  | S                              | Sheet: 5 of 8   |
|--|-----------------------------|--|--------------|---|--|------------------------------|--------------------------------|---|
| Date S   | Started:                    | 05/08/2022                             |              |   | Surface Elevation:   | 506.35 ft amsl               |                                | 2 02  |
| Date (   | Completed:                  | 05/10/2022                             |              |   |  | 506.02 ft amsl               |                                | <u>K-UZ</u>   |
| Drilling   | , Co.:                      | ABC LIOVIN                             |              |   | Deep Well Elevation:                                       | N/A                          | <br>Client: PG&E               |   |
| Drilling   | ,<br>Method:                | Sonic Drilling                         |              |   | Northing (NAD83):  | 2101009.50                   | Project: Final                 | GW Remedy Phase 2A  |
| Driller  | ,<br>Name:                  | Eddie Ramos                            |              |   | _Easting (NAD83):  | 7616642.75                   | Location: PG&E                 | Topock, Needles California  |
| Drilling   | g Asst:                     | J. Candelaria                          | / F. Pe      | rez   | _Borehole Diameter:  | 8-12 inches                  |                                |   |
| Logge  | er:                         | <u>Alexis McIntyr</u>                  | e            |   | _Static Water Level:                                       | See Log for Depths           | Project Number                 | r: <u>30126255</u>  |
| Editor   |                             | Sean McGrar                            | e            |   | _Development End Date:                                     | 6/28/2022                    |                                |   |
| Total [  | Depth:                      | <u>146 ft bgs</u>                      | 1            |   | _Well Completion:  | ⊠ Flush  Stick-up            | To Be Completed                | in Well Vault   |
| Depth<br>(ft)  | Groundwate<br>Sample ID     | Geologic                               | USCS<br>Code | USCS<br>Class   | Construc   | tion Details                 | Calculated<br>Material Volumes | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume   |
| 81   | -                           | Weathered<br>Bedrock -<br>Conglomerate | N/A          | × × × × × × × × × × × × × × × × × × ×   | (47.1 - 138.0')<br>6" 0.02-Slot 316 SS<br>Wire Wrap Screen |                              |                                |   |
| 8383   | •                           | Weathered<br>Bedrock -<br>Conglomerate | NR           | ×××   |  |                              |                                |   |
| 85 85 86 86 87 8 |                             |  |              | × × × × × × × × × × × × × × × × × × ×   |  |                              |                                |   |
|  | No<br>Groundwate<br>Samples |  |              |   | (45.7 - 146.0')<br>Cemex #2/16<br>(16x30) Lapis Lustre     |                              | (45.7 - 146.0')<br>80.9 bags   | (45.7 - 146.0') 83 bags (103%)<br>Note: Filter pack. Ran dummy tool<br>and swabbed filter pack for<br>approximately 20 minutes prior to<br>the installation of the<br>besteriis (transition cond cool |
| 91<br>91<br>92   | Collected                   | Weathered<br>Bedrock -                 | N/A          | × × × × × × × × × × × × × × × × × × ×   | Sand   |                              |                                | Grain-size analysis of the filter<br>pack sand showed a higher<br>percentage of fine-grained sand.  |
| 93_  |                             | Congiomerate                           |              | × × ×<br>× × ×<br>× × ×<br>× × ×  |  |                              |                                |   |
| 94_  |                             |  |              | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \\ \times & \times &$ |  |                              |                                |   |
| 95_  |                             |  |              |   |  |                              |                                |   |
| 96 96  |                             |  |              |   |  |                              |                                |   |
| 9797   |                             |  |              |   |  |                              |                                |   |
| 98   |                             |  |              |   |  |                              |                                |   |
| 99 99  |                             |  |              | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \\ \times & \times &$ |  |                              |                                |   |
| 100  |                             |  |              | × × ×   |  | H                            |                                |   |
| Abbre  | viations: U                 | SCS = Unified                          | Soil Cl      | assificat   | tion System, ft = feet, bgs                                | = below ground surface, ar   | msl = above mean               | sea level, SS = Stainless   |
| Steal,   | NR = No R                   | ecovery, N/A                           | = Not A      | pplicabl  | e, GW = groundwater, No                                    | tes: solid blue and hollow l | blue water table ma            | irks represent depth to water   |
| (ft. bg:   | s.) static wa               | ter measured                           | during       | develop   | ment and approximate sta                                   | auc measured during drilling | j, respectively.               |   |

| 9          | ARC                                      | ADIS                                   |             |                                       | Well Const   | ruction Log                  | 5                              | Sheet: 6 of 8   |
|------------|--|--|-------------|---------------------------------------|--|------------------------------|--------------------------------|---|
| Date S     | Started:                                 | 05/08/2022                             |             |                                       | _Surface Elevation:  | <u>506.35 ft amsl</u>        |                                | P_02  |
| Date C     | Completed:                               | 05/10/2022                             |             |                                       | Shallow Well Elevation:  | 506.02 ft amsl               |                                | <u>R-02</u>   |
| Drilling   | Co.:                                     | ABC LIOVIN                             |             |                                       | _Deep Well Elevation:  | N/A                          | <u>PG&amp;</u>                 | =   |
| Drilling   | Method:                                  | Sonic Drilling                         |             |                                       | _Northing (NAD83):   | 2101009.50                   | Final                          | GW Remedy Phase 2A  |
| Driller    | Name:                                    | Eddie Ramos                            |             |                                       | _Easting (NAD83):  | 7616642.75                   | PG&                            | E Topock, Needles California  |
| Drilling   | Asst:                                    | J. Candelaria                          | / F. Pe     | rez                                   | Borehole Diameter:   | <u>8-12 inches</u>           |                                |   |
|            |  | Alexis McIntyr                         | е           |                                       | _Static Water Level:   | See Log for Depths           |                                |   |
|            |  | <u>Sean McGran</u>                     | е           |                                       | _Development End Date:   | 6/28/2022                    |                                |   |
|            |  | <u>146 ft bgs</u>                      |             |                                       | _Well Completion:  | K Flush Stick-up             | To Be Completed                | in Well Vault   |
| Depth (ft) | Groundwat<br>Sample II                   | Geologic<br>Formation                  | ode<br>Code | USCS<br>Class                         | Constru  |                              | Calculated<br>Material Volumes | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume   |
|            | No<br>Groundwate<br>Samples<br>Collected | Weathered<br>Bedrock -<br>Conglomerate | N/A<br>NR   | x x x x x x x x x x x x x x x x x x x | (47.1 - 138.0')<br>6" 0.02-Slot 316 SS<br>Wire Wrap Screen<br>(45.7 - 146.0')<br>Cemex #2/16<br>(16x30) Lapis Lustre<br>Sand |                              | (45.7 - 146.0')<br>80.9 bags   | (45.7 - 146.0') 83 bags (103%)<br>Note: Filter pack. Ran dummy tool<br>and swabbed filter pack for<br>approximately 20 minutes prior to<br>the installation of the<br>bentonite/transition sand seal.<br>Grain-size analysis of the filter<br>pack sand showed a higher<br>percentage of fine-grained sand. |
| Abbre      | viations: U                              | SCS = Unified                          | Soil C      | lassificat                            | tion System, ft = feet, bgs  | = below ground surface, a    | msl = above mean               | sea level, SS = Stainless   |
| Steal,     | NR = No F                                | ecovery, N/A                           | = Not A     | pplicabl                              | e, GW = groundwater, No  | otes: solid blue and hollow  | blue water table ma            | arks represent depth to water   |
| {(ft. bgs  | s.) static wa                            | ater measured                          | during      | develop                               | ment and approximate sta   | atic measured during drillin | g, respectively.               |   |
|            |  |  |             |                                       |  |                              |                                |   |

| 9   | ARC                                      | ADIS                                   |  |               | Well Const   | ruction Log                 | :                              | Sheet: 7 of 8   |
|---|--|--|--|---------------|--|-----------------------------|--------------------------------|---|
| Date S  | Started:                                 | 05/08/2022                             |  |               | _Surface Elevation:  | 506.35 ft amsl              |                                | R-02  |
| Date C  | Completed:                               | 05/10/2022                             |  |               | _Shallow Well Elevation:   | <u>506.02 ft amsl</u>       |                                |   |
| Drilling  | g Co.:                                   | ABC LIOVIN                             |  |               | _Deep Well Elevation:  | <u>N/A</u>                  | Client: PG&E                   | <u> </u>  |
| Drilling  | g Method:                                | Sonic Drilling                         |  |               | _Northing (NAD83):   | 2101009.50                  | Project: <u>Final</u>          | GW Remedy Phase 2A  |
| Driller   | Name:                                    | Eddie Ramos                            |  |               | _Easting (NAD83):  | 7616642.75                  | Location: PG&                  | <u>E Topock, Needles California</u>   |
| Drilling  | g Asst:                                  | J. Candelaria                          | / F. Pe                                | rez           | Borehole Diameter:   | 8-12 inches                 |                                |   |
| Logge   | er:                                      | Alexis McIntyr                         | е                                      |               | Static Water Level:  | See Log for Depths          | Project Numbe                  | r: <u>30126255</u>  |
| Editor:   |  | Sean McGran                            | е                                      |               | _Development End Date:   | 6/28/2022                   |                                |   |
|   | Jepth:                                   | <u>146 ft bgs</u>                      |  |               | _Well Completion:  |                             | _ To Be Completed              | in Well Vault   |
| Depth<br>(ft)   | Groundwat<br>Sample II                   | Geologic<br>Formatio                   | abo<br>S<br>S<br>S<br>S<br>S<br>S<br>S | USCS<br>Class |  |                             | Calculated<br>Material Volumes | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume   |
| 121         121         122         122         123         124         124         126         127         128         128         129         129         121         123         131         133         133         133         133         133         133         133 | No<br>Groundwate<br>Samples<br>Collected | Weathered<br>Bedrock -<br>Conglomerate | N/A                                    |               | (47.1 - 138.0')<br>6" 0.02-Slot 316 SS<br>Wire Wrap Screen<br>(45.7 - 146.0')<br>Cemex #2/16<br>(16x30) Lapis Lustre<br>Sand<br>(136.2 - 137.2')<br>PVC Well Bung<br>(Plug)<br>(137.2 - 143.4')<br>Cemex #2/16<br>(16x30) Lapis Lustre |                             | (45.7 - 146.0')<br>80.9 bags   | (45.7 - 146.0') 83 bags (103%)<br>Note: Filter pack. Ran dummy tool<br>and swabbed filter pack for<br>approximately 20 minutes prior to<br>the installation of the<br>bentonite/transition sand seal.<br>Grain-size analysis of the filter<br>pack sand showed a higher<br>percentage of fine-grained sand.<br>(136.2 - 137.2')<br>Note: Well bung was installed on<br>6/8/22 to reduce additional filterp<br>ack from entering the well from<br>potential damage to the sump.<br>(137.2 - 143.4')<br>Note: Filter pack sand and<br>sediment in the bottom of the well,<br>due to potential damage to the<br>sump or a higher percentage of |
| 140   | 1  |  |  |               | Sand and sediment.   |                             |                                | אוויפי או גויפ אוופו אמטג אוומנפוומו.   |
| Abbre   | viations: U                              | SCS = Unified                          | Soil C                                 | assificat     | ion System, ft = feet, bas   | = below ground surface.     | amsl = above mean              | sea level, SS = Stainless   |
| Steal,  | NR = No F                                | ecovery, N/A =                         | = Not A                                | pplicabl      | e, GW = groundwater, No  | otes: solid blue and hollow | / blue water table ma          | arks represent depth to water   |
| (ft. bgs  | s.) static wa                            | ter measured                           | during                                 | develop       | ment and approximate sta   | atic measured during drilli | ng, respectively.              |   |
|   |  |  |  |               | ••   | 5                           | /                              |   |

| 9   | ARC   | ADIS                                   |              |  | Well Const  | ruction Log  | S                              | Sheet: 8 of 8  |
|---|---|--|--------------|--|---|--|--------------------------------|--|
| Date S  | Started:  | 05/08/2022                             |              |  | _Surface Elevation:   | 506.35 ft amsl   |                                | 2-02   |
| Date C  | Completed:                                      | 05/10/2022                             |              |  | _Shallow Well Elevation:  | 506.02 ft amsl   |                                | <u>\-02</u>  |
| Drilling  | Co.:  | ABC LIOVIN                             |              |  | _Deep Well Elevation:   | N/A  | Client: <u>PG&amp;E</u>        |  |
| Drilling  | Method:   | Sonic Drilling                         |              |  | _Northing (NAD83):  | 2101009.50   | Project: <u>Final</u>          | GW Remedy Phase 2A   |
| Driller   | Name:   | Eddie Ramos                            |              |  | _Easting (NAD83):   | 7616642.75   | Location: <u>PG&amp;E</u>      | Topock, Needles California   |
| Drilling  | Asst:   | J. Candelaria                          | / F. Pe      | rez                                    | Borehole Diameter:  | 8-12 inches  |                                |  |
| Logge   | r:  | Alexis McIntyr                         | e            |  | Static Water Level:   | See Log for Depths   | Project Number                 | r: 30126255  |
| Editor:   |   | Sean McGrar                            | ie           |  | Development End Date:   | 6/28/2022  | _ ,                            |  |
| Total [   | Depth:  | 146 ft bgs                             |              |  | _Well Completion:   | ⊠ Flush  | To Be Completed                | in Well Vault  |
| Depth<br>(ft)                                     | Groundwat<br>Sample IE                          | Geologic<br>-ormation                  | USCS<br>Code | USCS<br>Class                          | Construc  | ction Details  | Calculated<br>Material Volumes | Material Volumes Installed<br>Note: percentages are the actual<br>volume vs the calculated volume  |
| <br>141<br>142<br>142<br>143<br>144<br>144<br>145 | No<br>Groundwate<br>Samples<br>Collected        | Weathered<br>Bedrock -<br>Conglomerate | N/A          | ************************************** | (140.0 - 141.0')<br>SS Centralizer<br>(45.7 - 146.0')<br>Cemex #2/16<br>(16x30) Lapis Lustre<br>Sand<br>(137.2 - 143.4')<br>Cemex #2/16<br>(16x30) Lapis Lustre<br>Sand and sediment. | (138.0 - 143.4')<br>— Sump and<br>316 SS End Cap<br>— (145.0 - 146.0') 8"<br>Diameter Borehole | (45.7 - 146.0')<br>80.9 bags   | (45.7 - 146.0') 83 bags (103%)<br>Note: Filter pack. Ran dummy tool<br>and swabbed filter pack for<br>approximately 20 minutes prior to<br>the installation of the<br>bentonite/transition sand seal.<br>Grain-size analysis of the filter<br>pack sand showed a higher<br>percentage of fine-grained sand.<br>(137.2 - 143.4')<br>Note: Filter pack sand and<br>sediment in the bottom of the well,<br>due to potential damage to the<br>sump or a higher percentage of<br>fines in the filter pack material. |
| <br><br>147                                       |   |  | NR           |  |   |  |                                |  |
|   |   |  |              |  | 2   |  |                                |  |
|   |   |  |              |  |   |  |                                |  |
| 150   |   |  |              |  |   |  |                                |  |
|   |   |  |              |  | K   |  |                                |  |
| <br>152   |   |  |              |  | *   |  |                                |  |
|   |   |  |              |  |   |  |                                |  |
| <br>154   |   |  |              |  |   |  |                                |  |
| 155   |   |  |              |  |   |  |                                |  |
|   |   |  |              |  |   |  |                                |  |
| 157   |   |  |              |  |   |  |                                |  |
| 158   |   |  |              |  |   |  |                                |  |
| 159   |   |  |              |  |   |  |                                |  |
|   |   |  |              |  |   |  |                                |  |
| 160<br>Abbrev                                     | viations <sup>.</sup> II                        | SCS = Unified                          | Soil C       | assificat                              | ion System ft = feet bas  | = below ground surface an  | nsl = ahove mean               | sea level SS = Stainless   |
| Steal   | $NR = N \cap R$                                 | $ecoverv N/\Delta$                     | = Not 4      | nnlicahl                               | e GW = groundwater No   | tes: solid blue and bollow b   | lue water table ma             | arks represent denth to water  |
| (ft bar   | $r_{\rm r} = r_{\rm r} = r_{\rm r} = r_{\rm r}$ | ter measured                           | during       | develor                                | ment and approximate at   | ntic measured during drilling  | reenectively                   |  |
| in nde  | s.) static Wa                                   |  | uunny        | develop                                | ment and approximate sta  | and measured during drilling   | , respectively.                |  |

## **Attachment 5**

Well Development Log



PG\_1\_ of 16 Date(s) 6/3/2025 Arcadis Oversight: Arsel MCK/orghcadis Job Title: Geologist ARCADIS Project Name: PG&E Topock Phase 2A GW Remedy Measuring Point (MP) ft. (ags /bgs) <u>6.51</u> Total Depth (ft. BMP) <u>120,62</u> bgs) <u>47-138</u> 614/22 -Well ID ER- 2 Water column 70.97 Diameter of well (in.): 6 Gallons in well: 184, 2 (ft. BMP): 49.65 (ft. bgs): 50.16 Rig operator: Such HurerarBig type: Smeale Bailer make and size: 31/2 × 5' Water added: N/A. Be block make Surge block make and size: S Ran w/6" Pump make and size: Grund fos 15506-250 source: N/A ORP (mV) (µS/cm) Turb NTU (<10.0 DO (mg/L) DO (mg/L) Notes/Gallons (± 0.3 mg/L) Removed/Water Clarity Time Task GPM (ft. BMP) (ft. BMP) Temp "C рН (±1.0) (± 10.0 mV) (± 3%) NTU) Solt bottom - 120.62 -7:50 746 ----7:50 746 49.65 --8: 80 Begin Bailing -\_ ---8:18 COLLECT INTIME BAIL #1 ---SAMPZE ~ DARK BROWN, VRY EN GRAIN SAND/ SIGT soft bottom 9:26 TAG -----139.55 ~ soft bottom 18:46TAC . --140.58 soft bottom 1:10 TAL 136.83 -La chizi gal bailing Hiso Pumping 50 506 into ficek tenk 13:18 -----59.67 -Soft bottom ----136.07 13:18746 --136.16 --Soft bottom 14:02TAG --Soft bottom -136.54 -14:37 TAC --\_ Soft bottom 15:89-TAG 137.28 --5:26 JAM --136.8 ----Soft bottom ---------~ -------6/4/202 -\_\_\_\_\_ --~ -\_ ---~ ~ ----~ ----------Sample ID and Time: ER-2 Total gallons removed at completion of development: Arcadis Staff: ANSEL Mcchelland

ER-2 - Well Development Record



|    | -    | AF      | CAD            | IS I   | -      |         | roject Nam | e: PG&FT~ | oock Phase 2A | GW Remedy               | ,                           |                         | PG                        | ,2 of 16                               |          |
|----|------|---------|----------------|--------|--------|---------|------------|-----------|---------------|-------------------------|-----------------------------|-------------------------|---------------------------|--|----------|
|    | Da   | ell Dev | elopmer<br>(a/ | LI 2 R | xZZP   | oject # | 30126255   |           | Arcad         | lis Oversight:          | ANS                         | 66 Me                   | Well ID                   | ER-2                                   |          |
| 9  | -    | Time    |                |        | PM (th | DTW     | Total Dept | h Temp "C | pH<br>(± 1.0) | ORP (mV)<br>(+ 10.0 mV) | Cond.<br>(µ\$/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(± 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |          |
|    | E    | :4      | X              | 746    | 4      | 9.76    | 2 -        | -         | -             | -                       | -                           | -                       | -                         | -                                      |          |
|    | 6    | :50     | 2              |        |        |         | 135.5      | 3         | 11-           | -                       | -                           | -                       | -                         | Soft bottom                            | 1        |
|    | -    |         |                |        |        | 201     |            |           | 1             |                         | - Alleria                   |                         | -                         | LL 6/6/202                             | 1        |
| 1  | 22,  | PEL     | el:            | And L  | int    | w       | TH         | BE        | con           | inve                    | D                           | + +                     | LA                        | TER DATE                               |          |
|    | 8    | 51      | TA             | 6      | - 44   | 7.5-    | 7          |           | -             |                         | -                           | -                       | -                         |  |          |
| 1  | 8    | :51     | TA             | 4.     |        |         | 132.       | s -       | -             | -                       | -                           | -                       | -                         | Soft bollom                            |          |
|    | 11   | 49      | TA             | 6      | - 41   | 9.55    | -          | -         | -             | -                       | -                           | -                       | -                         | ā,                                     |          |
|    | 11:  | 40      | TA             | 6      |        | 7       | 133.67     | - 4       | -             | -                       | -                           | -                       | -                         | Soft Bottom                            | -        |
|    | 13   | :53     | -+-            | al l   | - 54   | 0       | 3          | -         | -             | -                       | -                           | -                       | -                         |  |          |
|    | 15   | : 30    | TA             | 6      |        | -       | 13625      | 6         | -             | -                       | - /                         | -                       | -                         | Sole bottom                            | ,        |
|    | 14   | 101     | TA             | 4      | 56     | - 0     | 53         | -         | -             | -                       | -                           | -                       | -                         |  |          |
|    | 14.  | 3/      | TA             | 6      | -      | -       | 136.5      | 6         | -             | -                       | -                           | -                       | -                         | Soft bottom                            |          |
|    | 19   | 31      | A              | 4      | 51     | 7       | 9          | -         | RI            | NG                      | DOL                         | WHOB                    | e]                        | 00/-000                                |          |
|    | 14.  | 31      | TA             | GI     | -      |         | 135.4      |           | F             | -                       | -                           | -                       | -                         | Soft bottom                            |          |
| +  | 14.  | 96      | TA             | G      | -      | - 1     | 35.7       | -         | -             | -                       | -                           | -                       | 17. 105                   | Soft bottom                            |          |
| +  | 14:  | 54      | TAC            | 5-     | -      | 1       | 35.5       | -         | -             | -                       | -                           | T                       | -                         | Soft botton                            | 1        |
| +  | 5:1  | 14      | TA             | 6      | -      | -       | 136.8      | 2 -       | (SA           | NO A                    | DDED                        | Down                    | How)                      | - ,                                    |          |
| +  | 16:1 | 0       | THE            |        | 53.    | 2       | 7          | 11-       | -             | - /2.                   | -                           | -                       | -                         | 16 galons                              | bailes   |
| L  | 16:  | 10      | TA             | \$     |        | 1       | 35.7       | -         | -             | -                       | -                           | -                       | -                         | SOLE 20TOM                             |          |
| -  |      | -       |                |        | -      | - 1     | SONE       | f         | pr -          | TODA                    | Y -                         | -                       |                           |  | 6/4/     |
| 1  | 7:10 | -       | AG             | -      | 41.    | 9       | -          | 5         | 1-            | -                       | +14                         | 1                       |                           | -                                      | 012      |
| 1  | 7:10 | T       | AG             | (-     | -      | 1       | 35.4       | 8         | -             | -                       | -                           | -                       | -                         | Soft Lotto                             | m        |
| -  | 120  |         | -              | Be     | GIN    | 1       | BAIL       | NG        | -             | -                       | -                           | -                       | -                         | -                                      |          |
| 7  | 7:3  | -       | C              | 24     |        | +       | 1          | VITIA     | 2 R           | 122                     | cu                          | her.                    |                           | -                                      | 1999     |
| -  | -    |         | -              | -      | DK     | :       | BRA        | ha        | -             | TU                      | Int                         | 2121                    | 1 -                       | 20 5.20                                |          |
| -  | 2-0  | -       |                |        | -      | -       | -F.        |           | 1st           | 242.                    | e                           | inp                     | T2                        | 8 11                                   | 0        |
| 1  | ~ 70 | -       | -              | -      | ECT    | -       |            | AC        |               | AIL                     |                             | - APR                   | 10                        | gollons                                |          |
| -  | 2.1  | 10      |                |        | 0      | T       |            | 5.        | ABOVE         |                         | -                           | 1000                    | 1200                      | -                                      | -        |
| 2  | X    | 5 -     | TAS            | -      | 53,1   | 8       | -          | -         |               | -                       | -                           |                         | 19-01                     |  |          |
| 0  | .4   | 3       | -              | -      | -      | 13      | 5,71       | -         | -             | -                       | - /                         | -                       | -                         | Hord Botton                            | 4        |
| 8  | :5   | ø       |                | 51     | LKT    | -       | SW         | BBIN      | 16            | 13                      | 3-                          | 128                     | -                         | -                                      |          |
| 7. | 15   | -       | C              | om     | el es  | e       | SWA        | BBING     | 153           | - 127                   | \$157                       | TART                    | 128                       | -123' BTC                              | 1 Carlos |
| ?: | 20   | -       | C              | omp    | LET.   | ¢       | 500.       | ABRIA     | 1 129         | 3-12:                   | 5 - 0                       | -                       | -                         | -                                      |          |
|    |      |         |                |        |        |         | a mar      |           |               |                         |                             |                         |                           |  | -        |

ER-2 - Well Development Record



|     | Well D | Develop | ment R | ncord | Project    | Project Name                            | PG&E Top | ock Phase 2 | A GW Remedy          | Anala            | Medellow? | PG<br>Well ID | of<br>ER2_     |          |
|-----|--------|---------|--------|-------|------------|---|----------|-------------|----------------------|------------------|-----------|---------------|----------------|----------|
| 3   |        |         | 113    | 100   | DTW        | Total Depth                             |          | pH          | ORP (mV)             | Cond.<br>(µS/cm) | Turb NTU  | DO (mg/L)     | Notes/Gallons  |          |
| 3   | 9:4    | 4       | Task - | GPM   | (ft. BIMP) | (H. BMP)                                | Temp*C   | (± 1.0)     | ( <u>+ 10.0 mV</u> ) | -                | -         |               | Hard bottom    |          |
|     | -      | -       | -      | -     | 52.0       | 3                                       | -        | -           | -                    | -                | -         | -             |                |          |
|     | 9.5    | 2       | -      | STAK  | 7          | SWAR                                    | BINE     | 5           | 123-                 | 118              | ISTE      |               | -              |          |
| 1   | 19:1   | s       | -0     | male  | TE S       | WARBIA                                  | G 12     | 3-118       | STAR                 | SW.              | ABB/NG    | 118-1         | 13' Btoc       |          |
| 1   | 10:4   | 0       | co     | mple  | 10         | SUABBI                                  | WG       | 118-1       | 13                   | -                | -         | -             | -              |          |
| ľ   | (p:    | - AC    | 574    | RT    | SWAG       | BING                                    | 113-     | 188         | Brac                 | ~                | -         | -             | -              |          |
| -   | 1/19   | la      | P      | DAN   | ere        | SULA                                    | BING     | 113.        | 108,                 | START            | SUA       | BBING         | - 108-103      |          |
|     | 11:9   | 5       | +      | 46    | -          | 135.78                                  | 0        |             |                      | - 0              | -         | -             | Hard Bottom    |          |
| 1   | 1:4    | \$ 7    | AG     |       | 50.8       | 5                                       | -        | -           | -                    | -                | -         | -             | -              |          |
| 4   | 2:0    | 5       |        | AC    | Set        |   | ne d     | AY -        |                      |                  |           |               |                | pm 2/2/2 |
| 36  | :46    | 7 7     | AG     | -     | 19.70      | 8                                       | -        | -           | -                    | -                | -         | -             | -              | ornz     |
| 6.7 | 190    | TA.     | G      | -     | -          | 133.96                                  | -        | -           | -                    | -                | -         | -             | SOST Batton    | 7        |
| 0   | 45.5   | 1 5     | the.   | ET    | Such       | BBING                                   | 16:      | 3-9         | 8                    | ~                | -         | -             | -              |          |
| TI  | :25    | CO      | ome    | LOTE  | SWA        | BBING                                   | 193      | -98,        | START                | SUAB             | BING      | 98-9          | 3 -            |          |
| T   | .01    | 100     | Imp    | lete  | 6 5        | und Bit                                 | ING      | 98          | -93                  | -                | -         | -             |                |          |
| C:  | 25     | The     |        | 1     | 7.20       |   | -        | -           |                      | •                | -         | -             | ALE CONTRACTOR | Call .   |
| 8:  | 30     | 1-1-    | The.   |       | C S        | NG T                                    | 3-2      | 92.0        | STOC                 |                  |           |               | -              |          |
| 8   | 55     | an      | P.     | 1/ 4  | Sulab      | aus                                     | 88.0     | 31 ~        | 0 0                  | -                | STAR      | 500           | BRINGI 88      | - 83     |
| 7:1 | 0      | SPA     | 47     | SW    | BAN        | 6 83                                    | 3-78     | 810         | -                    | -                | -         | -             | -              |          |
| 913 | 5 0    | om      | PLE    | TED   | Sma        | BING                                    | 83-      | 78'         | otac                 | -                | -         | -             |                |          |
| 9.4 | 2-1    | AG      | -      | 49    | 1.79       | in the                                  | 2        | -           | -                    | -                | -         | -             | -              |          |
| 1:4 | 27     | 46      | -      | -     | 1          | 33.91                                   | N        | -           | -                    | -                | -         | -             | Soft with      | n        |
| 9:  | \$5    |         | -      | 1     |            | com                                     | me       | vce         | RA                   | KIN              | 6         | -             | -              |          |
| 9:5 | 10     |         | C      | ale   | ier        | in                                      | TIA      | 1575        | ano                  | 0-0              | H H       | 3011          |                |          |
| 9:5 | 55     |         | co     | ere   | den        | SI,                                     | na       | 107         | SAM                  | 91               | - 5       | here          | dis Aboi       | 100      |
| 9:5 | 8.     | TA      | 6      | -     | 13         | 5.72                                    | 1-       | -           | -                    | -                | +         | -             |                | 9        |
| ø   | 12     | 8       | -      | 51    | 17.        | -                                       | -        | -           | -                    | -                | -         | -             | 4-164          | 7        |
| 8   | 12     | 5       | -      | -     | 5          | TOP                                     | 8        | AILI        | NG                   | -                | +         | -             | BALLER         | em       |
| 8   | :00    | 7       | -      | -     | -          | nm                                      | ente     | ce          | She                  | ARA              | SING      | -             | DAVCED 6       | 6th      |
| 31  | 35     |         | 57     | AZ    |            |   | 2446     | 10          | -221                 | DT               | -         | -             | -              | -        |
| -   |        |         |        | in l  | 1.50       | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | ING      | ( 0)        | 70                   | 6100             | 1         |               |                |          |

ER-2 - Well Development Record



| -    |      |       |        | 1000 |                  |                          |              |               |                        |                   |             | PG           | 4 at 14               |       |
|------|------|-------|--------|------|------------------|--------------------------|--------------|---------------|------------------------|-------------------|-------------|--------------|-----------------------|-------|
| Wei  | Deve | opmer | t Reco | d    | P                | roject Name:             | PG&E Topo    | ck Phase 2A   | GW Remedy              | And               | Mclellan)   | Well ID      | ER-2                  |       |
| Date | e(s) | 4.    | 3/22   | -    | Project #        | 30126255                 |              | Arcad         | IS OVErsigne.          | Cond.             |             |              | Notes/Gallons         |       |
| 1    | _    | Tank  |        | SPM. | DTW<br>(ft. BMP) | Total Depth<br>(ft. BMP) | Temp 'C      | pH<br>(± 1.0) | ORP (mV)<br>(+10.0 mV) | (µS/cm)<br>(± 3%) | (<10.0 NTU) | (+ 0.3 mg/L) | Removed/Water Clarity |       |
| 11   | 00   | co    | mel    | ere  | Such             | BBING                    | 78-          | 73'B          | TOC                    | -                 | -           | -            | -                     |       |
| 11:  | 15   | BE    | EAK    | 50   | ne cu            | New                      | -            | -             | -                      | -                 | •           | -            | -                     |       |
| 12   | 00   | 51    | AFT    |      | MBB              | NG                       | 73-6         | 8 300         | -                      | -                 |             | -            |                       |       |
| 12.  | 25   | con   | nec    | Te   | SWA              | BBING                    | 73-6         | 8, 5TA        | et so                  | ABBI              | v 6 6       | 8-63         | -                     |       |
| 12:  | sø   | con   | npla   | HE   | SWA              | EBING                    | 68-6         | 3' 31         | IDC .                  | -                 |             |              | -                     |       |
| 13:  | 0    | 504   | RT     | an   | ABBIN            | Ca 63                    | -58 8        | HOC           | -                      | -                 | -           | 2. 27'       | Ta                    | 12    |
| 13:  | 5    | com   | ere    | Te   | SUABB            | and the                  | 3-58         | STAR          | t su                   | ABBIN             | G 59        | -25 6        | -                     |       |
| 13:3 | 10   | 2010  | ren    | 6 :  | tinta RB         | NG 5                     | 8-53;        | BIOC          | -                      | -                 | 1           | -            | - 12                  | 1     |
| 141  | 20   | 374   | ver    |      | WAR              | BING                     | 53-4         | 7 8%          | 22                     |                   | -           | -            |                       |       |
| 14:5 | 0    | co    | MPL    | ET   | 6 5              | NABBI                    | NG -         | 54-45         | K BID                  | K                 | 1.491       |              | AM GH.                | 121   |
| 10   | -    | -     | 12     | 510  | 60 m             | WORK                     |              | IK 1          | AV -                   | -                 | -           | -            | -                     |       |
| 15:2 |      |       | 9      | -    | 10.9             | 101175                   | -            | -             | -                      | -                 | -           | -            | - 41                  |       |
|      |      | AG    | L      | -    |                  | 39.72                    | Enp          | -107          | av                     |                   |             | -            |                       |       |
|      |      | -     | 57.    | ar   | NO<br>LA VI      | KK .                     | ADR          | -             | -                      | -                 | 12          | -            | - 60                  |       |
| - 13 | 1    | T     |        | 1    | 2.19             |                          | 1. 1.0       | -             | -                      | -                 | -           |              | Sift both             | Sha   |
| 7.1  | 1    |       | -      |      |                  | 137.9                    | 12+20        | 2. (          | 200                    |                   | ne          | 20-          | DE BRN                |       |
| 7:3  | +    | -     | 100    |      | 501              | 510                      | 11 1         | 0             | Det                    | 5                 | hore        |              | SALDE 43 ABO          | NE    |
| 2-2  | -    | P     | Le     | -    | 4.9              | 9                        | -            | -             | -                      | -                 | -           | 1-1          | - CK.                 | in    |
| 1-0  | 1    | 14    | -      | -    | -                | 12 1 29                  | 7 -          | -             | -                      | -                 | -           | - 1          | 16 glons              | ba    |
| 120  | ,    | 4     | 107    | -    | 21               | 17011                    | ic .         | 132-          | ne'                    | B.L.              |             | -            | -                     |       |
| 30   |      | 5 10  | ~ ·    | an   | 100 INC          | T                        | STAN         | Sundeli       | NG                     | 1010              | T           | -            | -                     |       |
| 20   | CE   | ma    | ere    | 0    | -33-             | 281                      | iner l       | 0 12          |                        | -                 | -           | -            | -                     | 1     |
| 11   | -    | mre   | ere    | 2    | Swingt           | in Ca                    | 28-1         | 28 13         | joc                    | -                 | -           | -            | -                     |       |
| 15   | 57   | ACT   | 00     | SU.  | ABOW             | 6 12                     | 5-118        | 500           | L                      |                   |             | -1-          |                       |       |
| 12   | co   | mfa   | ere    | 0    | SWAB             | BING                     | 123-119      | 574           | 120                    | SWOB              | BING        | 118-1        | BIDE                  | -     |
| 25   | co   | npa   | et c   | 0 3  | Sharb            | 186.11                   | 8-113'       | 8100          | -                      | -                 |             |              |                       | -     |
| 20   | 511  | K     | 40     | 5    | WABB!            | NG II                    | 3-199        | 8 15          | toc                    | -                 | -           | -            | -                     | -     |
| 45   | (0)  | mpz   | era    | 2 3  | surac 8.         | wall                     | 3-158        | , 51          | Reteo                  | SMAL              | BING        | 198-         | -193 BTOC             |       |
| 10   | 00   | mp    | ere    | 0 :  | OWAB             | SING.                    | 108-1        | 103 K         | stoc                   | -                 | -           | -            | -                     |       |
| 15   | 5    | TAK   | te     | 0    | SWAC             | SBIN GA                  | 103-         | - 98'         | BTOC                   | -                 | -           | -            | -                     | 2.2.2 |
| 10   | Ca   | MA    | ette   | 0 0  | NARRU            | G 103                    | -98          | STATTA        | Stutt                  | A MA              | 1 98        | -+23         | otor                  | -     |
| v    | -    | T     | 100    | L    |                  | 1 Carlos                 | a la company | 1             | - Carlos               | a la constante    |             |              |                       |       |

ER-2 - Well Development Record



|     |       |         |        |           |                |                  |               |                         |                   |                         | PG        | 5 or 14               |      |
|-----|-------|---------|--------|-----------|----------------|------------------|---------------|-------------------------|-------------------|-------------------------|-----------|-----------------------|------|
|     | Wei   | ARC/    | ADIS = | rd        | Project Na     | me: PG&E To      | pock Phase 2/ | GW Remedy               | And               | 4º Clellen              | Well ID   | ER-2                  |      |
| -   | Date  | n(s) _4 | 6/14/2 | Z_ Pro    | ject # 3012625 | 5                | Arca          | dis Oversigne:          | Cond.             | - Contraint             |           | Mater (Gallogs        |      |
| 3   |       |         | -      | 01        | Total De       | pth<br>P) Temp*( | pH<br>(±1.0)  | ORP (mV)<br>(± 10.0 mV) | (µS/cm)<br>(± 3%) | TURB NTU<br>(<10.0 NTU) | 00 (mg/L) | Removed/Water Clarity |      |
| 6/1 | 1 19  | me      | Task ( | SPM (PL ) |                | a de             | 43-88         | 1000                    | E                 | -                       | -         | -                     |      |
|     | 14:   | 00 -    | - that | 40 5m     | ABRING         | 5 88-            | -83 BI        | De                      | -                 | -                       | -         | -                     |      |
|     | 14:2  | 15 1    | mare   | ran an    | ARGING         | 88-83, :         | STARTIN       | 6 sw.                   | ABBIN             | 67 83                   | -75 8     | 02                    |      |
|     | 145   | 8       | ample  | TED       | SWAABIN        | 6 83             | 3-78'         | Broc                    | -                 | -                       | -         | -                     |      |
|     | 15:0  | 10 5    | TARTER | 5 50      | BBING          | 78-7             | STO BTO       | K                       | -                 | -                       | -         | -                     |      |
|     | 15:2  | 5 0     | ompre  | nes       | SWABBI         | VG 79            | 3-73'         | 3700                    | 2                 | -                       | -         | -                     |      |
|     | -     | -       | -      | - 10      | we i           | OR T             | Ste D         | DY A                    | 4 6               | 14/22                   |           |                       |      |
|     | 15:   | 31 -    | TAG    | 51.       | - 50           | -                | -             | -                       | -                 | -                       | -         | -                     |      |
|     | 15    | 32      | ZAG    |           | 135.           | 8 -              | -             | -                       | -                 | -                       | -         | Saft bottom           |      |
| -   | -     | -       | -      | Dan       | 6 -50          | R -TH            | 6 D           | Ay -                    |                   | -                       |           |                       |      |
| is  | 7:4   | 3 T.    | AG     | 50        | 300            | -                | -             | -                       | -                 | 1.0                     | -         | - 6                   |      |
|     | 7:5   | 4 7     | 46     |           | 135.2          | 8                | -             | -                       | -                 | -                       | -         | -                     |      |
|     | 8780  | 1 57    | ARTE   | DS        | WARBIN         | 167              | 3-68          | BTO                     | e                 | -                       | -         |                       |      |
|     | 8:25  | ca      | meller | the s     | VARE V         | G 73-            | 6813          | TARTER                  | SMAR              | BING 6                  | 8-63      | 8100                  |      |
|     | 8:50  | 00      | marc   | TED :     | ABR            | NG 6             | 8-63          | Bt                      | be,               | TARTA                   | o swa     | BBING 63-58           |      |
|     | 1:15  | Cal     | nera   | TED       | SWARR          | 11/2 6           | 3-58          | RTD                     | e                 | -                       | -         | -                     |      |
|     | THE   |         | L.     | Swa       | banda          | 50-              | 63'           | Bra                     | -                 | -                       | -         | -                     |      |
| 1   | o:es  | con     | Marin  | SUM       | PUNG S         | c                | ot the        |                         | Rulla             | 69.21                   | 01 m      | -                     |      |
| 1   | Ø:30  | c 21    | nert   | 2         | DRING          | 52               | 10' 2         | Tac                     | -                 | -                       | -         |                       |      |
| 5   | -     | a       | top    |           | -              | -                | -             | -                       | -                 | -                       | -         | -                     |      |
| 6   | 1927  | TAC     | -      | 50 7      | 2 .            | -                | -             | -                       | 10-               | -                       | -         | -                     |      |
| 1   | ~~~   | 1700    | 1      | -         | 1000           | 1                | -             | 1000                    | and and the       |                         | 1000      |                       |      |
| 14  | 8:34  | TA      | 6-     | -         | 135,6          | }                |               |                         | -                 | -                       | -         |                       |      |
| 12  | :41   | Co      | mm     | ence      | BA             | UNG              | 1             | -                       | -                 | 1                       | -         | -                     |      |
| 18  | 8:44  | 4       | Lie    | CT        | AN, TLAL       | 150              | boil          | Son                     | plo-              | OK B                    | er si     | T CTAILE LU           | YOON |
| 10  | 159   | a       | rece   | - 1       | FILLAZ         | 151              | beri          | 1 Scy                   | no lo             | SAA                     | -         | 12 gollors            | 1    |
| 10  | : por | 5       | TOP    | Br        | UNG            | -                | -             | - '                     | 1-                | -                       | -         | 200                   | 00   |
| 11: | 97    | 26      | -      | 54.00     | 9 -            | -                | -             | 10-                     | -                 | -                       | -         |                       |      |
| 11  | 72    | TAG     |        | -         | 12501          | -                | _             | -                       | 1                 |                         |           | -                     | -    |
| 1   |       |         | 2.     | 20        | e-             | 1                | 19            | e.                      |                   |                         |           | TOTALIZER             | -    |
| 12  | 193   |         | 101    | np<br>a   | xt             | वा               | 61            | te                      | Bt                | DC                      | -         | 4140                  | 56   |
| 31  | 07-   | TAG     | -      | 52,19     | -              | -                | -             | -                       | -                 | -                       | 1         | ZER TO                |      |
| 13. | 11    | Per     | p      | an        | -              | 14.15.1          | -             | -                       | -                 | -                       | -         | -                     |      |
|     |       | - 1     | 122    | (ac)      | ~              | 249              | 7.74          | DACH                    | 0                 | DIGK                    | 2 00)     |                       | -    |



|     | Well Der | relopment R | ecord  | Project I        | roject Name:<br>30126255 | PG&E Topod | Arcadis               | W Remedy                | Anall                       | 1ª Clefon               | Well ID                  | ER-2                                   | 1        |
|-----|----------|-------------|--------|------------------|--------------------------|------------|-----------------------|-------------------------|-----------------------------|-------------------------|--------------------------|--|----------|
| 10  | Time     | Task        | GPM    | DTW<br>(ft. BMP) | Total Depth<br>(ft. 8MP) | Temp *C    | pH<br>( <u>+</u> 1.0) | ORP (mV)<br>(± 10.0 mV) | Cond.<br>(µds/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(+0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity | (69.ft)  |
| 6/1 | 5 131    | 20          | 100    | 1605             | Pun                      | to a       | -                     | -                       | -                           |                         | -                        | J                                      |          |
|     | 131      | 6 7         | 6      | 59.3             | 7                        | -          | -                     | -                       | -                           | -                       | -                        | -                                      |          |
|     | 13:      | 26          | Re     | mp               | on                       | 30.3       | 8.12                  | 1447                    | 365                         | DVER                    | 4.52                     | LOWER GO                               | RATE .   |
|     | 13:3     | 1           | 0.00   | 69,71            | le                       | -          | -                     | -                       | -                           | -                       | -                        | Surge = Z                              | (69-46   |
|     | 13:00    | Ta          | -      | 64.27            | 2 -                      | -          | -                     | -                       | -                           | -                       | -                        | A contract to                          | - 56/mi  |
|     | 19:16    | TAG         | -      | 12.72            | 2 -                      | -          | -                     | -                       | -                           | -                       | -                        | RATE = 0.05                            | E GPAN   |
|     | 14:31    | TAG         | -      | 61.92            | -                        | -          | -                     | - /                     | -                           | -                       |                          | -                                      | 1        |
|     | 14:34    | Per         | np .   | an -             | -                        | -          | -                     | -                       | -                           | -                       | -                        | flow set                               | Ø.85     |
|     | 19:37    | 706         | -      | 63.85            | -                        | -          | -                     | -                       | -                           | DUAL                    | -                        | -                                      | -        |
|     | 14:39    | ,           | 9. 812 | 64.3             | 8                        | 34.4       | 7.94                  | 34.8                    | 0.464                       | LIMIT                   | 2.09                     | - AR                                   | -        |
|     | 14:49    | · R         | que    | off              | -                        | 344        | -                     | -                       | 0-                          | -                       | 200                      | Surge =                                |          |
|     | 14:4     | 7 TAG       | -      | 62.0.            | 3                        | -          | -                     | -                       | -                           | -                       | -                        | -                                      | -        |
|     | 14:47    | Pury        | 0 01   | -                | -                        | -          | -                     | -                       | -                           | -                       | -                        |  | -        |
| 3   | 19:52    | 3           | 1.97   | 65.0             | 7 -                      | -          | -                     | -                       | -                           | OVEL                    | 11                       | 1 11                                   | 1        |
|     | 14:53    | Par         | 6      | ff               | -                        | 31.5       | 8.16                  | 43.2                    | 3.73                        | GMIT                    | 3.66                     | Surge 7                                | 1        |
|     | 14:58    | TAG         | -      | 63.0             | 1 -                      | -          | -                     | -                       | -                           | -                       | -                        | -                                      | -        |
|     | 19:59    | Pump        | 01     | -                | -                        | -          | -                     | -                       | 1 7 1                       | 1000                    | -                        |  |          |
| 1   | 15:24    | - 1         | 5.98   | 66.6             | 9 -                      | 31.8       | 8.01                  | 60,6                    | 3-781                       | Sum                     | 7 5.6                    |  | 6        |
|     | 15:09    | Per         | np     | st               | -                        | 31.8       | -                     | -                       | -                           | -                       | -                        | Surge                                  | _        |
| -   |          | -           | - 1    | DEVE             | of mo                    | ENT        | 3101                  | pér                     | FOR-                        | THE                     | PAY                      |  |          |
| 6   | 7:07     | -           | -      | 50.79            | 5                        | -          | -                     | -                       | -                           | -                       | -                        |  | -        |
| +   | +:11     | Pun         | p      | on               | -                        | -          | -                     | -                       | -                           | -                       |                          | -                                      | -        |
| -   | 1:16     | - #         | 84     | 52.85            | -                        | 31.3       | 6.73                  | 192.5                   | \$.20                       | 5 45.                   | 96.6                     | 6                                      |          |
| 7   | 121      | - 2.        | 85     | 54.33            | -                        | 29.2       | 6.71                  | 62.7                    | 3.4                         | 27.                     | 34.3                     | 9                                      | -        |
| T   | 7:26     | - Ø.        | 84     | 56.48            | -                        | 29.3       | 6.90                  | -69                     | \$21                        | 5 28.                   | 32.0                     | 2 MAY BE                               | off      |
| 1   | 2:27     | Perm        | po     | AF               | -                        | -          | - 91                  |                         | -                           | -                       | -                        |  |          |
| i   | 2:34     | - 7         | Emp    |                  | SWERE                    | 0 -        | 5                     | 9 . 8                   | Toc                         | -                       | -                        | -                                      | 1115     |
| Ŧ   | 1:46 -   | 46          | in     | 54.43            |                          | -          | -                     | -                       | -                           |                         | -                        |  |          |
| 7   | 2:47 .   | - Re        | -      | on               | -                        | - /        | -                     | -                       | -                           | -                       | - 1/2                    |  |          |
| F   | 2-52 -   | 1.2         | 3      | 58.98            | -                        | 31.3       | 7.83                  | -24                     | 23.57                       | 5 53.                   | 5 70                     | 58 -                                   | 11 7 8 1 |
| 1   | 1.54     | Rom         | 2      | f6               | -                        | -          | -                     | -                       | -                           |                         | -                        | - Sizer                                | 4)       |
| Ľ   |          | 1           |        |                  |                          | 1997       |                       | -                       | -                           |                         |                          | inge .                                 |          |



|    | Well D | RC      |      | S ER | -          | Project Name | PG&E Topo | ck Phase 2A C | SW Remedy               | Ansel                      | 4 c/ellin                | PG                        | ER-2                                   |       |
|----|--------|---------|------|------|------------|--------------|-----------|---------------|-------------------------|----------------------------|--------------------------|---------------------------|--|-------|
| b  | Date(s |         | 6/40 | /22  | Project    | Total Depth  | Temp "C   | pH<br>(+ 1.0) | ORP (mV)<br>(± 10.0 mV) | Cond.<br>(µS/cm)<br>(± 3%) | Turib NTU<br>(<10.0 NTU) | DO (mg/L)<br>(+ 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |       |
|    | 7:1    | 4       | Task | GP   | M (TE. BAN | 25           | -         | -             | -                       | -                          | -                        | -                         |  |       |
|    | 8:0    | 30      |      | Pum  | no on      | -            | -         | -             | -                       | -                          | -                        |                           |  |       |
|    | 80     | s       | -    | 1.10 | 5 61.4     | 6 -          | 30.5      | 8.11          | 228,3                   | 3.68                       | 77.0                     | 7.95                      | Sirce #7                               |       |
|    | 8:0    | 24      | 1    | ing  | of         | -            | -         | -             | -                       | -                          | -                        | -                         | soige -                                |       |
|    | 8:1    | 4.      | TA   | 5    | 59.6       | 7 -          | -         | -             |                         |                            | -                        | -                         | -                                      |       |
| 1  | 8:11   | 4       | PU,  | qu   | on         | 1            |           | -             | -                       | -                          | -                        | -                         | -                                      |       |
| -  | 8:16   | -       | 2    | 1.23 | 67.2       |              | 300       | 7.44          | 1279                    | 3.571                      | 83.9                     | 30.6                      | Surge #3                               |       |
| ł  | 5:17   | -       | Tur  | mp . | 1196       |              | -         | -             | -                       | -                          | -                        | -                         | 3-                                     |       |
| ŀ  | 8:23   | 7-      | D.   |      | 6          | -            | -         | -             | -                       | -                          | -                        | -                         | -14                                    |       |
| F. | 8:24   |         |      | 120  | 66.8       | 8 -          | 31.5      | 7.68          | - 70.7                  | 3.54                       | 367                      | 1.73                      | -                                      |       |
| -  | 830    | F       | 2    | 2 0  | ff         |              | 31.5      | -             | -                       | -                          | 367                      | 1.73                      | Surge #9                               |       |
|    | 9:31   | -       | 1    | -    | 61.96      | -            | -         | -             |                         | -                          | -                        | -                         |  |       |
| ;  | 1:32   | ;       | Pur  | -    | on         | -            | -         | -             | -                       | -                          | -                        | -                         | - 7 ml                                 |       |
| 5  | 7137   | -       | . 1  | 1.12 | 67.5       | 9-           | 31.6      | 7.87          | 336.8                   | 3.79                       | 33.4                     | 5.84                      | -                                      |       |
| 9  | 1:39   | 8       | 200  | 0    | off        | -            | -         | -             | -                       | -                          | -                        | -                         | Surge #3                               |       |
| 1  | 46     | TA      | 6    | -    | 64.7       | -            | -         | -             | -                       | -                          | -                        | -                         | -                                      |       |
| 7  | :47    | Pe      | m    | 0    | on         | -            | -         | -             | -                       | -                          | -                        | -                         | -                                      | T.C.  |
| 1  | isz    | -       | 1    | 300  | 69.85      | -            | 34.6      | 7.63          | -1.07                   | \$.95                      | 135                      | 2.3                       | -                                      |       |
| i  | :57    | and the | 1.   | 263  | 72.0       |              | 30.3      | 761           | -1.52                   | 3.519                      | 390                      | 1.55                      | -                                      |       |
| 8  | 1.82   | 2       | 1    | 25   | 75.04      | 1-           | 29.3      | 7.57          | -45.1                   | 3.512                      | 553                      | 4.58                      | 5 -                                    |       |
| 4  | 8:0    | 7       | 1.2  | 07   | 77.3       | 3 -          | 28.9      | 7.64          | 33.6                    | 3.488                      | CINIT                    | 3.17                      |  |       |
| 2  | 5:12   | -       | 1.   | 16   | 80.53      | 5-           | 29.1      | 7-20          | -134.6                  | 3.463                      | SUMT                     | 1.82                      | -                                      | 23.46 |
| R  | 5:17   | 2       | 1.   | 159  | 83.93      | -            | 29.6      | 7.80          | -147                    | 3.382                      | CIMI                     | 1.32                      |  |       |
| 1  | :23    |         | Pe   | mp   | off        |              | -         | -             | - 10                    | -                          | -                        | 1-                        | - 11                                   |       |
|    | 31     | -       |      |      | 77.76      | -            | -         | -             | -                       | -                          | -                        | - 10                      |  |       |
| 2  | 13     | Pum     | P    | an   | -          | - 1989       | -         | -             | -                       | -                          | -                        | - 14                      | -                                      |       |
|    | 37     | -       | 0.7  | 15   | 82.05      | -            | -         | -             | -                       | -                          | 314                      | -                         | 1                                      | 1     |
| 9  | 0      | -       |      | -    | 83.10      | -            | -         | -             | -                       | +                          | TZ.9                     |                           | -                                      |       |
| 1  | 43     | - 1     | -    | 4    | 34.15      | -/           | -         | -             | -                       | -                          | 337                      | 1 and                     | 1 -                                    | -     |
| 4  | 16     | -       | -    | -    | 85.26      | -            | -         | -             | -                       | -                          | 218                      |                           |  | -     |
| 5  | 1      | -       |      | - 4  | 4 82       | -            | -         |               | 0000                    | -                          | 824                      | -                         |  | -     |
| 2  |        | 1000    |      | -    | 6:02       |              | 1         | 1             | 1                       |                            | 027                      |                           |  |       |

ER-2 - Well Development Record



| Wel    |        |       | Projec  | Project Name | : PG&E Topo | Arcadi        | GW Remedy               | Ansel                      | Mclella                 | PG_<br>Well ID _          | U of 14<br>ER-2                         |   |
|--------|--------|-------|---------|--------------|-------------|---------------|-------------------------|----------------------------|-------------------------|---------------------------|---|---|
| 0 L    |        |       | DTW     | Total Depth  | Temp *C     | pH<br>(+ 1.0) | ORP (mV)<br>(± 10.0 mV) | Cond.<br>(µS/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(± 0.3 mg/L) | Notes/Gallions<br>Removed/Water Clarity |   |
| 116 11 | 151    | R     | no or   | 4 -          | -           | -             | -                       | -                          | -                       | -                         | -                                       |   |
| 11:    | 53     | 4     | over    | PUP          | p n         | 111           | £Ł.                     | BTOC                       | -                       | -                         |   |   |
| 12     | 16 72  | 6 -   | 81.4    | 7 -          | -           |               | -                       | -                          | -                       | -                         | -                                       |   |
| 12     | 17 1   | emp   | an      | -            | 214         | -             | -7/9                    | 2001                       | 368                     | 1.34                      | Surce #1                                |   |
| 12     | 122    | 20.7  | 826     | -            | -           | 0.12          | -                       | +.10.<br>-                 | -                       | -                         | -                                       |   |
| 12.    | ZJ     |       | 82.9    | 5 -          | -           | -             | -                       | -                          | -                       | -                         | -                                       |   |
| 1213   | Z Pur  | ~ ~   | -       | 1-           | -           | -             | -                       | -                          | -                       | -                         | -                                       |   |
| 12:    | 37     | 1.89  | 1186.34 | 8 -          | 31.5        | 7.83          | -109.9                  | 7.633                      | 869                     | 2.17                      | - menter and                            |   |
| 12:3   | 39 Pc  | no e  | 4       | -            | -           | -             | -                       | -                          | -                       | Ŧ                         | Surge #2                                |   |
| 12.9   | 3 The  | 1 -   | 83.76   | -            | -           | -             | -                       | -                          | -                       | -                         | -                                       |   |
| 12:4   | 4 Par  | mp o  | n -     | -            | -           | -             | -                       | -                          | LBOVE                   | -                         |   | - |
| 12.1   | 9      | 1.96  | 9 88.2  | 1 -          | 30.6        | 7.8           | 6.3                     | 7.291                      | CIMIT                   | 4.42                      | -                                       |   |
| 12:0   | P Pu   | que   | off     | -            | -           | -             | -                       | -                          | -                       |                           | Dry 3                                   | - |
| 12:3   | 2      | 1     | 84.7    |              | -           | _             |                         | _                          |                         |                           | -                                       |   |
| 13:00  | 5 100  | np np | 090     | -            | 30.4        | 242           | 3.3                     | 678                        | ABULE                   | 2.48                      |   |   |
| 13:00  | 5 Perm | 1.13  | er.s    | -            | -           | -             | -                       | -                          | -                       | -                         | Surge 124                               | 1 |
| 13:10  | TACH   | -     | 86.27   | -            | -           | -             | -                       | -                          | -                       | - 1                       | -                                       |   |
| 13:11  | 0.00   |       | -       | 1-           | - 1         | -             | -                       | -                          | -                       | -                         |   |   |
| 1348   | 100    | 1.05  | 93.91   | -            | 31.1        | 7.74          | 8.9                     | 6364                       | LABORE                  | 3.94                      | -                                       |   |
| 13118  | Pur    | no    | A       | -            | -           | -             | -                       | -                          | -                       | -                         | Surce # 5                               |   |
| 13:28  | TAG    | -     | 86.98   | 5 -          | -           | -             | -                       | -                          | -                       | -                         | -                                       |   |
| 13:27  | Puny   | n an  | -       | 1            |             |               |                         |                            |                         |                           |   |   |
| 13:35  | - ]    | 1.0%  | 92.06   |              |             |               |                         |                            | ABDUG                   | ION                       |   | 1 |
| 13:40  |        | 123   | 94.46   |              | /           | _             | Con Charles             |                            | 11 0                    | 2                         |   |   |
| 13:50  | - 0    | 1976  | 9872    |              |             | /             |                         |                            | ABOU                    | AS                        |   |   |
| 14:01  | - Ø.   | 962   | 102.4   | 7            |             |               | /                       | Carl                       | S.A                     |                           | /                                       |   |
| 14:00  | 7 8    | 106   | 105.40  |              | 1           |               |                         | 1                          | 5.A.                    | 1                         | /                                       | 1 |
| 1470   |        |       |         |              |             |               |                         |                            | Y-                      | -                         |   | 7 |
| 14:12  | . ,    | Pin   | 0 01    | 7            |             |               |                         | 1 Alex                     | - PALLE                 | -                         |   | - |
| 14:32  | Rom    | an    | long    | ed l         | 62          | 132           | 86                      | BIE                        | re                      |                           | 1                                       | - |
|        |        | -     |         | -            |             |               |                         |                            | The second              | VUI                       |   | 1 |

ER-2 - Well Development Record



|                 |        |             | roject Name     | PG&E Topo | ck Phase 2A          | GW Remedy               | -                  |                         | PG_                      | 7 of 16                                |   |
|-----------------|--------|-------------|-----------------|-----------|----------------------|-------------------------|--------------------|-------------------------|--------------------------|--|---|
| Date(s) 6/1     | 6/22   | Project #   | 30126255        |           | Arcadi               | s Oversight:            | Ansel M            | ( dellan                | Well ID                  | EK-E                                   |   |
|                 |        | DTW         | Total Depth     | Tama      | pH<br>(+1.0)         | ORP (mV)<br>(+ 10.0 mV) | (µS/cm)<br>(± 3%)  | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(±0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |   |
| Time Tas        | k GPM  | 98.2        | (n. amp)<br>7 ~ | -         | -                    | -                       |                    |                         | -                        |  |   |
| 14:40           | Rum    |             | -               | -         | -                    | -                       |                    | -                       | -                        |  |   |
| 14.45           | 8.9    | 5102.6      | 8-              | 32.3      | 8.39                 | -3.1                    | 10.105             | 1,000                   | 1.98                     |  |   |
| 19:92           | Rimo   | off         | a ling          | -         |                      | 1000                    | -                  | -                       | 1 Martin                 | Surge #1                               |   |
| 14:51 TAG       | 5      | 98.7        | 8               | 1 ann     | 10/18/1              |                         | /                  | -                       | 1915                     |  |   |
| 14:52           | Rump   | on          | 21.8            | 1 March   | Maria                | -                       | 15 19 10           |                         |                          |  |   |
| 15:01 TA        | 6 5.42 | 4114.55     |                 | 10 alter  | 1.000                | 1 march                 | State Mark         | 20.34                   | 4911                     |  |   |
| 15:09           |        | 125.19      | - inter         |           | 11/1/19              | - 1119 4                | 11.00              | 11                      | 11.15.46.1               |  |   |
|                 | - De   | ane.        | FOR             | THE       | A DAY                | -                       |                    |                         |                          |  |   |
| 6:58 72         | 9      | 54.25       | >               |           | 1 Series             |                         | mistar.            | S. Caller               |                          |  |   |
| 8:80 Th         | 4      | \$3.98      | 2               | /         | 1.0.000              | 1                       | ALCON ALCON        |                         |                          |  |   |
| 8:43 %          | ing .  | an          | And And         |           |                      | 17-18                   |                    |                         |                          | No XION                                |   |
| 8:46 1          | amp    | •H          | The start       | 1 and     |                      |                         |                    | 12782                   |                          | 1 Dland                                |   |
| 8:48 1          | mp     | on          |                 | 1. 191    | 175.08               |                         | N SSID             |                         |                          | No ALOU                                |   |
| 8:47 1          | mp     | off         |                 |           | 1990                 |                         |                    |                         |                          | Clark                                  |   |
| 8:56 1          | amp    | on.         |                 |           | CARGONIA<br>CARGONIA | 1.1911.13               | 1                  | 122                     |                          | No TION                                |   |
| 8:39 PL         | mp     | off         |                 |           | Con Brown            | 1-1-1-1-                | 20101              |                         | 1                        |  |   |
| 7:17 70         | *      | 52.69       |                 |           | Children Harris      |                         | 1000               | 1                       | 1                        | Ci .                                   |   |
| 7:18 Tem        | yp e   | (7.70       |                 | 7/6       | 711                  | 2 -                     | 1711-1             | 110                     | 1.4-                     | FLOW                                   |   |
| 7:23<br>Q. 24 D | 0.779  | DT.37<br>PP | -               | 36.0      | 7.73                 | 1.2                     | 12.401             | 112                     | 1.72                     | -                                      |   |
| 7:29 Per        | mp o   | H CLCA      |                 |           |                      |                         | Contraction of the | 10000                   |                          | Surge # Z                              |   |
| 2.2 TAC         | 2      | 22.81       |                 |           |                      |                         | -                  |                         |                          |  |   |
| 130 H           | emp    | on          |                 | 3-11      |                      |                         |                    |                         |                          |  | 1 |
| 1.35            | 0.917  | 58.7        | -               | 23.9      | 7.40                 | ~77.3                   | 3.67               | 775                     | 2.31                     |  |   |
| .36 Yump        | 2 04   | 7           |                 | 1         | -                    |                         | 1                  |                         |                          | Surge #3                               | - |
| 191 TAG         | -      | 57.35       | Charles 1       | P. P. P.  | 10.10                |                         | -                  |                         | 17. 12                   | 1                                      |   |
| :92 Pum         | y sy   | 2           |                 | and the   | -                    | 1. Suger                |                    |                         | -                        |  |   |
| :47             | 2.942  | 0.65        | -               | 32.0      | 7.45                 | -62.9                   | 7.47               | 974.                    | 1 4.44                   |  |   |
| :48 Pump        | o of   | 4           |                 | -         |                      | Mer Elle                | 1983               | 1312                    |                          | Surge #4                               |   |
| :53 TAG         | 4      | 59.03       |                 |           |                      |                         | -                  | 0.8                     | 1. 1.3.151               | 1                                      | 1 |
| 154 Pum         | 0 0    | 2           |                 | 232320    |                      | 120135                  | 11978              | 1                       |                          | 1                                      |   |
| 10              | on Day | 1           | 1000            | 2110      |                      |                         |                    | 10                      | TH.                      | 1 1                                    | - |

ER-2 - Well Development Record



| Well Developm | DIS ment Record | ,                | roject Name              | PG&E Topo | ck Phase 2A  | GW Remedy               | 4.10              | 141.1.)                 | PG<br>Well ID             | 10 of 16<br>ER-2      |
|---------------|-----------------|------------------|--------------------------|-----------|--------------|-------------------------|-------------------|-------------------------|---------------------------|-----------------------|
| Date(s)       | /17/22          | Project I        | 30126255                 |           | Arcadi       | is Oversight:           | Cond.             | 1 Chesting              |                           |                       |
| Time          | ask GPM         | DTW<br>(ft. BMP) | Total Depth<br>(ft. BMP) | Temp °C   | рН<br>(±1.0) | ORP (mV)<br>(± 10.0 mV) | (µS/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(+ 0.3 mg/L) | Removed/Water Clarity |
| In a F        | ines 3          | Ar               | -                        | -         | -            | -                       | -                 | -                       | -                         | Surge # 5             |
| 18:07 1       | 400 -           | 6179             | 5 -                      | -         | -            | -                       | +                 | -                       | -                         | -                     |
| 10:10         | 2mp             | on               | -                        | -         | -            | -                       | •                 | -                       | -                         | DRP                   |
| 10 515        | 1.00            | 7 65.0           | -                        | 32.1      | 7.64         | 0/145                   | ø.848             | 66.1                    | 2.59                      | -145.83               |
| 19:29         | 0.98            | 7 66.61          | -                        | 29.9      | 7.48         | -157.2                  | 12.735            | 55.0                    | 2.00                      |                       |
| 18:25         | 0.785           | 19.54            | -                        | 29.7      | 7.31         | -155.8                  | Ø.488             | 43.9                    | 2,13                      | -                     |
| 10:30         | 1007            | 71.64            | -                        | 30.2      | 7.25         | -134.7                  | 12.335            | 38.0                    | 2.61                      |                       |
| 10:35         | 1013            | 73.98            | -                        | 29.8      | 7.38         | -131.6                  | 2.23              | 41,6                    | 2.49                      | -                     |
| 10:45         | 8,962           | 77.66            | -                        | 29.8      | 7.30         | -192.5                  | 11.698            | 63.5                    | 1.14                      |                       |
| 10:50         | Ø.954           | 80.23            |                          | 29.2      | 7.33         | -293.6                  | 11.732            | 94.2                    | Ø.96                      |                       |
| 10:55         | 0.824           | \$2.7            | -                        | 29.1      | 7.27         | -158,5                  | 11.56             | 130                     | 1.71                      | ~                     |
| 11:00         | \$.94           | 83.75            | 5 -                      | 28.5      | 7.26         | -179.3                  | 11.347            | 1\$3                    | 1.26                      |                       |
| 11:05         | 0.94            | 86.09            |                          | 28.4      | 7:25         | - 104.8                 | 11.120            | :1\$3                   | 2.81                      | -                     |
| 11:08         | Remp            | rate             | incre                    | esid      | -            | -                       | -                 | -                       | -                         | -                     |
| 11:00         | 7.076           | 91.11            | -                        | -         | -            | -                       | -                 | 113                     | +                         | -                     |
| 11312         | 652             | 98               | -                        | -         | -110         |                         | -                 | 153                     | -                         | -                     |
| 11:14 6       | 18 6.12         | 1\$6             | -                        | 78.4      | -            | -                       | 1. 1. 1. 1. 1.    | 222                     |                           | -                     |
| 11:16         | Dier            | 111.34           | ~                        |           | -            | -                       | -                 | 208                     | -                         | -                     |
| 11:18         | and the         | 16               | -                        | -         | Ter          | -                       | -                 | 236                     | -                         | -                     |
| 11:20         | 5.16            | 125.4            | 3 -                      | -         | -            | -                       | -                 | 490                     | -                         | 1                     |
|               |                 | STOP             | f                        | OR        | THE          | DA                      | y                 |                         | -                         |                       |
|               |                 | 1                | 4.5                      |           | A della      |                         |                   |                         | 1.12                      | J. S. C. Martin       |
|               |                 |                  |                          | r         | a Bass       |                         | See.              | in the                  |                           |                       |
|               |                 | -                | Carl                     |           |              | 16 Balls                |                   |                         | 1                         |                       |
|               |                 | and the second   |                          | w and     | 1            | Repper                  |                   |                         | Roy Al                    |                       |
|               |                 |                  |                          | -         | lax          | 11                      |                   | 12 15                   | 14                        |                       |
|               | 1               |                  | 14                       |           |              |                         | -                 |                         | Aller Ares                |                       |
|               |                 | Sector 1         | C. all                   |           | 1000         | R                       | ~                 |                         | 1 tor                     | ALL STREET            |
|               | 1200            | 199              |                          |           | 1.10         | 2                       | 2x                | >                       |                           |                       |
|               |                 | 1                |                          |           |              | 1200                    | -                 | 4                       | 2                         |                       |
|               |                 |                  |                          |           | 12 Martin    |                         |                   |                         |                           |                       |
|               |                 |                  | 100                      |           | -            |                         | -                 |                         |                           |                       |

ER-2 - Well Development Record



| Date/el | le la la | 122    | Project # | 30126255    |         | Arcad        | is Oversight: | Davro                      | Cornel                  | Well ID                   | ER-2                                   |        |
|---------|----------|--------|-----------|-------------|---------|--------------|---------------|----------------------------|-------------------------|---------------------------|--|--------|
| -arc(s) |          |        | DTW       | Total Depth | Tamp IC | pH<br>(+1.0) | ORP (mV)      | Cond.<br>(µS/cm)<br>(+ 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(± 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |        |
| 0761    | Pumping  | GPM    | (IT. BMP) | 136.02      | -       | -            | -             | -                          | -                       | -                         | In.t.a 1 448.0 (Co                     | atmost |
| 1010    | start    | 1.01   | 49.79     | -           | 27.1    | 7.04         | -185          | 11.798                     | 143                     | 1.78                      | Intial Purge very a                    | 4. 606 |
| 2910    | Pumping  | -      | 5412      | -           | 27.8    | 7.13         | -207          | 11.691                     | 08.5                    | 1.69                      | 458 Sighty                             |        |
| 2820    | 1        | 0.96   | inse      | -           | 28.0    | 7.26         | -212          | 11.60                      | 45.0                    | 1.39                      | 47300825                               |        |
| 7830    |          | 0.962  | 12.87.    | -           | 28.3    | 7.32         | -223          | 11,425                     | 35.6                    | 1.22                      | 479                                    |        |
| 2840    |          | 0.923  | 67.98     | -           | 28.4    | 7.36         | -229          | 11.306                     | 49.3                    | 1.18                      | 488.6                                  |        |
| 1850    |          | 0.117  | 72.15     | -           | 28,6    | 7.32         | -23)          | 11,137                     | 25.7                    | 0,92                      | 497.6                                  |        |
| 0900    |          | 0.895  | 75.96     | -           | 28.6    | 7,29         | -220          | 11.000                     | 21.4                    | 1.00                      | 506.2                                  |        |
| 0910    |          | 0,875  | 89.09     | -           | 28.5    | 7.28         | -220          | 10.719                     | 18.2                    | 1.05                      | 515.3                                  |        |
| 2920    |          | 0,814  | 83.00     | -           | 28,7    | 7.28         | -234          | 9,905                      | 23,5                    | 0.92                      | 523,8                                  |        |
| 0930    |          | 0,771  | 87.29     | - /         | 28.6    | 7.32         | -211          | 8,812                      | 40.9                    | 1.37                      | 532                                    |        |
| 1940    |          | 0.728  | 90.32     | - /         | 28,6    | 7.35         | -237          | 8,597                      | 35,5                    | 0.83                      | 539                                    |        |
| 950     |          | 0.737  | 94.01     | -           | 28,7    | 7,39         | -213          | 8,308                      | 27.5                    | 1.10                      | 544 to 0.954 Fle                       | wheter |
| 000     |          | 0.937  | 98.34     | -           | 28.9    | 7,48         | -208          | 7.934                      | 41.5                    | 0,85                      | 553,8                                  | Cuttin |
| 010     |          | 0.897  | 101.95    |             | 28.9    | 7.60         | -171          | 7,8%                       | 47.3                    | 1.22                      | 562.Z                                  |        |
| 020     |          | 0,819  | 106.04    | 7           | 28.9    | 7.73         | -196          | 8.074                      | 56.4                    | 1,15                      | 571.7                                  |        |
| 030     |          | 0.793  | 109,47    | -           | 29.3    | 7.78         | -187          | 8.350                      | 62.2                    | 1.07                      | 579.2 t                                | 1.1    |
| 740     | 10       | 2,909  | 113.22    | -           | 29,3    | 7.85         | -177 .        | 8.838                      | 63.8                    | 1.10                      | 587.7                                  |        |
| 250     |          | 2847   | 117.18    | -           | 29.5    | 7.92         | -167          | 9.257                      | 70.5                    | 0.97                      | 596.9                                  |        |
| 00      | 10       | 3,776  | 120.90    | -           | 29.5    | 7,97         | -167          | 9.687                      | 86.5                    | 1.27                      | 605.3 7                                |        |
| 110     | 6 0      | 7.979  | 124.95    | -           | 29,9    | 8.01         | -164          | 9.926                      | 89.3                    | 1.10                      | 614.0                                  |        |
| 20      | Punyor   | -      | 131.4     | Dry         | -       | -            | 1-1           | -                          | -                       | +                         | -                                      |        |
| 25      | -        | -      | 123.7     | Intral      | backwa  | sh           | -             | -                          | -                       | -                         | -                                      |        |
| 24      | -        | - /    | 13.82     | Be          | m jour  | In pur       | ap            | -                          | -                       | -                         | -                                      |        |
| 259     | Poller   | Pung   | 108.7     | 135,75      | Soft    | ottom        | -             | -                          | -                       | -                         | -                                      | 1      |
| -       | -        | - '    | 108.73    | after       | pouro   | pola         | - (           | -                          |                         | -                         |  | 10/2   |
| 06      | Began    | Bailon | - Inth    | a) white    | Red     | sh-bran      | m - thick     | torbie                     | ) odar                  | -                         | -                                      |        |
| 28      | Remone   | 692    | lons 1    | 135.81      | Hand 6  | Han 's       | one Sa        | DP.                        | tom                     | -                         | -                                      |        |
| -       | -        | -      | 108,89    | -           | -       | -            | -             | -                          | -                       | -                         | -                                      | 1000   |
| 00 1    | Barn .   | swabbo | m/Sun     | - 137-      | 128 4   | bis          | -             | -                          | -                       | -                         | -                                      |        |
| 25      | Began    | Swel   | bom       | 23-12       | 8A      | has          | -             | -                          | -                       |                           | -                                      | 1      |
| 00 "    | Began    | Smalad | ny 1      | 18-12       | 3 A     | 2            | -             | -                          | - 1                     | -                         | -                                      | -      |
| 5       | 0        |        | 93.02     | 135,81      | Handha  | How          | SHabler       | Conde                      | te foo                  | m 118-19                  | 3,695                                  | 1      |



| Da   | te(s) | 4/2    | 2/20  | -     | _ Project        | # 3012        | 5255          |          | Arcad         | is Oversight:           | David                      | Carnell                 | Well ID                   | ER-               | 2                          |
|------|-------|--------|-------|-------|------------------|---------------|---------------|----------|---------------|-------------------------|----------------------------|-------------------------|---------------------------|-------------------|----------------------------|
|      | Time  | Tas    | k     | GPM   | DTW<br>(ft. BMP) | Total<br>(ft. | Depth<br>BMP) | Temp *C  | pH<br>(± 1.0) | ORP (mV)<br>(+ 10.0 mV) | Cond.<br>(µS/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(+ 0.3 mg/L) | Notes<br>Removed/ | /Gallons<br>/Water Clarity |
| 0    | 701   | Balle  | r.    | havit | 52.51            | 135           | 81            | Hand     | bottom        | -                       | -                          | -                       | -                         | 10                | 12                         |
| 07   | 06    | Be     | Jan   | bail  | ing -            | In            | 1/            | water to | fik ved       | Ush bra                 | an vary                    | torbic                  | ); trace                  | GINOUN            | tot                        |
| -    | -     | -      |       | f.    | he sa            | 2             | into          | e retu   | n; Ha         | 2                       | -                          | -                       | -                         | -                 |                            |
| 01   | 33    | Rem    | and   | 2 14  | gallans o        | Inny          | bali          | ; final  | ball we       | stucki)                 | (Not H                     | (rck) w/                | trace &                   | Sand in           | retirm                     |
| -    | -     | -      | -     | 4     | 59.18            | 135           | 5.87          |          | -             | 1-1                     | -                          | -                       | 1.                        | 10 100            | -                          |
| OR   | 14    | St     | ato   | Range | 57,92            | -             | -             | -        | -             | -                       | -                          | 6-100                   | -                         | -                 |                            |
| -    | 1     | Stor   | tap   | empin | w/Mar            | ant           | b cl          | an up    | ottan         | -                       | -                          | -                       | -                         | -                 |                            |
| -    | -     | ~      | Initi | al    | Perding          | -             | 1             | 28.8     | 8.88          | 134.4                   | 12.385                     | 71000                   | 2.33                      | Monsoon           | Tunger                     |
| 08   | 2C    | Prayon | 303   | 15    | 59.65            | 1             | 1             | 28.4     | 8.72          | 54.5                    | 12.878                     | 7/000                   | 1.2.2                     | Contra on both    | an of Well.                |
| 084  | 6     | 1      | 03.   | 30    | 62.35            | Pin           |               | 28.4     | 8.85          | 40.0                    | 12.894                     | 71000                   | 1.lel                     |                   | 5                          |
| 090  | 7     |        | 0.    | 31    | 63.61            | 1000          | 22            | 28.8     | 8.75          | 31.3                    | 12.858                     | 71000                   | 1.23                      |                   |                            |
| 093  | 5     |        | 0.    | 31    | 105.48           | Red.          | 100           | 28.8     | 8.69          | 27.5                    | 12,861                     | 71000                   | 1.60                      | -                 |                            |
| 095  | 2     | -      | 0.    | 30    | 66.33            |               |               | 28.5     | 9.04          | 22.6                    | 12.819                     | >/000                   | 1.30                      | -                 |                            |
| 101  | 6     | -      | 0.    | 30    | 67,51            | aller.        | 12            | 29.0     | 9.08          | 24.0                    | 12.900                     | 71000                   | 1.51                      |                   | -                          |
| 104  | 3     |        | 0,    | 20    | 67.82            | 1             | 200           | 29,1     | 9,23          | Z1.9                    | 13.022                     | 653                     | 1.84                      | 22                |                            |
| 110  | Z     |        | 0.2   | 3     | 68.68            | 24            | 10            | 29.4     | 9.02          | 18.8                    | 12.984                     | 482                     | 1.58                      | and all           | 1                          |
| 1123 | -     |        | 0,2   | 3     | 69.05            | Ting          | 1             | 30.0     | 9.05          | ZZ.4                    | 13.062                     | 517                     | 1.76                      | 11 martin         | 1                          |
| 114  | 5     |        | 0.1   | 1     | 69.20            | Sta           | .to           | rebound  | lim           | -                       | -                          | -                       | -                         |                   |                            |
| 115  | 1     |        | 0.1   | 1     | 69,15            |               | 12            | 31.0     | 9,52          | 29,0                    | 13.193                     | 492                     | 1.93                      |                   |                            |
| 1212 |       | 1      | 0.1   | 5     | 68.84            |               |               | -        | -             | -                       | -                          | -                       | -                         |                   |                            |
| 1216 |       |        | 0.1   | 5     | 68.87            |               |               | -        | -             | -                       | -                          | -                       | - 11                      |                   |                            |
| 220  |       |        | 0,13  | . 0   | 68.89            |               |               | 30.2     | 9.08          | 26.0                    | 13,198                     | 373                     | 1.63                      | 112.08            | 1                          |
| 270  | -     |        | 0.14  | 1     | 8.85             |               |               | -        | -             | -                       | -                          | -                       | -                         | 1999              | 120/00                     |
| 31   |       |        | OIR   | 10    | 8.85             |               |               | +        | -             | -                       | -                          | -                       |                           | 199.16            |                            |
| 35   |       | V      | 0.1   | 4     | 8.85             | 1             |               | 79 4     | 9.08          | 21.9                    | 13 172                     | 211                     | 7 71                      | 1                 | 1                          |
| 1    | 1     | 5      | -     | -     |                  |               | P             | P        | 7             | 15                      | 1                          | N                       | D                         |                   | 1                          |
| UN   | Ť     | -      | mo    | N3CK  | Haz              | 1200          | 7             | hanald   | 2 a 72        | gations                 | during                     | 1 tons don              | ( Tomping)                | -                 | V                          |
| NO4  | 415   | P      |       | 6     | 102              | 100,2         | de            | -        | 0.1           |                         |                            | -                       | -                         | -                 | -                          |
| R    |       | De     | gar   | Sh    | aban             | > 12          | 80            | 133 0    | eet bys       | -                       | -                          | -                       | -                         | -                 | -                          |
| 45   | 2     | Beg    | 2     | Sule  | abto.n           | 12            | 3-            | 128      | feet by       | 8 -                     | -                          | -                       | -                         | -                 |                            |
| 17   | -     | Swa    | bp-   | ) 0   | 12               | 3-14          | 28            | feet     | gs Car        | plate                   | - en                       | Jaf-a                   | In ,                      | 1                 | -                          |
| 702  | 54    | -ging  | Swibb | my 5  | 0,92 1.          | 35.8          | 1'            | -Ir      | Aral          | -                       | -                          | -                       |                           | Next:             | Day Int.                   |
| 20   | 17    | Bega   | n 3   | snak  | abing            | from          | 1             | 118 10   | 123 fr        | bas                     | -                          | -                       | -                         |                   | -                          |
|      |       | 0      |       |       | -                |               |               |          |               | -                       | 611                        | 199 3 181               | 120920                    |                   |                            |

ER-2 - Well Development Record



| Date(s)       | 6/23/    | 122      | _ Project #      | 30126255                 |          | Arcad        | lis Oversight:          | David                      | Comel                   | Well ID                   | CR-2                                   |
|---------------|----------|----------|------------------|--------------------------|----------|--------------|-------------------------|----------------------------|-------------------------|---------------------------|--|
| Time          | Tæsk     | GPM      | DTW<br>(ft. BMP) | Total Depti<br>(ft. BMP) | Temp "C  | pH<br>(+1.0) | ORP (mV)<br>(± 10.0 mV) | Cond.<br>(µS/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(± 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |
| 0745          | Silva    | bbing    | Surgine          | Comp                     | lete fre | 118%         | 123; 1                  | egan :                     | Swabby                  | From                      | 113 to 118 Jobs                        |
| 0810          | Suchho   | comple   | te from          | 113 to 1                 | BA; be   | gan Swab     | buy from                | 108-                       | IACU                    | 12                        | -                                      |
| 0835          | Swel     | bing f   | Jon 10           | 8-113                    | + bgs    | Comple       | te                      | -                          | -                       | -                         | -                                      |
| 0850          | Beg      | an shi   | abbine           | from                     | 103 1    | 6 #3 K       | 8 feet                  |                            | -                       | -                         | -                                      |
| 0915          | Sunbl    | iez/sun  | ging co          | yslete &                 | from 10  | 3 do 108     | fed b                   | egon i                     | Sugar                   | from 9                    | 8 to 103                               |
| 0940          | Surging  | and      | te fran          | 98-10:                   | A;B      | gan Sul      | ging for                | n 93                       | \$ 98                   | fact by                   | > -                                    |
| 1005          | Sign     | Comp     | let. to          | on 93                    | 6 98-    |              | -                       | -                          | -                       | -                         | -                                      |
| 1020          | Began    | sing     | ing for          | m 88                     | + to 9:  | 3 feed       | bys                     | -                          | -                       | -                         | -                                      |
| 1045          | Sunga    | Comyo    | lete A           | an or                    | 693 1    | 1. hoga      | Surga                   | 83                         | 10 88                   | for has                   | -                                      |
| 1110          | Sugin    | Com      | dete             | from 8                   | 10 88    | for has      |                         | -                          | -                       | -                         | -                                      |
| 1215          | Bergan   | Surgin   | at 7             | 8-83                     | St bys   | -            | -                       | -                          | -                       | -                         | -                                      |
| 12.40         | Surga    | from     | 78-8             | sfr a                    | yelete;  | Benns        | urgan fo                | om 73                      | 10 78                   | G by2                     | -                                      |
| 1305          | Surgen   | , com    | plate +          | From T.                  | 3 6 7    | Feel         | 95                      | -                          | -                       | -                         | -                                      |
| <b>B</b> 25 J | Began    | Singer   | 68               | 6 73                     | fi bys   | 1-11         | -                       | +                          | -                       | -                         | -                                      |
| 1350 0        | Complete | Jan      | in from          | m 68 h                   | 73;1     | Jegan Su     | man fr                  | om 6                       | 3 to C                  | SS &                      | bas                                    |
| 1415          | Comples  | Los      | ingela           | from G                   | 3-68     | ft bys;      | began .                 | Sungan                     | from                    | 58-0                      | 3 ft bas                               |
| 1440          | Comple   | DS       | and              | Com 58                   | -63 '    | Bayan.       | Sunger .                | from                       | 53 6 3                  | 58 A.                     | Das                                    |
| 305 (         | Cample   | 625      | ingh             | from                     | 53 to 3  | 8A:          |                         | -                          | -                       | -                         | -                                      |
| 648           |          |          | 80.03 1          | 35.87                    | -        | -            | -                       | -                          | -                       | -                         | -                                      |
| 701 2         | Bernit   | Bailon   | Inite            | I wet                    | r redd   | sh-brow      | n var                   | tob)                       | stat                    | 1. the                    | 4                                      |
| -             | -        | - 1      | Trace            | amount                   | s of ve  | v fre        | and ab                  | Serie                      | Lu f                    | 1                         | 1 hl . t                               |
| 754 B         | In Com   | olete 3  | 57,25 10         | 35,90                    | Rela 1   | andote.      | Ramon                   | 2 20                       | Doolly.                 | )                         | 1. 1                                   |
| 830 F         | Began    | Junai    | ne fro           | m 129                    | Ad       | 133 A        | he                      | -                          | - January               | Sound                     | balling                                |
| P56 3         | ELAN     | 500      | ATA              | C FR                     | - 17     | 3            | 205-                    |                            |                         | -                         | -                                      |
| 20 B          | Egan .   | SVALA    | f                | - 119                    | 1 12-    | 2 6 1        | ****                    | <u>063</u>                 |                         |                           |  |
| 55 B          | 090      | Ja       | Sp               | 113                      | 1 MG     | Q I          | 3                       |                            |                         | -                         | PER LAR                                |
| R             | 570      | 3)       | Com              | 113                      | 10 /18   | At 1gr       |                         | -                          | -                       | -                         | -                                      |
| JE C.         | Juns     | vogen    | Fron             | 108                      | 6 113    | to by        | 2                       | -                          | -                       | -                         | -                                      |
| 75 50         | \$71     | - 5      | 3,51 12          | \$5,90                   | Sun      | 35 Con       | yshole                  | free                       | 1 108                   | 113A                      | bys                                    |
| 40 L          | stial    | - 50     | 0 100 12         | 35,90                    | -        | -            | -                       | +                          | -                       | -                         | -                                      |
| LO D          | gan :    | strang   | trom             | 1036                     | 108 4    | bis          | -                       | -                          | -                       | -                         | -                                      |
| 15 Be         | gan s    | vrging - | tran             | 98-1                     | 103 1    | + 698        | -                       | T                          | -                       | -                         | -                                      |
| 25 Be         | gan 3    | why      | thom             | 93 ;                     | 6 98     | fil          | bs                      | -                          | -                       | -                         | _                                      |
|               |          |          |                  |                          |          | 2            |                         |                            |                         | -                         |  |
|               |          |          |                  |                          |          |              |                         |                            |                         |                           |  |

ER-2 - Well Development Record



| AAF      | RCADIS      | S         |           |             |            | - Obace 24 G | W Remedy     |                    |           | PG                        | 14 of 10_                              |          |
|----------|-------------|-----------|-----------|-------------|------------|--------------|--------------|--------------------|-----------|---------------------------|--|----------|
| Well Dev | relopment R | tecord    | Pr        | oject Name: | PG&E Topoc | Arcadis      | Oversight:   | David (            | anell     | Well ID                   | ER -2                                  |          |
| Date(s)  | 6/24        | 22        | DTW       | Total Depth |            | pH           | ORP (mV)     | Cond.<br>(µS/cm) T | UTS NTU   | DO (mg/L)<br>(+ 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |          |
| Time     | Task        | GPM       | (ft. BMP) | (ft. BMP)   | Temp °C    | (+1.0)       | (+ LOCO MIN) | 1                  | 1         | 1                         | 1                                      |          |
| 0845     | Beg         | an sug    | any th    | m 88        | \$ 73      | for of       | 1            |                    |           |                           |  |          |
| 0910     | Sur         | ing co    | uplet     | - tran      | 88 h       | - C L        | 25           |                    |           |                           |  |          |
| 0925     | Sung        | in be     | gove q    | in the      | to o       | 70 +         | 831          | bas                |           |                           |  |          |
| 0950     | Bage        | an sur    | Bing      | P           | 70 1.      | A            | 6-0          | 0                  |           |                           |  |          |
| 1015     | Durgi       | 3 Com     | focore    | From 73     | 1 70       | Rb           | 0            |                    |           |                           |  |          |
| 1215     | R           | Surg      | m f       |             | -73        | & bas        | +            |                    | 1         |                           | 1 - Barris                             | 100      |
| 1740     | B           | Surg      | Dy        | For 6       | 3 do 0     | 68 \$        | bys          |                    | 1         |                           | -                                      |          |
| 1305     | Ben         | 1.5       | Sina      | from        | 18 to      | 63 A         | bas          |                    |           |                           | 1                                      |          |
| 1330     | Sum         | ina (     | omolo     | = from      | 58 %       | 636          | bys          |                    |           |                           | Harris Contraction                     | -        |
| 1350     | Base        | Sum       | in f      | om 53       | 16 58      | + A b        | 99           |                    | -         |                           |  |          |
| 1415     | Bega        | - surg    | my f.     | om 52       | to 5       | s A          | 328          |                    | -         |                           |  | -        |
| 1440     | Sug         | Com       | Lete      | to 5        | of by      | 8            | 1            |                    | 1         |                           |  | -        |
| 1448     | Fin         | 1->       | 52.80     | 135.90      | Haro       | 1 botto      | m            | 1                  | 1         |                           | 1 1                                    | -        |
| 1450     | Bar         | n bo      | along -   | 7 instra    | 1 bail     | > this       | k redo       | 131.61             | Borrise 1 | may from                  | bis with                               | -        |
|          | to          | ce am     | anto a    | froy        | f. Sa)     | 1            |              |                    |           |                           |  |          |
| 1514     | Ren         | and       | 16 ge     | llow a      | for b      | alis         |              |                    | 10        | ++                        |  | 6/20     |
| 0702     |             |           | 50.67     | 135.90      | -          | 1            | infelle .    |                    |           |                           |  | -        |
| 0145     | Pump I      | Installed | 50.58     | - 5         | myer?      | fine         | 5 True       | 2                  |           |                           |  | -        |
| 0750     | Story       | p         | unyo a    | 2 adju      | ster ;     | flow re      | te           | -                  |           | 1.1.1                     | 2 -1                                   | 10.5     |
| 0811     | Page        | 0.25      | 54.0      | -           | 31.5       | 8.08         | 360.7        | 9.371              | 41.6      | 4,49                      | Tumpo Set @ 69                         | to bys - |
| 0813     |             | 0.25      | 54.65     | -           | 31.0       | 7.70         | 286.5        | 9.773              | 39,1      | 2.77                      | Ilgal                                  |          |
| 0830     |             | 0,25      | 55.26     | -           | 31.1       | 7.62         | 221,4        | 4,733              | 39.4      | 3,18                      | 15.25go                                | 10       |
| 0840     |             | 0.25      | 55,90     | -           | 31.4       | 7,77         | 186.4        | 9.717              | 31.2      | 2.86                      | 17.75 34                               |          |
| 0952     |             | 0,25      | 56,65     | -           | 31.8       | 7.92         | 159.7        | 9.689              | 21.2      | 2.77                      | 20,75gel                               |          |
| 0903     |             | 0,20      | 57.25     | -           | 31.9       | 7.90         | 129.)        | 9.648              | 18:8      | · 2.39                    | 23.551                                 | _        |
| 932      |             | 0.20      | 58.76     | -           | 32.8       | 8.16         | 94.2         | 9,651              | 19,6      | 2.76                      | 29.3gr)                                | _        |
| 0943     | 4           | 0.20      | 59.28     | -           | 33.0       | 8.09         | 80.2         | 9.620              | 2013      | 3 2,53                    | 31,5gal                                | -        |
| 1005     | Purge       | 0,20      | 60.25     | -           | 34.0       | 8,86         | 41.2         | 9.606              | 22.0      | Z.12                      | 35,9 31                                |          |
| 027      | start       | Surge     | 58.28     | Maria       | panys      | 10 90        | A bas -      | -sten              | 4 -       | - Surge                   | "Pump 5 time                           | 2        |
| 032      | Porge       | 0.35      | 61,70     | + -         | 31,2       | 11.24        | 36.3         | 10,500             | , 24.3    | 1.32                      | -                                      |          |
| 044      | V           | 0.35      | 61.70     | -           | 32,0       | 9.02         | 39,2         | 10.52              | 1 19.8    | r 1.31                    | 40.1.00                                |          |

ER-2 - Well Development Record



| Well Deve<br>Date(s) | G/ET/   | tecord<br>22 | Project #      | 30126255    |         | Arcadis        | Oversight:              | Den) (                     | amell                   | Well ID                   | ER-2                                   |   |
|----------------------|---------|--------------|----------------|-------------|---------|----------------|-------------------------|----------------------------|-------------------------|---------------------------|--|---|
|                      |         |              | DTW            | Total Depth | Temp 'C | piH<br>(+ 1.0) | ORP (mV)<br>(± 10.0 mV) | Cond.<br>(µS/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(+ 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |   |
| Time                 | Task    | GPM          | (1. 90         | -           | 32.0    | 8.28           | 49.9                    | 10.533                     | 18.2                    | 1.23                      | 44.3 g=1                               |   |
| 1050                 | I       | 0.35         | 64.01          | -           | 31.6    | 8,31           | 619                     | 10,461                     | 18.5                    | 1.05                      | 48,23                                  |   |
| 119                  | V       | 0.35         | 64.94          |             | 31,6    | 8.24           | 56.1                    | 10,424                     | 23.6                    | 1.25                      | 52.4301                                |   |
| 1127                 | Stopp   | 2 pun        | ping and       | moved       | sump to | 111 fr 6       | 93                      | -                          | -                       | -                         | 55.290.                                |   |
| 1246                 | Surge   | 1            | 49,95          | Surger      | w/Pour  | p 5 th         | ne 3                    | -                          | -                       | -                         | -                                      |   |
| 1253                 | Purge   | 0.25         | Be             | gan pr      | mpm     | and a          | adjuste                 | D flo                      | y rate                  | -                         | = 1 -1                                 |   |
| 1300                 | 1       | 0.25         | 63.63          | -           | 33.0    | 8,98           | 69.6                    | 10,842                     | 34,8                    | 9,10                      | 102-1                                  |   |
| 1312                 |         | 0,62         | 63.40          | -           | 33.1    | 8.75           | 72.9                    | 10,779                     | 39.4                    | 3.86                      | 71 401                                 |   |
| 1330                 |         | 0.62         | 65.50          | -           | 31.5    | 8.54           | 60.7                    | 10,748                     | 47.8                    | 1.11                      | 77.6 00                                |   |
| 1340                 |         | 0.62         | 68.50          | -           | 30.8    | 8,52           | 43.7                    | 10,731                     | 38.8                    | 1.22                      | 83 8 0                                 |   |
| 1350                 |         | 0.62         | 70.45          | -           | 30.6    | 8.35           | 33.0                    | 10,107                     | 125                     | 1.0                       | 90.0 cal                               |   |
| 1400                 | ~       | 0.62         | 72.20          | -           | 30.4    | 8.23           | 21.8                    | 10,692                     | 45-                     | 1.10                      | 962 92                                 |   |
| 1410                 | Porge   | 0.62         | 74.18          | -           | 30,7    | 8.24           | 17.8                    | 10,50                      | 0 6                     | -                         | -                                      |   |
| Stopp                | a) p    | mp to        | lowar<br>70.93 |             | Tump    | now si         | etat                    | 132                        | ++ 03>                  | -                         | -                                      |   |
| 1428                 | Bag     | n Jung       | ing or         | my pur      | ya 5    | times          | 211 1                   | 12 60                      | 51.5                    | 2 7 27                    |  |   |
| 1437                 | Purge   | 0.62         | 74,30          | -           | 30.7    | 10.98          | 27.1                    | 13,00                      | 4 27                    | 2 1.1.9                   | 102.4                                  |   |
| 1447                 | 1       | 0.62         | 76.20          | -           | 30.3    | 8.57           | 31,7                    | 13.70                      | 1 511                   | 1 129                     | 108 1.                                 |   |
| 1457                 |         | 0,62         | 78,15          | -           | 30,4    | 8.51           | 40,2                    | 13,11                      | 5 30.                   | 1 120                     | 114.8                                  |   |
| 1507                 | -       | 0.62         | 19.50          | -           | 30.3    | 8,33           | 40,1                    | 12,45                      | A 11-                   | 1.40                      | 1777                                   |   |
| 1519                 | V       | 0.62         | 8260           | -           | 30.3    | 8.07           | 60.0                    | 1                          | 16                      | 11/60                     | 166.5                                  | 1 |
| 1521                 | Inone   | sed 1        | law va         | re to 2     | gpm a   | and sur        | ge w/                   | pump                       | 3 tin                   | us -                      | - 111                                  | 1 |
| 1525                 | Tega    | pum          | pinge          | 3 gpm       | -       | -              | -                       | -                          | - 00                    | 1                         |  | 1 |
| 1527                 | Runpin  | -            | 90.35          | -           | -       | -              | -                       |                            | 93                      | .4 -                      | 140,2                                  | - |
| 529                  |         | 2,61         | 97.48          | -           | -       | -              | -                       | -                          | 13                      | 9 -                       | 146.2                                  |   |
| 532                  |         | 2.46         | 106.24         | -           | -       | -              | -                       | -                          | - 83                    | 5 -                       | 1547,0                                 | - |
| 535                  |         | 2.27         | 116.43         | -           | ~       | -              | -                       | -                          | - 20                    | 8 -                       | 161.38                                 | - |
| 38                   |         | 2.18         | 123.75         | -           | -       | -              | -                       | -                          | - 67                    |                           | 168.2                                  | - |
| 540                  | ¥       | 2,06         | 128.27         |             | -       | -              | -                       | -                          | - 710                   | 00                        | 172.6                                  | - |
| 500.20               | De      | 0 137        | Se bo          | -> Por      | no A    | -              | -                       | -                          |                         | -                         | 173.6                                  | - |
| 540,50               | 1 de    | 136          | 54.44          | BEA         | -       | -              | -                       |                            |                         | -   -                     | -                                      | - |
| 830                  | ++7     | mo           | 52.97          | i. A.       | 1       | n fat          | to rem                  | one so                     | Jan                     | tez                       | GPM .                                  |   |
| 849 5                | Sicat 1 | 2 2          | 12,14          | 1 mitou     | 7 por   | H. 1           | 52)                     | wick                       | THE T                   | 5                         | 176.6                                  |   |
| 851                  | Turn    | en do        | mn 7           | D 0.33      | once    | yhick          | Dec.                    | weep Th                    | er loui                 |                           | 1                                      |   |



| Datala  | relopment. | Record | P<br>Project # | 30126255    | PG&E Topo | Arcadi       | Oversight:              | Davie                      | Decut                   | Well ID                   | ER-2_                                  |
|---------|------------|--------|----------------|-------------|-----------|--------------|-------------------------|----------------------------|-------------------------|---------------------------|--|
| Care(s) | 400        |        | DTW            | Total Depth | Tamp 'r   | рН<br>(+1.0) | ORP (mV)<br>(+ 10.0 mV) | Cond.<br>(µS/cm)<br>(± 3%) | Turb NTU<br>(<10.0 NTU) | DO (mg/L)<br>(+ 0.3 mg/L) | Notes/Gallons<br>Removed/Water Clarity |
| Time    | Task       | GPM    | (TT. BMP)      | 135,90      | 30.3      | 8.02         | 167.4                   | 13.44                      | 765                     | 1.26                      | 180.1                                  |
| 0901    | 1 mg       | 0.75   | 59.91          | 1           | 29.7      | 7.30         | 137.3                   | 13.681                     | 545                     | 1.11                      | 184,3                                  |
| 19995   | 11         | 0.4    | 61.50          |             | 30.1      | 7.11         | 115.0                   | 13.690                     | 203                     | 1.15                      | 139,1 Werker Pung                      |
| 09.12   | 11         | 0.4    | 63,00          |             | 29.2      | 7.49         | 160.1                   | 13,606                     | 472                     | 1.34                      | 195.9                                  |
| 000-    | 1          | 0.2    | 63.77          |             | 29.4      | 7.55         | 92.6                    | 13.635                     | 154                     | 1,45                      | 198,5 40                               |
| 1007    | 1          | 0.26   | 64.18          |             | 31.7      | 7.30         | 77.3                    | 13.737                     | 154                     | 1.29                      | 200,9 W                                |
| 1025    |            | 0.26   | 64.99          |             | 29.7      | 7.61         | 73.5                    | 13.688                     | 328                     | 1.35                      | 205,6                                  |
| 1047    |            | 0.20   | 65.65          |             | 29.5      | 7.89         | 661                     | 13.UA                      | 307                     | 1.97                      | 209.0                                  |
| 1100    |            | 0.20   | 64.15          |             | 30.7      | 7,29         | 62.4                    | 13,622                     | 148                     | 1.94                      | 212.6                                  |
| 1116    |            | 0.20   | 64.55          |             | 32.4      | 7.30         | 65.5                    | 13,736                     | 91.8                    | 1.19                      | 215.8                                  |
| 1140    |            | 0.08   | 61.52          |             | 30.8      | 8.00         | 60.6                    | 13.700                     | 37.5                    | 1.91                      | 217.7 Starte X                         |
| 254     | 1          | 0,16   | 67.45          |             | 32,9      | 9.10         | 60.0                    | 13,769                     | 25.8                    | 1.98                      | 229.5                                  |
| 1300    | V          | 0.16   | 67.55          |             | 30.2      | 8.65         | 63.4                    | 13,691                     | 25.3                    | 1.75                      | 231.4                                  |
| 1315    | Sh         | malad  | . 5            | notes 1     | 200       | £7           | total.                  | van                        | filte-                  | D. Per                    | to sampling                            |
|         |            |        |                |             | X         |              | ~ Ver                   |                            |                         |                           |  |
|         |            |        |                |             |           |              |                         | -                          |                         | 123                       | 1 July                                 |

ER-2 - Well Development Record

# **Attachment 6**

Specific Capacity Testing Package

### Specific Capacity Test



| Location/Well ID         | ER-02   |
|--------------------------|---|
| Date                     | 6/29/2022   |
| Screened Interval Tested | 47 to 136 ft bgs  |
| Packer Set Depth         | N/A   |
| Packer Seal Test         | N/A   |
| Tests Conducted          | Single capacity test was performed at 0.25 GPM  |
| Purpose                  | Well performance test   |
| Summary                  | Specific capacity: 0.25 gpm = 0.0125 gpm/ft   |
| Notes                    | Transducer dropped twice during the test but was retrieved and restored<br>to the original position in the well. Affected data was omitted from the<br>plot. Drawdown drawdown did not stablize during the test due to time<br>constraints. |
| Oversight Signature      | Ch. Saild   |
| Date                     | 7/27/2022   |



| Location/Well ID                           | ER-02        |
|--|--------------|
| Date                                       | 6/29/2022    |
| Screened Interval                          | 47 - 136 ft. |
| Pump Depth (ft btoc)                       | 135          |
| Packer Depth (ft btoc)                     | N/A          |
| Packer Leak Test (Pass/Fail)               | N/A          |
| Initial Water Level (ft btoc)              | 50.95        |
| Initial Totalizer Reading (gal)            | N/A          |
| Final Totalizer Reading (gal)              | N/A          |
| Approx Pumped Volume (gal)                 | 77.28        |
| Calculated Volume Purged (gal)             | 58.25        |
| Difference in Volume Pumped vs. Calculated | 19.03        |
| Number of Specific Capacity Steps          | 1            |
| Pumping Rates (in order)                   | 0.25         |

| Step 1<br>(1.5 GPM) | Change in Time<br>Between | Elapsed | Pumping |              |            |          |
|---------------------|---------------------------|---------|---------|--------------|------------|----------|
| Time                | Measurements              | Time    | Rate    | Total Volume | Depth to   | Drawdown |
| (HR:MN:SEC)         | (min)                     | (min)   | (gpm)   | Pumped (gal) | Water (ft) | (ft)     |
| 7:59:00             | 0.00                      | 0.00    | -       | 0.00         | 50.95      | 0.00     |
| 8:00:00             | 0.00                      | 0.00    | -       | 0.00         | 50.95      | 0.00     |
| 8:00:15             | 0.25                      | 0.25    | 1.00    | 0.25         | 50.95      | 0.00     |
| 8:00:30             | 0.25                      | 0.50    | 0.25    | 0.31         | 51.05      | 0.10     |
| 8:00:40             | 0.17                      | 0.67    | 0.25    | 0.35         | 51.11      | 0.16     |
| 8:00:50             | 0.17                      | 0.83    | 0.25    | 0.40         | 51.11      | 0.16     |
| 8:01:05             | 0.25                      | 1.08    | 0.25    | 0.46         | 51.13      | 0.18     |
| 8:01:20             | 0.25                      | 1.33    | 0.25    | 0.52         | 51.15      | 0.20     |
| 8:01:35             | 0.25                      | 1.58    | 0.25    | 0.58         | 51.16      | 0.21     |
| 8:01:50             | 0.25                      | 1.83    | 0.25    | 0.65         | 51.17      | 0.22     |
| 8:02:13             | 0.38                      | 2.22    | 0.25    | 0.74         | 51.18      | 0.23     |
| 8:02:30             | 0.28                      | 2.50    | 0.25    | 0.81         | 51.20      | 0.25     |
| 8:03:00             | 0.50                      | 3.00    | 0.25    | 0.94         | 51.21      | 0.26     |
| 8:04:00             | 1.00                      | 4.00    | 0.25    | 1.19         | 51.26      | 0.31     |
| 8:05:00             | 1.00                      | 5.00    | 0.25    | 1.44         | 51.31      | 0.36     |
| 8:06:00             | 1.00                      | 6.00    | 0.25    | 1.69         | 51.35      | 0.40     |
| 8:07:00             | 1.00                      | 7.00    | 0.25    | 1.94         | 51.40      | 0.45     |
| 8:08:00             | 1.00                      | 8.00    | 0.25    | 2.19         | 51.44      | 0.49     |
| 8:09:00             | 1.00                      | 9.00    | 0.25    | 2.44         | 51.50      | 0.55     |
| 8:10:00             | 1.00                      | 10.00   | 0.25    | 2.69         | 51.56      | 0.61     |
| 8:12:00             | 2.00                      | 12.00   | 0.25    | 3.19         | 51.69      | 0.74     |
| 8:14:00             | 2.00                      | 14.00   | 0.24    | 3.67         | 51.77      | 0.82     |
| 8:16:30             | 2.50                      | 16.50   | 0.25    | 4.29         | 52.00      | 1.05     |
| 8:18:00             | 1.50                      | 18.00   | 0.26    | 4.68         | 52.16      | 1.21     |
| 8:20:00             | 2.00                      | 20.00   | 0.25    | 5.18         | 52.33      | 1.38     |
| 8:22:00             | 2.00                      | 22.00   | 0.24    | 5.66         | 52.51      | 1.56     |
| 8:24:00             | 2.00                      | 24.00   | 0.23    | 6.12         | 52.68      | 1.73     |
| 8:26:00             | 2.00                      | 26.00   | 0.24    | 6.60         | 52.83      | 1.88     |
| 8:28:15             | 2.25                      | 28.25   | 0.28    | 7.23         | 53.09      | 2.14     |



| Location/Well ID                           | ER-02        |
|--|--------------|
| Date                                       | 6/29/2022    |
| Screened Interval                          | 47 - 136 ft. |
| Pump Depth (ft btoc)                       | 135          |
| Packer Depth (ft btoc)                     | N/A          |
| Packer Leak Test (Pass/Fail)               | N/A          |
| Initial Water Level (ft btoc)              | 50.95        |
| Initial Totalizer Reading (gal)            | N/A          |
| Final Totalizer Reading (gal)              | N/A          |
| Approx Pumped Volume (gal)                 | 77.28        |
| Calculated Volume Purged (gal)             | 58.25        |
| Difference in Volume Pumped vs. Calculated | 19.03        |
| Number of Specific Capacity Steps          | 1            |
| Pumping Rates (in order)                   | 0.25         |

| Step 1<br>(1.5 GPM) | Change in Time<br>Between | Elapsed | Pumping |              |            |          |
|---------------------|---------------------------|---------|---------|--------------|------------|----------|
| Time                | Measurements              | Time    | Rate    | Total Volume | Depth to   | Drawdown |
| (HR:MN:SEC)         | (min)                     | (min)   | (gpm)   | Pumped (gal) | Water (ft) | (ft)     |
| 8:30:00             | 1.75                      | 30.00   | 0.27    | 7.70         | 53.28      | 2.33     |
| 8:35:00             | 5.00                      | 35.00   | 0.25    | 8.96         | 53.75      | 2.80     |
| 8:40:00             | 5.00                      | 40.00   | 0.24    | 10.16        | 54.22      | 3.27     |
| 8:45:00             | 5.00                      | 45.00   | 0.25    | 11.41        | 54.68      | 3.73     |
| 8:51:40             | 6.67                      | 51.67   | 0.19    | 12.67        | 55.25      | 4.30     |
| 8:55:00             | 3.33                      | 55.00   | 0.25    | 13.51        | 55.50      | 4.55     |
| 9:00:30             | 5.50                      | 60.50   | 0.25    | 14.88        | 56.00      | 5.05     |
| 9:05:28             | 4.97                      | 65.47   | 0.21    | 15.92        | 56.38      | 5.43     |
| 9:10:00             | 4.53                      | 70.00   | 0.30    | 17.28        | 56.77      | 5.82     |
| 9:20:00             | 10.00                     | 80.00   | 0.25    | 19.78        | 57.74      | 6.79     |
| 9:30:00             | 10.00                     | 90.00   | 0.19    | 21.68        | 58.68      | 7.73     |
| 9:40:00             | 10.00                     | 100.00  | 0.29    | 24.58        | 59.64      | 8.69     |
| 9:50:00             | 10.00                     | 110.00  | 0.28    | 27.38        | 60.75      | 9.80     |
| 10:00:00            | 10.00                     | 120.00  | 0.25    | 29.88        | 61.68      | 10.73    |
| 10:11:00            | 11.00                     | 131.00  | 0.22    | 32.30        | 62.48      | 11.53    |
| 10:20:20            | 9.33                      | 140.33  | 0.25    | 34.64        | 63.21      | 12.26    |
| 10:30:00            | 9.67                      | 150.00  | 0.25    | 37.05        | 63.91      | 12.96    |
| 10:41:00            | 11.00                     | 161.00  | 0.24    | 39.69        | 64.70      | 13.75    |
| 10:51:15            | 10.25                     | 171.25  | 0.23    | 42.05        | 65.27      | 14.32    |
| 11:00:45            | 9.50                      | 180.75  | 0.31    | 45.00        | 66.15      | 15.20    |
| 11:10:00            | 9.25                      | 190.00  | 0.25    | 47.31        | 66.95      | 16.00    |
| 11:21:00            | 11.00                     | 201.00  | 0.25    | 50.06        | 67.95      | 17.00    |
| 11:31:00            | 10.00                     | 211.00  | 0.24    | 52.46        | 68.60      | 17.65    |
| 11:40:10            | 9.17                      | 220.17  | 0.27    | 54.93        | 69.05      | 18.10    |
| 11:51:00            | 10.83                     | 231.00  | 0.26    | 57.75        | 69.76      | 18.81    |
| 12:04:00            | 13.00                     | 244.00  | 0.25    | 61.00        | 70.60      | 19.65    |
| 12:11:10            | 7.17                      | 251.17  | -       | -            | 71.00      | 20.05    |
| 12:15:00            | 3.83                      | 255.00  | -       | -            | 70.51      | 19.56    |
| 12:21:00            | 6.00                      | 261.00  | -       | -            | 70.09      | 19.14    |



| Location/Well ID                           | ER-02        |
|--|--------------|
| Date                                       | 6/29/2022    |
| Screened Interval                          | 47 - 136 ft. |
| Pump Depth (ft btoc)                       | 135          |
| Packer Depth (ft btoc)                     | N/A          |
| Packer Leak Test (Pass/Fail)               | N/A          |
| Initial Water Level (ft btoc)              | 50.95        |
| Initial Totalizer Reading (gal)            | N/A          |
| Final Totalizer Reading (gal)              | N/A          |
| Approx Pumped Volume (gal)                 | 77.28        |
| Calculated Volume Purged (gal)             | 58.25        |
| Difference in Volume Pumped vs. Calculated | 19.03        |
| Number of Specific Capacity Steps          | 1            |
| Pumping Rates (in order)                   | 0.25         |

| Step 1<br>(1.5 GPM)<br>Time<br>(HR:MN:SEC) | Change in Time<br>Between<br>Measurements<br>(min) | Elapsed<br>Time<br>(min) | Pumping<br>Rate<br>(gpm) | Total Volume<br>Pumped (gal) | Depth to<br>Water (ft) | Drawdown<br>(ft) |
|--|--|--------------------------|--------------------------|------------------------------|------------------------|------------------|
| 12:26:00                                   | 5.00   | 266.00                   | -                        | -                            | 69.79                  | 18.84            |
| 12:41:00                                   | 15.00  | 281.00                   | -                        | -                            | 68.79                  | 17.84            |
| 12:51:00                                   | 10.00  | 291.00                   | -                        | -                            | 68.12                  | 17.17            |
| 12:58:00                                   | 7.00   | 298.00                   | -                        | -                            | 67.70                  | 16.75            |
| 13:18:00                                   | 20.00  | 318.00                   | -                        | -                            | 66.45                  | 15.50            |
| 13:33:00                                   | 15.00  | 333.00                   | -                        | -                            | 65.62                  | 14.67            |
| 13:38:00                                   | 5.00   | 338.00                   | -                        | -                            | -                      | -                |


# Attachment 7

Photo Logs



Description: Date: 4/23/2022 Description: Date: 4/23/2022 **Description:** Date: 4/23/2022



Core Depth: 47 to 52 Description: Date: 4/23/2022 Core Depth: 52 to 57 Description: Date: 4/23/2022 Core Depth: 57 to 62 Description: Date: 4/23/2022



Core Depth: 77 to 82 Description: Date: 4/23/2022 Core Depth: 82 to 87 Description: Date: 4/23/2022 Core Depth: 92 to 97 Description: Date: 4/23/2022



Core Depth: 110 to 112 Description: Date: 4/24/2022 Core Depth: 112 to 115 Description: Date: 4/24/2022 Core Depth: 115 to 117 Description: Date: 4/24/2022



Core Depth: 132 to 13 Description: Date: 4/25/2022 Core Depth: 137 to 139 Description: Date: 4/25/2022 Core Depth: 139 to 145 Description: Date: 4/25/2022





CLIENT NAME: PG&E PROJECT NAME / LOCATION: Final Groundwater Remedy, WELL CONSTRUCTION PG&E Topock Compressor Station/Needles, CA PHOTO LOG WELL ID: ER-02 Arcadis PROJECT NO: 30126255 5/8/2020 - ER-02: Confirmation gauging of the 20 slot Wire Wrapped Screen 5/8/2020 - ER-02: Confirmation gauging of the 20 slot Wire Wrapped Screen



5/8/2020 – ER-02: Cemex #0/30 (30 x 50) Lapis Lustre Sand for transition sand seal



CLIENT NAME: PG&E PROJECT NAME / LOCATION: Final Groundwater Remedy, WELL CONSTRUCTION PG&E Topock Compressor Station/Needles, CA PHOTO LOG WELL ID: ER-02 Arcadis PROJECT NO: 30126255 5/8/2020 - ER-02: CEME #0/30 Conis dustr





Cemex #0/30 (30 x 50) Lapis Lustre Sand for transition sand seal

5/8/2022 - ER-02: Cemex #2/16 (16 x 30) Lapis Lustre Sand for filter pack

5/8/2020 - ER-02: Enviroplug: Medium Bentonite Chips used for bentonite seal



| CLIENT NAME: PG&E  | WELL CONSTRUCTION<br>PHOTO LOG | PROJECT NAME / LOCATION: Final Groundwater Remedy,<br>PG&E Topock Compressor Station/Needles, CA              |
|--|--------------------------------|---|
| Arcadis PROJECT NO: 30126255   |                                | WELL ID: ER-02  |
| Contraction of the second seco |                                | 5/8/2022 – ER-02:<br>Hydrogel Wyoming Bentonite used in grout   |
| O90381<br>TPE I, II, AND V<br>BEDEVERSE<br>BEDEVERSE<br>MEETS STANDARD<br>SPECIFICATIONS FOR<br>CEMENT.<br>LOW ALKALI-<br>IGCH SULPHATE RESISTANT  |                                | 5/8/2022 – ER-02:<br>Type I, II, and V Portland Cement used in grout  |
|  |                                | 5/8/2022 – ER-02:<br>6-inch diameter Schedule 80 PVC sump with<br>316L stainless steel endcap and centralizer |



CLIENT NAME: PG&E PROJECT NAME / LOCATION: Final Groundwater Remedy, WELL CONSTRUCTION PG&E Topock Compressor Station/Needles, CA PHOTO LOG Arcadis PROJECT NO: 30126255 WELL ID: ER-02 5/8/2022 - ER-02: 316L Wire Wrapped Screen and Schedule 80 sump threaded connection 5/8/2022 - ER-02: Installing Schedule 80 PVC well casing with stainless steel centralizer 5/8/2022 - ER-02: Installing Schedule 80 PVC well casing with stainless steel centralizer











CLIENT NAME: PG&E

Arcadis PROJECT NO: 30126255

 
 WELL CONSTRUCTION PHOTO LOG
 PROJECT NAME / LOCATION: Final Groundwater Remedy, PG&E Topock Compressor Station/Needles, CA

#### WELL ID: ER-02



6/8/2022 – ER-02: PVC well bung (plug) used to repair the well

6/8/2022 – ER-02: Installing the well bung (plug)

6/8/2022 – ER-02: Installing the well bung (plug)



| CLIENT NAME: PG&E            | WELL CONSTRUCTION<br>PHOTO LOG | <b>PROJECT NAME / LOCATION:</b> Final Groundwater Remedy,<br>PG&E Topock Compressor Station/Needles, CA |
|------------------------------|--------------------------------|---|
| Arcadis PROJECT NO: 30126255 |                                | WELL ID: ER-02  |
|                              |                                | 6/8/2022 – ER-02:<br>Installing the well bung {plug}  |

# **Attachment 8**

Filter Sand Issue Summary and Plots

## **ER-2 Well Construction Log**



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### **Well Development Issues**

- ER-02 well construction was finalized on May 10, 2022.
- Approximately 22 feet of sediment was measured in the well at the beginning of well development on June 4, 2022. The 8 feet of sand at the bottom was visually similar to filter pack sand.
- Additional sand, more than expected during well development, appeared to enter the well during bailing indicating potential damage to the well. Well Development activities paused to assess path forward.
- On June 5, 2022, a downhole video log was conducted but the water was too turbid to provide useful observations.



## **Well Survey and Plug Installation**

- Project discussions on June 6, 2022, resulted in the solution to install a bung (plug) just above the suspected damaged in the well. Conduct a video log following partial well development. This solution assumed the potentially damaged portion of the bottom of the well would minimize additional sand entering the well and should allow the well to function as designed.
- Preliminary Video log was completed on June 8, 2022 prior to installation of plug after partial development. No damage observed.
- A well bung (plug) was installed at 136 to 137 feet bgs. (approximately 2 feet above the bottom of the screen).
- Post repair, development was continued and completed. A small volume of fine sand was observed during well development.



## **Extent of the Plume**

- On June 8, 2022, concurrent with well development, DoR submitted a representative sample of the filter pack installed in ER-2 for grain-size analysis.
- By June 27, 2022, results from the grain-size analysis of the filter pack used in well construction were compared to the original grain-size submittal (CEMEX) and the supplemental grain-size Certification of Compliance (CEMEX).
- Filter pack delivered was different than the manufacturers specified grain size distribution. The percent passing of the designed filter pack was <3%. The actual percent passing of the filter pack installed was approximately 28%.



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## **Extent of the Plume**

- June 29, 2022: End of Development and Testing. Well testing which showed the sustainable pumping rate is consistent with objectives in the BOD (< 1 GPM). Turbidity measured ~25 NTUs (goal was <50 NTUs).</li>
- Successfully completed alignment test using "dummy" tool.
- The Video Survey conducted after well installation and development showed filter pack sand behind the top of the screen and throughout the length of the screen. Well screen observed to be in good condition.



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## Conclusion

Arcadis reviewed the available data and documentation. The results of the review are presented below.

- The filter pack material supplied by the manufacturer was finer than the designed filter pack.
- The percent passing of the designed filter pack was <3%. The actual percent passing of the filter pack installed was approximately 28%.
- The filter pack manufacturer was notified regarding this issue.
- Well development and testing indicates that the well will meet the target pumping rate of <1 gpm. The well was tested at 0.25 gpm.
- Photo evidence from the video log indicates that filter pack is present throughout the length of the screen and the screen is not damaged.





| Sieve      | Results sup | plied #2/16  | (16x30)       | Original Sp | ecified #2/2 | 16 1 |
|------------|-------------|--------------|---------------|-------------|--------------|------|
| emex Lap   | is Lustre S | and (Marina, | California) - | Cemex La    | pis Lustre   | Sa   |
| Mesh       | Sieve Size  | Sieve Size   | #2/16         | Sieve Size  | Sieve Size   | Sie  |
| Sieve Size | inches      | mm           | (16x30)       |             | inches       |      |
| 3/8        | 0.3748      | 9.520        |               | 3/8         | 0.3748       |      |
| 3          | 0.2638      | 6.700        |               | 3           | 0.2638       |      |
| 1/4        | 0.2500      | 6.350        |               | 1/4         | 0.2500       |      |
| 4          | 0.1870      | 4.750        |               | 4           | 0.1870       |      |
| 6          | 0.1319      | 3.350        |               | 6           | 0.1319       |      |
| 8          | 0.0929      | 2.360        |               | 8           | 0.0929       |      |
| 10         | 0.0787      | 2.000        | 100           |             |              |      |
| 16         | 0.0465      | 1.180        | 99            | 12          | 0.0669       |      |
| 30         | 0.0236      | 0.6000       | 33            | 16          | 0.0465       |      |
| 40         | 0.0167      | 0.4250       | 18            | 20          | 0.0335       | (    |
| 50         | 0.0118      | 0.3000       | 5             | 30          | 0.0236       | (    |
| 100        | 0.0059      | 0.1500       | 0             | 40          | 0.0167       | (    |
| 200        | 0.0030      | 0.0750       | 0.2           | 50          | 0.0118       | (    |
|            |             |              |               | 70          | 0.0083       | (    |
|            |             |              |               | 100         | 0.0059       | (    |
|            |             |              |               | 140         | 0.0042       | (    |
|            |             |              |               | 200         | 0.0030       | (    |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |
|            |             |              |               |             |              |      |

| ab Sieve Sieve | Results supplie | d #2/16           | Cubmittee        |
|----------------|-----------------|-------------------|------------------|
| Semex Lapis L  | ustre Sand (Ma  | rina, California) | - Submitted      |
| Mesn           | Sieve Size      | Sieve Size        | #2/10<br>(16v20) |
| Sieve Size     | 0.2749          | mm                | (10x30)          |
| 3/0            | 0.3740          | 9.520             |                  |
| 1/4            | 0.2030          | 6.700             |                  |
| 1/4            | 0.2300          | 0.350             |                  |
| 4              | 0.1310          | 4.750             |                  |
| 0              | 0.1319          | 3.350             |                  |
| 10             | 0.0929          | 2.360             | 100              |
| 10             | 0.0787          | 2.000             | 100              |
| 20             | 0.0405          | 1.180             | 99               |
| 40             | 0.0230          | 0.6000            | 33               |
| 40<br>50       | 0.0107          | 0.4250            | 18               |
| 100            | 0.0118          | 0.3000            | 5                |
| 200            | 0.0039          | 0.1500            | 0.2              |
| 200            | 0.0000          | 0.0750            | 0.2              |
|                |                 |                   |                  |
|                |                 |                   |                  |
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|                |                 |                   |                  |
|                |                 |                   |                  |
|                |                 |                   |                  |
|                |                 |                   |                  |

#2/16 (16x30)

100

94

22

3

#### Aquifer Grain Size (finest Interval)

| 4*D30 | 0.015 | in | 6*D30 | 0.022 | in | 10*D30 | 0.037 | in |
|-------|-------|----|-------|-------|----|--------|-------|----|
| 30    |       |    | 30    |       |    | 30     |       |    |

#### Selected Slot Size



| mex Lapis Lı | istre Sand (Ma | rina, California | ) -     |
|--------------|----------------|------------------|---------|
| Mesh         | Sieve Size     | Sieve Size       | #2/16   |
| Sieve Size   | inches         | mm               | (16x30) |
| 3/8          | 0.3748         | 9.520            |         |
| 3            | 0.2638         | 6.700            |         |
| 1/4          | 0.2500         | 6.350            |         |
| 4            | 0.1870         | 4.750            |         |
| 6            | 0.1319         | 3.350            |         |
| 8            | 0.0929         | 2.360            |         |
| 10           | 0.0787         | 2.000            |         |
| 12           | 0.0669         | 1.700            | 100     |
| 14           | 0.0551         | 1.400            | 97.2    |
| 16           | 0.0465         | 1.180            | 90.4    |
| 18           | 0.0394         | 1.000            | 61.4    |
| 20           | 0.0335         | 0.850            | 26      |
| 25           | 0.0280         | 0.710            | 8.5     |
| 30           | 0.0236         | 0.6000           | 3.8     |
| 35           | 0.0197         | 0.500            | 2.4     |
| 40           | 0.0167         | 0.4250           | 1.4     |
| 50           | 0.0118         | 0.3000           |         |
| 100          | 0.0059         | 0.1500           |         |
| 200          | 0.0030         | 0.0750           |         |
|              |                |                  |         |
|              |                |                  |         |
|              |                |                  |         |
|              |                |                  |         |
|              |                |                  |         |
|              |                |                  |         |



#### LAPIS LUSTRE SAND GRADING PARAMETERS

Cumulative percent passing US Sieves

#### Summary of Test Results

| PRO       | рист       | Sp<br>B | ler  | ial<br>nd | Co<br>Aqu | bar<br>Iar | rse<br>rium | Me<br>Aqu | dii<br>Jai | um<br>rum | 4   | x'<br>Ve | x16 8 Mesh #3<br>Mesh |     | #3  |    | #   | 2/1 | 2  |     |   |    |
|-----------|------------|---------|------|-----------|-----------|------------|-------------|-----------|------------|-----------|-----|----------|-----------------------|-----|-----|----|-----|-----|----|-----|---|----|
| Nominal S | Sieve Size | 3/8     | 3" x | #6        | 4         | x 1        | 12          | 6         | x 1        | 16        | 4   | хí       | 16                    | 8   | x 1 | 6  | 8   | x 2 | 20 | 12  |   | 20 |
| US        | mm         |         |      |           |           |            |             |           |            |           |     |          |                       |     |     |    |     |     |    |     |   |    |
| 3/8"      | 9.52       | 100     | ±    | 0         |           |            |             |           |            |           |     |          |                       |     |     |    |     |     |    |     |   |    |
| #3        | 6.70       | 77      | ±    | 24        |           |            |             |           |            |           |     |          |                       |     |     |    |     |     |    |     |   |    |
| 1/4"      | 6.35       | 65      | ±    | 33        | 100       | ±          | 0           | 100       | ±          | 0         | 100 | ±        | 0                     |     |     |    |     |     |    |     |   |    |
| #4        | 4.75       | 21      | ±    | 20        | 97        | ±          | 3           | 98        | ±          | 2         | 99  | ±        | 1                     |     |     |    |     |     |    |     |   |    |
| #6        | 3.35       | 4       | ±    | 4         | 78        | ±          | 10          | 87        | ±          | 14        | 79  | ±        | 7                     | 100 | ±   | 0  | 100 | ±   | 0  |     |   |    |
| #8        | 2.36       | 2       | ±    | 1         | 31        | ±          | 7           | 37        | ±          | 18        | 39  | ±        | 17                    | 99  | ±   | 1  | 99  | ±   | 1  | 100 | ± | 0  |
| #12       | 1.70       |         |      |           | 1         | ±          | 1           | 9         | ±          | 5         | 6   | ±        | 5                     | 40  | ±   | 15 | 59  | ±   | 12 | 96  | ± | 3  |
| #16       | 1.18       |         |      |           |           |            |             | 2         | ±          | 1         | 2   | ±        | 2                     | 4   | ±   | 3  | 9   | ±   | 5  | 20  | ± | 8  |
| #20       | 0.850      |         |      |           |           |            |             | 1         | ±          | 1         | 1   | ±        | 1                     | 2   | ±   | 2  | 2   | ±   | 1  | 1   | ± | 1  |
| #30       | 0.600      |         |      |           |           |            |             |           |            |           |     |          |                       |     |     |    | 1   | ±   | 1  | 1   | ± | 1  |

| PRO       | рист       | #2/16   | #1C     | #1/20   | #0/30     | 30 Mesh | #60         | All Purpose |
|-----------|------------|---------|---------|---------|-----------|---------|-------------|-------------|
| Nominal S | Sieve Size | 16 x 30 | 16 x 40 | 20 x 40 | 30 x 50   | 30 x 70 | 40 x 70     | 4 x 50      |
| US        | mm         |         |         |         |           |         |             |             |
| #4        | 4.75       |         |         |         |           |         |             | $100 \pm 0$ |
| #8        | 2.36       |         |         |         |           |         |             | 99 ± 1      |
| #12       | 1.70       | 100 ± 0 | 100 ± 0 |         |           |         |             |             |
| #16       | 1.18       | 94 ± 5  | 95 ± 3  | 100 ± 0 |           |         |             | 76 ± 21     |
| #20       | 0.850      | 22 ± 16 | 55 ± 9  | 88 ± 8  | 100 ± 0   | 100 ± 0 | $100 \pm 0$ |             |
| #30       | 0.600      | 3 ± 3   | 10 ± 6  | 18 ± 11 | 77 ± 5    | 95 ± 5  | 99 ± 1      | 42 ± 25     |
| #40       | 0.425      |         | 1 ± 1   | 1 ± 1   | 12 ± 6    | 73 ± 23 | 80 ± 12     |             |
| #50       | 0.300      |         |         |         | 2 ± 2     | 25 ± 11 | 30 ± 11     | 13 ± 7      |
| #70       | 0.212      |         |         |         | 0.5 ± 0.5 | 3 ± 2   | 5 ± 4       |             |
| #100      | 0.150      |         |         |         |           | 1 ± 1   | 1 ± 1       | 1 ± 1       |
|           |            |         | •       |         |           |         |             |             |

THESE ARE GENERAL GRADINGS ONLY. FOR CURRENT INDIVIDUAL GRADING DATA A CERTIFICATE OF COMPLIANCE IS AVAILABLE ON REQUEST FROM THE TECHNICAL SERVICES LABORATORY. FOR PRICING OR AVAILABILITY INFORMATION CONTACT THE INDUSTRIAL SAND SALES DESK AT 925-200-6207.

| Mesh       | Sieve Size | Sieve Size | #0/30   |
|------------|------------|------------|---------|
| Sieve Size | inches     | mm         | (30x50) |
| 3/8        | 0.3748     | 9.520      |         |
| 3          | 0.2638     | 6.700      |         |
| 1/4        | 0.2500     | 6.350      |         |
| 4          | 0.1870     | 4.750      |         |
| 6          | 0.1319     | 3.350      |         |
| 8          | 0.0929     | 2.360      |         |
| 10         | 0.0787     | 2.000      |         |
| 16         | 0.0465     | 1.180      |         |
| 20         | 0.0335     | 0.850      | 100     |
| 30         | 0.0236     | 0.6000     | 77      |
| 40         | 0.0167     | 0.4250     | 12      |
| 50         | 0.0118     | 0.3000     | 2       |
| 70         | 0.0083     | 0.212      | 0.5     |
| 100        | 0.0059     | 0.1500     |         |
| 200        | 0.0030     | 0.0750     |         |
|            |            |            |         |
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#### LAPIS LUSTRE SAND GRADING PARAMETERS

Cumulative percent passing US Sieves

#### Summary of Test Results

| PRO       | рист       | Special<br>Blend | Coarse<br>Aquarium | Medium<br>Aquarum | Medium 4 x 16<br>Aquarum 6 Mesh |         | #3          | #2/12       |
|-----------|------------|------------------|--------------------|-------------------|---------------------------------|---------|-------------|-------------|
| Nominal S | Sieve Size | 3/8" x #6        | 4 x 12             | 6 x 16            | 4 x 16                          | 8 x 16  | 8 x 20      | 12 x 20     |
| US        | mm         |                  |                    |                   |                                 |         |             |             |
| 3/8"      | 9.52       | 100 ± 0          |                    |                   |                                 |         |             |             |
| #3        | 6.70       | 77 ± 24          |                    |                   |                                 |         |             |             |
| 1/4"      | 6.35       | 65 ± 33          | $100 \pm 0$        | $100 \pm 0$       | 100 ± 0                         |         |             |             |
| #4        | 4.75       | 21 ± 20          | 97 ± 3             | 98 ± 2            | 99 ± 1                          |         |             |             |
| #6        | 3.35       | 4 ± 4            | 78 ± 10            | 87 ± 14           | 79 ± 7                          | 100 ± 0 | $100 \pm 0$ |             |
| #8        | 2.36       | 2 ± 1            | 31 ± 7             | 37 ± 18           | 39 ± 17                         | 99 ± 1  | 99 ± 1      | $100 \pm 0$ |
| #12       | 1.70       |                  | 1 ± 1              | 9 ± 5             | 6 ± 5                           | 40 ± 15 | 59 ± 12     | 96 ± 3      |
| #16       | 1.18       |                  |                    | 2 ± 1             | 2 ± 2                           | 4 ± 3   | 9 ± 5       | 20 ± 8      |
| #20       | 0.850      |                  |                    | 1 ± 1             | 1 ± 1                           | 2 ± 2   | 2 ± 1       | 1 ± 1       |
| #30       | 0.600      |                  |                    |                   |                                 |         | 1 ± 1       | 1 ± 1       |

| PROI      | рист       | #2/16   | #1C         | #1/20   | #0/30     | 30 Mesh | #60     | All Purpose |
|-----------|------------|---------|-------------|---------|-----------|---------|---------|-------------|
| Iominal S | Sieve Size | 16 x 30 | 16 x 40     | 20 x 40 | 30 x 50   | 30 x 70 | 40 x 70 | 4 x 50      |
| US        | mm         |         |             |         |           |         |         |             |
| #4        | 4.75       |         |             |         |           |         |         | 100 ± 0     |
| #8        | 2.36       |         |             |         |           |         |         | 99 ± 1      |
| #12       | 1.70       | 100 ± 0 | $100 \pm 0$ |         |           |         |         |             |
| #16       | 1.18       | 94 ± 5  | 95 ± 3      | 100 ± 0 |           |         |         | 76 ± 21     |
| #20       | 0.850      | 22 ± 16 | $55 \pm 9$  | 88 ± 8  | 100 ± 0   | 100 ± 0 | 100 ± 0 |             |
| #30       | 0.600      | 3 ± 3   | 10 ± 6      | 18 ± 11 | 77 ± 5    | 95 ± 5  | 99 ± 1  | 42 ± 25     |
| #40       | 0.425      |         | 1 ± 1       | 1 ± 1   | 12 ± 6    | 73 ± 23 | 80 ± 12 |             |
| #50       | 0.300      |         |             |         | 2 ± 2     | 25 ± 11 | 30 ± 11 | 13 ± 7      |
| #70       | 0.212      |         |             |         | 0.5 ± 0.5 | 3 ± 2   | 5 ± 4   |             |
| #100      | 0.150      |         |             |         |           | 1 ± 1   | 1 ± 1   | 1 ± 1       |

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#### Aquifer Grain Size (finest Interval)

| 4*D30 | 0.015 | in | 6*D30 | 0.022 | in | 10*D30 | 0.037 | in |
|-------|-------|----|-------|-------|----|--------|-------|----|
| 30    |       |    | 30    |       |    | 30     |       |    |

#### Selected Slot Size



| Cemex Lapis Lustre Sand (Marina, California) - Submitted Avera |            |            |         |
|--|------------|------------|---------|
| Mesh   | Sieve Size | Sieve Size | #2/16   |
| Sieve Size   | inches     | mm         | (16x30) |
| 3/8  | 0.3748     | 9.520      |         |
| 3  | 0.2638     | 6.700      |         |
| 1/4  | 0.2500     | 6.350      |         |
| 4  | 0.1870     | 4.750      |         |
| 6  | 0.1319     | 3.350      |         |
| 8  | 0.0929     | 2.360      |         |
|  |            |            |         |
| 12   | 0.0669     | 1.700      | 100     |
| 16   | 0.0465     | 1.180      | 94      |
| 20   | 0.0335     | 0.8500     | 22      |
| 30   | 0.0236     | 0.6000     | 3       |
| 40   | 0.0167     | 0.4250     |         |
| 50   | 0.0118     | 0.3000     |         |
| 70   | 0.0083     | 0.2120     |         |
| 100  | 0.0059     | 0.1500     |         |
| 140  | 0.0042     | 0.1060     |         |
| 200  | 0.0030     | 0.0750     |         |
|  |            |            |         |
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# **Attachment 9**

Video Survey Reports



Date/Time: June 5<sup>th</sup>, 2022, 12:45 Well ID: ER-02 Location: Topock (Needles, CA) Client: PG&E, Arcadis 6" Sch 80 PVC Riser with Stainless Wire Wrap Well Screen Casing Info: Estimated Static: 56.5' Est. Depth of Screen: 52.0' Depth of Survey: 100' Video Quality: Poor due to turbidity

#### Summary:

PVC riser casing appeared to be in good condition, without damage or issues. The static water level was a few feet below the top of well screen. The well screen above the static water level appeared intact, without damage or separation. The water quality was very turbid making the video quality very poor with no visibility of the well screen or casing below the static water level. Note that water on camera after video was noticeably turbid, and slightly muddy.



Well head and well box.



Well casing joint – no apparent issues. Noticeably muddy water on inside of casing for the entire riser well casing from surface to static.



Well casing joint – no apparent issues.



Well casing joint – no apparent issues.



Well casing joint – no apparent issues. Notice static water reflection ~15ft below camera.


Top of well screen joint. Note that muddy water began to collect on the end of the lens. Therefore, the quality of this photo is not as good as it can be. The screen appears intact, and the joint appears also intact. The top of well screen is estimated at 52.0'.



CLIENT NAME: PG&E PROJECT NAME / LOCATION: Final Groundwater Remedy, WELL CONSTRUCTION PG&E Topock Compressor Station/Needles, CA PHOTO LOG WELL ID: ER-02 Arcadis PROJECT NO: 30126255 5/8/2020 - ER-02: CEME #0/30 Copis dustr





Cemex #0/30 (30 x 50) Lapis Lustre Sand for transition sand seal

5/8/2022 - ER-02: Cemex #2/16 (16 x 30) Lapis Lustre Sand for filter pack

5/8/2020 - ER-02: Enviroplug: Medium Bentonite Chips used for bentonite seal



Poor video quality due to high turbidity water. Video quality does not improve with depth. Video camera advancement ceased at 100' to avoid camera potentially entering a portion of the well that may be damaged without knowing the camera is entering. The quality of the video did not improve from this depth to the end of the survey.



This is a photo taken with my phone of the water that dripped off the camera after the video was compete, onto the lid of the 55-gallon drum sitting by the well. Photo is included to demonstrate the turbidity of the groundwater.

Note that a series of 6-inch centralizers were used on the camera, so the camera moving advancing to 100' and then being retrieved, will have likely disturbed the water enough to require restarting the clock on waiting for the water to become clearer for a potential future video.

Please call me if you wish to discuss any part of this report or video. Thanks. Eli 505.999.7535

## **Pacific Surveys**

a full service geophysical well logging company

Video Survey Report

| Company:<br>Well:<br>Field:<br>State:<br>Location:<br>GPS:<br>Zero Datum<br>Reason for S<br>Depth<br>0.0 ft<br>0.4 ft<br>48.2 ft<br>48.4 ft<br>51.0 ft<br>100.0 ft<br>134.3 ft<br>136.7 ft | ABC Liovin Drilling, Inc. ER-2 Topock California 145453 National Trails HWY Ground Level Ground Level Tool Zero: Side-Scan Urvey: New Well Construction Gobservations Begin survey from ground level. Top of casing. Transition of casing from PVC to Stainless Steel Casing. Top of Screen: all are open with gravel pack visible behind the casing wall. SWL: Water is slightly cloudy. Visibility is fair. Water column clear up slightly. Wire-wrap screen are mostly plugged from 134.3 ft. Hard fill encountered, still in screen. End survey. | Date:<br>Run No.<br>ob Ticket:<br>otal Depth:<br>Vater Level:<br>Dil on Water:<br>Dperator:<br>Guides Set | 30-Jun-22<br>One<br>29875<br>136.7 ft<br>51.0 ft<br>No<br>Afoh<br>5.5 inch<br>Wel<br>Perforation:<br>Wire-Wrap | Truck PS-9 SWL Amount: N/A Dead Space 1.08 ft I Details As-Built 48 ft to 135.9 ft |
|--|--|---|--|--|
|  |  |   | Casing Size (in)<br>OD ID<br>6.75 5.75<br>Casing Material<br>Screen Material                                   | As-Built 0 ft to 135.9 ft PVC Stainless Steel                                      |
|  |  | 0088.7 F  |  |  |