



TOPOCK WELL COMPLETION AND ACCEPTANCE REPORT -REMEDIATION WELLS

Well Name: ER-01 (Note: Documentation referencing ER-1 is in reference to ER-01.)

Screen Zone (feet below ground surface [bgs]): 45 – 136

Dates Pilot Borehole Drilling: 04/02/2022 - 04/20/2022

Dates Well Installation: 4/20/2022 – 5/10/2022

Dates Well Head Completion: 5/10/2022

Dates of Development: 5/17/2022 to 6/1/2022

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 |
|------------------------|-------------------|--------------------|-----------------------------|
| | | | Successfully |
| Alignment Test | Y | 6/3/2022 | Completed |
| Specific Capacity Test | Y | 6/2/2022 | None |
| Injectivity Test | Ν | | |
| Plumbness Test | | | |
| (Gyroscope) | Ν | | |
| Spinner Log | Ν | | |
| Downhole Video | Y | 06/30/2022 | None |
| | | | Exceeds design rate |
| | | | criteria. Test results will |
| 48-hour Constant Rate | Added to Phase 2a | | be submitted under a |
| Test | SOW | 11/3/22-11/10/2022 | separate cover. |

Acceptance Criteria

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

Comments: As-built well construction consistent with the final well design (see Attached Logs). The Phase 2a scope of work preliminary design included the installation of a conductor casing to the top of the competent bedrock. The bedrock was planned to be reamed to a diameter of 6-inches and the well was to be completed as an open bedrock well to an estimated depth of 136 ft bgs.

However, drilling conditions and lithologic descriptions from the pilot borehole suggested the bedrock was not fully competent (See boring log). To avoid installing an open hole well with a potential for formation 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 attached Final Well Design and Well Construction Log). Er-01 Topock Well Acceptance Form

| Goal from 100% Design: | 0.5 gpm |
|-----------------------------|---|
| Tested Rates | |
| (gallons per minute [gpm]): | 1.5, 2.0, 2.5, 5.0 |
| | 0.09 gpm/ft per 22.16 ft of drawdown at an extraction rate of ~2.0 gpm (4x the |
| Specific Capacity | proposed design rate) |
| | The tested rates exceeded the proposed 100% design rate of 0.5 gpm. Well meets |
| | the design criteria for extraction rates. See attached Specific Capacity Well Testing |
| | Data Package. Test results for the 48-hour constant-rate test will be submitted |
| Comments | separately. |

Meets Design Criteria for Specific Capacity Testing

☑ Well Functions as Designed

Comments:

criteria for the intended use.

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, well testing, and well sampling and alignment test tool deployment to total depth.

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

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

Comments: Turbidity at the completion of well development meets the design criteria.

Final Turbidity at End of Well Development

| Screen Zone | Turbidity (NTUs) |
|-------------------|------------------|
| <u>45' – 136'</u> | 1.78 |

Other Water Quality Parameters

Water Quality Parameters at end of development

| Screen Depths | Temp (C) | рН | ORP (mV) | Cond (mS/cm) | DO |
|-------------------|----------|------|----------|--------------|------|
| <u>45' – 136'</u> | 30.3 | 7.85 | -26.6 | 8.64 | 3.29 |

ATTACHMENTS

- Final Well Design
- Boring Log
- Well Construction Log

- Well Development Logs
- Specific Capacity Testing Package
- Photo Logs
- Video Survey Report(s)

NOTE: Field documentation for all phases of the borehole drilling and well installation are included in the Daily Well Construction Reports. The Daily Well Construction Reports and DoR Daily Well Construction Quality Control Reports for the drilling program during Phase 2a are compiled and organized by date in *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 organized in *AutodeskBuild*. 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: Greg Foote

Arey S. Jew to

January 20, 2023

Approval Signature/Date:

Final Well Design

| Conductor casi | ng Dia: | 12 | R-01 Fi | inal We | ell De | | g Outer Diameter: | 6.5 |
|--------------------------------|---|---|-------------|---------|--------|---------------------------|------------------------------|---------|
| Drill casing Rathole Di | | 10.75 | | | | Well Casin | ng Inner Diameter: | 6 |
| | | | | | | Surface Completion: | | |
| | | Ground surface | 0.0 | ft. | | | Annular Materials | |
| | Tempo | rary Conductor Casing | 5.0 20.0 | ft. | | Quantity | Material Type Native fill | Units |
| | Well Materials | | | | | | | |
| | | rap 0.020" Slot Size nk Casing | 25.0 | ft. | • | 125.0 | Portland up to 5% Bentonite | Gallons |
| 4 | Centralizer Stai Portland Type | inless Steel I, II and V up to 6% Bentonit | e | | | | Conductor Casing | |
| | Transition Sand | | | | | Heat of Hydrati | on Safety 12 in PSI o | |
| | Bentonite Chip Lapis Lustre #2 | /16 (16 x 30) filter pack | | | | Factor | Drill Casing | |
| | | | | | | Heat of Hydrati Factor | | |
| Well Materials | Length | 10 ft | | | | Tactor | | |
| Casing Sch 80 PVC | 46 | Sections 4.6 | | | | | | |
| Jpper Screen ump Sch 40 PVC | 90.0 5.3 | 9 1.06 | | | | | | |
| | 5.5 | 1.00 | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | 39.0 | ft. | | | | |
| | | | 41.0 | ft. | _ | | | |
| | | | | | | 2.0 | Cemex #0/30 | Bags |
| | | | 43.5 | ft. | | | | |
| | | | 44.0 | ft. | | 0.3 | Chips | Buckets |
| | | | 46.0 | ft. | | | | |
| | A pr | proximate DTW | 47.0 | ft. | | | | |
| | | | 47.0 | | | | | |
| | | | | | | | | |
| | | | | | | 79.9 | Cemex #2/16 | Bags |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | 136.0 | ft. | | | | |
| | | | 138.5 | ft. | | | | |
| | | | 141.3 | ft. | | Sch 4 | 0 PVC Sump Stainless End Cap | |
| | | | 143.0 | ft. | | | | |
| | | | | | | | | |

Boring Log

| 9 | <u>A</u> R | <u>C</u> | | IS | | Bo | prin | g Log | S | neet: 1 of | 8 |
|-----------------------------------|------------------|--------------------------|--------|---|---------------------------------------|-------------------|---------------------------------------|---|---|---|---|
| Date S | started | : <u>0</u> | 3/31/ | /2022 | | Surface | | | Boring No | .: ER-01 | |
| Date C | • | | | | | Northir | | | _ | <u> </u> | |
| Drilling | | | | | | Easting | | | _ Client: <u>PG&E</u> | | |
| Drilling Drill Ri | | | | Drilling Sonic Truck | | Total D Boreho | • | <u>143.1 ft bgs</u> meter: <u>10-12 inches</u> | • | <u>SW Remedy Pl</u> | |
| Driller | • • • | | | Ramos | | | | Water: <u>80.5 ft bgs</u> | | TOPOCK, NEED | |
| Drilling | | | | ndelaria / F. P | | Sampli | | | Project Number: | 30126255 | |
| Logge | | | | Willford | | Sampli | - | | | 00.20200 | |
| Editor: | | 5 | Sean I | McGrane | | Convei | • | | _ | | |
| Depth (ft) | Recovery (ft) | Sie Samp | | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | Soil Description | | Drilling Notes | Drilling Fluid |
| 1 | | | | | Alluvium Deposits | SM | | (0-2 ft) Silty sand with gravel (SM); reddish bru fine to coarse, angular to subround; little silt; I to subround; little small cobbles, angular to su very large pebbles, angular to subround; trace dry. | ittle granules, angular ubround; little small to e clay; poorly sorted; | (0.0 - 4.5') Air-knifed for utility clearance refusal at approximately 4.5 ft bgs due | (0.0 - 4.5') No drilling fluid used |
| 3 3 4 | 4.5 | | | | Alluvium Deposits | SM | | (2-4.5 ft) Silty sand with gravel (SM); reddish f fine to very coarse, angular to subround; little pebbles, angular to subround; little small to la to subround; little silt; little granules, angular t clay; poorly sorted; dry; coarser grained comp lithology. | small to very large rge cobbles, angular o subround; trace | to encountering bedrock. Logged from air-knife cuttings. | |
| 5 6 6 7 | 0 | | | | | NR | | (4.5-7 ft) No Recovery. | | (4.5 - 20.0') Advancing 12 inch conductor casing 4.5-20 ft bgs (5.0 - 7.0') Core fell out of core barrel | (4.5 - 20.0') 600 gallons of water used; 500 gallons of water recovered; 100 gallons of water lost |
| _ 7 _ 8 _ 9 _ 10 _ 11 | 8 | No Sie Samp Collec | les | No Groundwater Samples Collected | | S | | | lar; highly weathered; hts observed, 1-2.5 dry; NOTE: Core | . (7.0 - 15.0') (7.0 - 15.0') Rough drilling | |
| 12 13 14 | | | | | Weathered Bedrock - conglomerat | N/A | × × × × × × × × × × × × × × × × × × × | | | | |
| 15 _16 | 2 | | | | | | × × × × × × × × × × × × × × × × × × × | | | (15.0 - 17.0') Rough drilling | |
| 17 18 18 19 | 5 | | | | | | × × × × × × × × × × × × × × × × × × × | | | (17.0 - 22.0') Very rough drilling | |
| 20 | | | | | | | $\times \times \times$ | | | | |
| | | | | | | - | | feet, bgs = below ground surface, am | | | |
| | | | | - | | | | d hollow blue water table marks repre | - | | |
| | | | ••• | | | uring d | evelop | ment, respectively. Apparent partial re | coveries can be th | e result of pote | ntial |
| compa | action o | ot sedir | nents | s in the core b | bag. | | | | | | |

| 9 | AR | <u>C</u> | D | S | | Bo | pring | g Log | 9 | | She | et: 2 of | 8 |
|--------------------------------------|--------------------|----------------------|---------------|---|---------------------------------------|-------------------|---------------------------------------|--|---|--|------------------------------|--|--|
| Date S | | - | 03/31/ | | | Surfac | | | 504.57 ft amsl | Bori | ng No. | : <u>ER-01</u> | |
| Date C | | | | | | Northin | | | 2101089.85 | | - | | |
| Drilling | | | | | | Easting | | 983): | 7616510.53 | Client: | PG&E | | |
| Drilling Drill Rig | | | | <u>Drilling</u> Sonic Truck I | | Total D Boreho | • | motori | <u>143.1 ft bgs</u> <u>10-12 inches</u> | Project: | | <u>N Remedy Pl</u> opock, Need | |
| | Jame: | | | Ramos | | | | | 80.5 ft bgs | | . FGal I | opock, Neeu | |
| Drilling | | | | idelaria / F. P | | Sampli | | | 7 inch x 10 ft. Core Barrel | Proiect N | Jumber: 3 | 30126255 | |
| _oggei | | | | Willford | | Sampli | - | | Continuous | | <u></u> | | |
| Editor: | | | | McGrane | | Conve | - | | 🛛 Yes 🗌 No | | | | |
| Depth (ft) | Recovery (ft) | | eve ple ID | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | | Soil Description | | | Drilling Notes | Drilling Fluic |
| 21 22 22 23 | 5 | | | | | | × × × × × × × × × × × × × × × × × × × | 5/4); mid hard; ma inches in sample (22 ft) C friable c | Sedimentary Rock - Conglomeral crocrystalline to coarse grained, ar assive; some competent rock fragr n length; moderately to highly friab appeared mostly pulverized drilling bserved some competent rock frag- onglomerate. | ngular; highly we nents observed, le; dry; NOTE: C g process. | athered; 1-2.5 ore | (22.0 - 27.0') Very rough drilling | (22.0 - 27.0' No drilling flu used |
| _24 | 5 | | | | Weathered Bedrock - | N/A | | | 01 | | | (27.0 - 32.0') Rough drilling | (27.0 - 32.0' No drilling flu used |
| | 5 | No S Sam Colle | ples | No Groundwater Samples Collected | | | | | | | | (30.0') 10-inch diameter drill casing became locked up. Advanced 12-inch diameter conductor | (30.0') No drilling flu used (32.0 - 36.0' No drilling flu used |
| _33 _34 _35 _35 _ _36 | 5 | | | | | | × × × × × × × × × × × × × × × × × × × | | | | | casing to free the 10-inch drill casing. (32.0 - 36.0') Rough drilling | |
| 37 38 39 | 5 | | | | Competent Bedrock - conglomerat | N/A | ***** | 5/4); mid some co less fria within th appeare | t) Sedimentary Rock - Conglomera procrystalline to coarse grained, ar ompetent rock fragments observed ble and more difficult to break; son e competent rock observed; dry; N d mostly pulverized drilling proces | ngular; hard; mas , 1 to 3 inches in ne friable rock fra IOTE: Core sam | ssive; length; agments | (36.0 - 37.0') Very rough drilling; drill rate slowed significantly. (37.0 - 42.0') Drilling conditions changed from rough to | (36.0 - 37.0' No drilling flu used (37.0 - 42.0' No drilling flu used |
| 40 bbrev I/A = I uring | Not Ap drilling | plicat and | ole, GV | V = groundw | ater, Notes neasured c | : solid k | n, ft = | feet, bg: d hollow | s = below ground surface, a v blue water table marks rep espectively. Apparent partial | present depth | to water | (ft. bgs.) first | encountere |

| A R | <u>C</u> | <u>A</u> DI | S | | Bo | pring | g Log | 9 | | She | eet: 3 of | 8 |
|-----------------------------------|----------|------------------------|---|---------------------------------------|--------------------|--|--|---|--|---------------------------|--|--|
| Date Started: | | <u>03/31/</u> | | | Surface | | | 504.57 ft amsl | - Borin | q No. | : <u>ER-01</u> | |
| Date Comple | | | | | Northin | | | 2101089.85 | | - | | |
| orilling Co.: Orilling Metho | | | <u>.IOVIN</u> Drilling | | Easting Total D | | 183): | 7616510.53 143.1 ft bgs | _ Client: _ Project: | PG&E | W Remedy Pr | 2250.24 |
| Drill Rig Type | | | Sonic Truck | | Boreho | • | meter: | <u>10-12 inches</u> | - | | Topock, Need | |
| Driller Name: | | | Ramos | | | | | 80.5 ft bgs | | | | |
| Drilling Asst: | | J. Can | idelaria / F. P | erez | Sampli | ng Me | thod: | 7 inch x 10 ft. Core Barrel | Project N | umber: | 30126255 | |
| ogger: | | | Willford | | Sampli | - | | Continuous | _ | | | |
| Editor: | | <u>Sean I</u> | McGrane | | Conve | ted to | Well: | 🛛 Yes 🗌 No | | | | |
| Depth (ft) Recovery (ft) | | Sieve nple ID | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | | Soil Description | | | Drilling Notes | Drilling Fluic |
| | | | | | | × × × × × × × × × × × × × × × × × × × | 5/4); mid some co less frial within th appeare |) Sedimentary Rock - Conglomerate crocrystalline to coarse grained, angumpetent rock fragments observed, 1 ble and more difficult to break; some e competent rock observed; dry; NO d mostly pulverized drilling process. | lar; hard; mass to 3 inches in l friable rock frag | sive; ength; gments | throughout drill run. | |
| 43 44 45 45 46 47 | San | Sieve ples ected | | | | × × × × × × × × × × × × × × × × × × × | | 01 | | | (42.0 - 57.0') Normal drilling conditions; very rough drilling at discrete depths. | (42.0 - 57.0' No drilling flu used |
| 48 49 49 4.5 50 51 | | | No Groundwater Samples Collected | Competent Bedrock - conglomerat | N/A | | | | | | | |
| _52 | | | | | | | | | | | | |
| _53_ | | CC 17 | | | | | | | | | | |
| | 6 | SS-47- 37 2022 | | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | | | |
| _54 | | :38 | | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | | | |
| - 5 | | | | | | | | | | | | |
| _55 | | | | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | | | |
| 56 | | | | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | | | |
| | | | | | | | | | | | | |
| _57 | | | | | | | | | | | / - | / - |
| _58 5 _59 | | | | Weathered Bedrock - conglomerat | N/A | **** | 5/4); mid hard; ma inches in sample | Sedimentary Rock - Conglomerate procrystalline to coarse grained, ang assive; some competent rock fragme alength; moderately to highly friable; appeared mostly pulverized drilling p | ular; highly wea nts observed, 1 dry; NOTE: Co | thered; -2.5 | (57.0 - 62.0') Smooth drilling | (57.0 - 62.0' No drilling flu used |
| <u>60</u> | | | | | 0 | $ \times \times \times$ | | - halaw en and | | | | |
| | | | | | - | | - | s = below ground surface, an / blue water table marks repre | | | | |
| - | | | - | | | | | spectively. Apparent partial r | - | | · • · | |
| anng aniing | | | in the core b | | u u | Sacioh | | opoolitoly. Apparonic partial h | | | | nudi |

| | <u>'ADI</u> | 5 | | BC | prin | g Lo | 9 | | She | et: 4 of | 8 |
|--|-----------------------------------|---|---------------------------------------|-------------------|--|---|--|---|------------------|--|---|
| Date Started: | <u>03/31/</u> | | | Surface | | | 504.57 ft amsl | - Boring | No.: | ER-01 | |
| Date Completed: | | | | Northir | | , | 2101089.85 | | | | |
| Drilling Co.: | <u>ABC L</u> | | | Easting | | 083): | 7616510.53 | | G&E | | |
| Drilling Method: Drill Rig Type: | Sonic Terra 9 | Drilling Sonic Truck N | | Total D Boreho | • | motor [.] | <u>143.1 ft bgs</u> 10-12 inches | • | | <u>V Remedy Pr</u> opock, Need | |
| Driller Name: | | Ramos | | | | | 80.5 ft bgs | | | | |
| Drilling Asst: | | delaria / F. Pe | | Sampli | | | 7 inch x 10 ft. Core Barrel | Proiect Nur | nber: 3 | 30126255 | |
| _ogger: | | Willford | | Sampli | • | | Continuous | | | | |
| Editor: | <u>Sean I</u> | McGrane | | Conve | - | | 🛛 Yes 🗌 No | | | | |
| Depth (ft) (ft) (ft) (ft) | Sieve ample ID | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | | Soil Description | | | Drilling Notes | Drilling Flui |
| 4/ | 1-SS-47- 67 5/2022 11:38 | | Weathered Bedrock - | N/A | × × × × × × × × × × × × × × × × × × × | sample | t) Sedimentary Rock - Conglomera crocrystalline to coarse grained, an assive; some competent rock fragn n length; moderately to highly friabl appeared mostly pulverized drilling | gular; highly weath nents observed, 1-2 e; dry; NOTE: Core | ered; .5 | (62.0 - 67.0') Smooth drilling | (62.0 - 67.0 No drilling flu used |
| 68 69 707 717 717 72 73ER- 4/ | 1-SS-67- 87 5/2022 12:05 | No Groundwater Samples Collected | conglomerat | | × × × × × × × × × × × × × × × × × × × | | | | | (67.0 - 74.0') Smooth drilling | (67.0 - 74.0' No drilling flu used |
| _74 75 76 76 77 | 12.00 | | Competent Bedrock - conglomerat | N/A | ************************************** | 5/4); mid compete to break observe drilling p | t) Sedimentary Rock - Conglomera crocrystalline to coarse grained, an ent rock fragments observed, 1-3 ir ; some friable rock fragments withi d; dry, NOTE: Core sample appear process. | gular; massive; son ches in length; diffi n the competent roo | ne cult xk | (74.0 - 77.0') Rough drilling (77.0 - 97.0') Rough drilling | (74.0 - 77.0' No drilling flu used (77.0 - 97.0' |
| | | | lassificatior | n Syster | × × × × × × × × × × × × × × × × × × × | feet, bg | s = below ground surface, a v blue water table marks rep | | | | |
| √A = Not Applic | | | | | | | | | | | |

| | <u> </u> | \mathbf{O} | <u>ADI</u> | 5 | | BC | pring | g Lo | | | She | et: 5 of | 8 |
|-------------------------------------|------------------|--------------|------------------------------|---|--|--------------|---------------------------------------|--|---|---|--------------------|---|--|
| | Started: | | 03/31/2 | | | Surfac | | | 504.57 ft amsl | Borin | a No.: | ER-01 | |
| | • | ted: | <u>04/20/2</u> | | | Northir | | , | 2101089.85 | _ | - | | |
| Drilling | J Co.: | | ABC L | IOVIN | | Easting | g (NAD | 983): | 7616510.53 | _ Client: | PG&E | | |
| rilling |) Metho | od: | Sonic [| • | | Total D | epth: | | 143.1 ft bgs | Project: | Final GV | <u>V Remedy Pł</u> | nase 2A |
| | ід Туре | | <u>Terra S</u> | Sonic Truck N | Nount | Boreho | ole Diar | meter: | 10-12 inches | _ Location: | <u>PG&E T</u> | opock, Need | les Californ |
| | Name: | | Eddie F | | | | | | 80.5 ft bgs | _ | | | |
| Drilling | Asst: | | | delaria / F. Pe | | Sampli | • | | 7 inch x 10 ft. Core Barrel | Project N | umber: 3 | 30126255 | |
| ogge | | | Grant \ | | | Sampli | • | | Continuous | _ | | | |
| ditor | | | Sean N | /lcGrane | | Conve | ted to | Well: | X Yes No | | | | |
| Depth (ft) | Recovery (ft) | | Sieve nple ID | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | | Soil Description | | | Drilling Notes | Drilling Fluic |
| | 5 | | | | Competent Bedrock - conglomerate | N/A | × × × × × × × × × × × × | (80.5 ft) | Rock fragments are moist. | | Ţ | | |
| | | | | | Competent Bedrock - conglomerate | N/A | | (2.5YR) | ft) Sedimentary Rock - Conglomerat 5/4); microcrystalline to coarse graine assive; dry; NOTE: Solid rock core. | | | | |
| _83 _84 _85 _85 _86 | 5 | { 4/5 | SS-67- 37 2022 2:05 | | | | × × × × × × × × × × × × × × × × × × × | (82.5-97 (2.5YR t massive length, c competer mostly p | ft) Sedimentary Rock - Conglomerat (/4); microcrystalline to coarse graine ; some competent rock fragments ob lifficult to break; some friable rock fra ent rock observed; dry; NOTE: Core a ulverized drilling process. | d, angular; har served, 1-3 inc gments within t | d; hes in he | | |
| 88 89 _90 _91 _92 | 5 | 9 | SS-87- 97 | No Groundwater Samples Collected | Competent Bedrock - conglomerat | ə N/A | | | | | | | |
| 93_ 94_ 95_ 96_ | 5 | 4/5/ | 2022 2:58 | | | | | (92-97 fi size of ti |) Conglomerate becoming more com re rock fragments 2-4 inches. | petent, increas | e in the | | |
| _97 _98 _98 _99 | 2.5 | San | Sieve nples ected | | | NR | | | ft) No Recovery. NOTE: See drilling | notes | | (97.0 - 102.0') Top 2.5 ft of drill cuttings washed out of core barrel during extraction. | (97.0 - 102.0 No drilling flu used |
| 100 | <u> </u> | | | | <u> </u> | N/A | $\times \times \times$ | | | | | | |
| | | | | | | - | | - | s = below ground surface, am | | | | |
| | | • | | | | | | | / blue water table marks repre | | | | |
| | drilling | and | approx | imate static n | neasured d | uring d | evelop | ment, re | espectively. Apparent partial re | coveries ca | n be the | result of pote | ntial |

| A g Sample D Sample D< | ARC | AD | S | | Bo | pring | g Log | 9 | | Sheet | : 6 of | 8 |
|---|--|-------------------------|-------------------------------------|--------------------------|-------------------|--------------------------------------|---|--|--|---------------|---|----------------|
| niling Method: Sonic Dalling. Total Depth: 143.11 fbgs. Project: BIGLW Remote/Reac 248 Borehole Diameter: 10:12 Inches Borehole Diameter: 10:12 Inches Borehole Diameter: 2016 Core Barrel Academicar 2 Sampling Nethod: 2016 Core Barrel Academicar 2 Converted to Welt: 21 Cht. 10 fb Core Barrel Reac 2 Sampling Nethod: 21 Continues Reac 2 Sampling Nethod: 21 Continues | ate Completed: | 04/20/ | 2022 | | Northin | ig (NA | D83): | 2101089.85 | _ | | <u>ER-01</u> | |
| Nump J.Candelaria/E.Perez Sampling Method: Z.Ind.x10.ft.Core.Barel Project Number: 30126255 orger: Grant Wilfford Sampling Interval: Continuous Ontinuous fig. Sample D S | Prilling Method: Prill Rig Type: | <u>Sonic</u> Terra S | Drilling Sonic Truck N | | Total D Boreho | epth: ble Diar | neter: | 143.1 ft bgs 10-12 inches | Project: Fina | al GW | - | |
| 101_25 25 (102_111) Sedametary Pool- Conjournate redictib boxm 101_25 25 (102_111) Sedametary Pool- Conjournate redictib boxm 102_103_103_103_103_103_103_103_103_103_103 | Prilling Asst: ogger: | <u>J. Can</u> Grant | idelaria / F. Po Willford | erez | Sampli Sampli | ng Mei ng Inte | thod: erval: | 7 inch x 10 ft. Core Barrel Continuous | Project Numb | er: <u>30</u> | 126255 | |
| 101 2.5 102 | | Sieve | Groundwater | Geologic Formation | | | | | | D | rilling Notes | Drilling Fluic |
| 120 Image: Sector S | 102 102 103 104 3.5 105 105 105 106 107 108 109 3.5 109 109 3.5 110 107 108 107 108 109 110 111 112 112 113 114 115 116 117 118 5 119 120 Voltable College Sale College 107 108 109 107 108 109 107 108 108 107 108 108 109 107 108 107 108 107 108 107 108 107 108 107 108 107 108 107 108 109 108 109 109 109 107 108 107 108 108 109 108 109 108 109 108 108 108 108 108 108 108 108 | SCS = I | Groundwater Samples Collected | Bedrock - conglomerat | n Syster | ×××××××××××××××××××××××××××××××××××× | (2.5YR massive length; compete sample | 5/4); microcrystalline to coarse graine ; some competent rock fragments ob ilifficult to break; some friable rock fra appeared mostly pulverized drilling p | ed, angular; hard; sserved, 1-3 inches in giments within the sist to dry; NOTE: Co rocess. | n pre | 122.0') Relatively formal drilling, rough in discrete intervals. | |

| | AD | IS | | Bc | pring | g Log | | 5 | Sheet: 7 of | 8 |
|---------------------------------------|------------------------------|---|---------------------------------------|--------------|---------------------------------------|---|--|---|---|--|
| Date Started: | 03/31 | /2022 | | | e Eleva | | 504.57 ft amsl | - Boring No | D.: ER-01 | |
| ate Completed | | | | | ng (NAI | | 2101089.85 | _ | | |
| Prilling Co.: | | | | - |) (NAD | 83): | 7616510.53 | Client: PG&I | | |
| rilling Method: | | Drilling | | Total D | • | | <u>143.1 ft bgs</u> | • | <u>GW Remedy P</u> | |
| rill Rig Type: riller Name: | | <u>Sonic Truck N</u> Ramos | | | ole Diar to First | | <u>10-12 inches</u> 80.5 ft bgs | Location: <u>PG&I</u> | <u>= Topock, Need</u> | lies Calliom |
| Filling Asst: | | ndelaria / F. Po | | | ng Met | | 7 inch x 10 ft. Core Barrel | Project Number | | |
| .ogger: | | Willford | | • | ng Inte | | Continuous | | . 00120200 | |
| Editor: | | McGrane | | | ted to | | X Yes No | | | |
| Depth (ft) (ft) (ft) (ft) | Sieve ample ID | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | | Soil Description | | Drilling Notes | Drilling Fluid |
| _130_ Sa | o Sieve Imples llected | No Groundwater Samples Collected | Competent Bedrock - conglomerat | » | x x x x x x x x x x x x x x x x x x x | (2.5YR & massive length; d compete sample a | 3.1 ft) Sedimentary Rock - Conglon 5/4); microcrystalline to coarse grain ; some competent rock fragments of infrock to break; some friable rock fr appeared mostly pulverized drilling | ned, angular; hard; pbserved, 1-3 inches in ragments within the noist to dry; NOTE: Core process. | (122.0 - 127.0') Very rough drilling (127.0 - 137.0') Normal drilling; rough drilling in discrete intervals. (137.0 - 143.0') Very rough drilling | (127.0 - 127.0') No drilling flu used (127.0 - 137.0') No drilling flu used (137.0 - 143.0') No drilling flu used |
| 140 | 000 | I Inified Soil C | lassification | Svster | m. ft = 1 | feet, bas | s = below ground surface, a | msl = above mean : | sea level. NR = | No Recove |
| bbreviations: L | | | | | | | | | | |
| bbreviations: L /A = Not Applic | able, G\ | N = groundwa | ater, Notes: | solid b | olue an | d hollow | v blue water table marks represented by the second se | resent depth to wat | er (ft. bgs.) first | encountere |

| 9 | AR | CADI | S | | Bo | oring | j Log | | Sh | eet: 8 of | 8 |
|---------------------------------|------------------|----------------------------------|---|--|--------------|---------------|---|--|----------------------|--------------------|----------------|
| Date S | started: | <u>03/31/2</u> | 2022 | | Surface | e Elevat | tion: <u>504.57 ft amsl</u> | Borin | a No. | : <u>ER-01</u> | |
| Date C | omple | ted: <u>04/20/</u> 2 | 2022 | 11 | Northin | g (NAE | D83): <u>2101089.85</u> | | 9.10. | <u></u> | |
| Drilling | | <u>ABC L</u> | IOVIN | | Easting | (NAD | 83): <u>7616510.53</u> | Client: | PG&E | | |
| Drilling | | | • | | Total D | • | 143.1 ft bgs | | | <u>W Remedy Pr</u> | |
| Drill Ri | | | <u>Sonic Truck N</u> | | | le Dian | | Location: | PG&E | Topock, Need | les California |
| Driller | | <u>Eddie I</u> | | | | | Water: 80.5 ft bgs | | | | |
| Drilling | | | <u>delaria / F. Pe</u> | | | ng Metl | | Project N | umber: | 30126255 | |
| Logge | | | <u>Nillford</u> | | • | ng Inter | | | | | |
| Editor: | | Sean N | /lcGrane | | Jonver | ted to \ | Well: 🛛 Yes 🗌 No | | | | |
| Depth (ft) | Recovery (ft) | Sieve Sample ID | Groundwater Sample ID | Geologic Formation | USCS Code | USCS Class | Soil Description | | | Drilling Notes | Drilling Fluid |
| 141 141 142 142 143 | 6 | No Sieve Samples Collected | No Groundwater Samples Collected | Competent Bedrock - conglomerate | N/A | **** | (99.5-143.1 ft) Sedimentary Rock - Conglomera (2.5YR 5/4); microcrystalline to coarse grained massive; some competent rock fragments obse length; difficult to break; some friable rock frag competent rock observed; rock fragments mois sample appeared mostly pulverized drilling pro | , angular; har erved, 1-3 inc ments within st to dry; NOT | rd; hes in the | | |
| 144 | | | | <u> </u> | | | End of Boring at 143.1 ft bgs. | | I | | |
| | | | | | | | | | | | |
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| 149 | | | | | | 9 | | | | | |
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| 151 | | | • | Ć | | | | | | | |
| _152_ | | | | | | | | | | | |
| | | | | | | | | | | | |
| 154_ | | | | | | | | | | | |
| | | | | | | | | | | | |
| 156 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 158 | | | | | | | | | | | |
| 159 | | | | | | | | | | | |
| 3 – – – 3 <u>160</u> | | | | | | | | | | | |
| - | | | | | - | | feet, bgs = below ground surface, ams | | | | |
| 5 | | • | - | | | | d hollow blue water table marks repres | - | | | |
| | - | | | | uring d | evelopr | ment, respectively. Apparent partial rec | coveries ca | n be the | e result of pote | ntial |
| compa | iction c | t sediments | in the core ba | aq. | | | | | | | |

Well Construction Log

| ARC | ADIS | | | Well Const | ruction Log | | Sheet: 1 of 8 |
|----------------------------------|--|--------------|---------------------------------------|---|--|--------------------------------|---|
| Date Started: Date Completed: | 04/20/2022 05/10/2022 | | | _Surface Elevation: _Shallow Well Elevation: | 504.57 ft amsl 503.83 ft amsl | Well ID: El | <u>२-01</u> |
| vrilling Co.: | ABC LIOVI | 1 | | _Deep Well Elevation: | <u>N/A</u> | Client: <u>PG&E</u> | <u> </u> |
| villing Method: | Sonic Drillin | g | | _Northing (NAD83): | 2101089.85 | Project: <u>Final</u> | GW Remedy Phase 2A |
| oriller Name: | Eddie Ramo | | | _Easting (NAD83): | 7616510.53 | Location: <u>PG&E</u> | <u>E Topock, Needles Californi</u> |
| Drilling Asst: | J. Candelar | | rez | _Borehole Diameter: | 10-12 inches | | |
| ogger: | Grant Willfo | | | _Static Water Level: | See Log for Depths | Project Numbe | r: <u>30126255</u> |
| Editor: otal Depth: | Sean McGra 143.1 ft bgs | | | _Development End Date: _Well Completion: | Stick-up | To Be Completed | in Well Vault |
| | | | | • | ction Details | | |
| Groundwat | | USCS Code | USCS Class | | | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actua volume vs the calculated volume |
| _ 1 _ 2 | Alluvium Deposits | SM | | (0.0 - 1 0') Temporary Surface Completion (1.0 - 2.0') Cemex #2/16 (16x30) Lapis Lustre | (0.0 - 20.0°) 12" Diameter Borehole | <u>_</u> , | (0.0 - 1.0') 7 bags Note: 2.5 x 2.5 ft. concrete pad with 18 inch diameter lockable vault, High Sped 4,500 PSI Concrete. Note: Cemex #2/16 Lapis Lustre Sand extended into skirt of vault |
| 3 3 4 | Alluvium Deposits | SM | | (10105) Labit Classic Sand (0.7 - 45.3') 6" Sch. 80 PVC Casing (2.0 - 5.7') Native Material | | | Note: Native material used to bar fill was from the SPY. |
| _ 5 6 7 | | NR | | | | | |
| | r Weathere Bedrock conglomera | N/A | x x x x x x x x x x x x x x x x x x x | (5.7 - 39.0') Portland Cement 5% Bentonite Type I, II, and V with Hydrogel | | (5.7 - 39.0') 116.1 Gallons | (5.7 - 39.0') 150 Gallons (129% Note: Used >20% of the calculate volume due to potential voids the formed during drilling. |
| | | | lassifica | | = below ground surface, a | | |
| | - | | | | otes: solid blue and hollow | | arks represent depth to wat |
| hara) atatia wa | ter measure | d post de | evelopm | ent and approximate stati | c measured during drilling, | respectively. | |

| | ADIS | | | | | |
|--|--|----------------------|---|--|--|--|
| ate Started: ate Completed rilling Co.: rilling Method: | ABC LIOVIN Sonic Drilling | | Surface Elevation: Shallow Well Elevation Deep Well Elevation: Northing (NAD83): | <u>N/A</u> 2101089.85 | - | E GW Remedy Phase 2A |
| riller Name: rilling Asst: ogger: ditor: | Eddie Ramos J. Candelaria Grant Willford Sean McGra | /F.Perez | Easting (NAD83): Borehole Diameter: Static Water Level: Development End Date | 7616510.53 10-12 inches See Log for Depths : 6/1/2022 | Location: <u>PG&I</u> Project Numbe | E Topock, Needles Californ r: <u>30126255</u> |
| otal Depth: | <u>143.1 ft bgs</u> | | Well Completion: | 🗵 Flush 🗌 Stick-up 🗌 |] To Be Completed | in Well Vault |
| Groundwa (£) Sample I | | USCS Code USCS | Sa Constr O | uction Details | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actu volume vs the calculated volum |
| 21 22 23 24 25 26 27 28 29 30 Groundwate Samples Collected 31 32 33 34 35 36 37 38 29 33 34 33 34 35 38 38 39 30 30 31 33 33 34 35 36 37 38 39 30 30 31 33 33 33 33 34 35 37 38 39 30 30 31 33 34 35 35 36 37 37 37 38 38 30 30 30 31 31 32 33 33 33 33 33 33 34 35 35 36 37 37 37 38 37 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 | Weathered Bedrock - conglomerat | N/A | (24.5 - 25.5') SS Centralizer | C20.0 - 143.1)* Diameter Borehole | (5.7 - 39.0') 116.1 Gallons | (5.7 - 39.0') 150 Gallons (1299 Note: Used >20% of the calcula volume due to potential voids th formed during drilling. |
| 39 <u> </u> | | | × × | | (39.0 - 43.4') 3.5 bags | (39.0 - 43.4') 3 bags (86%) |
| 40 | | × × | | | 3.5 bags | |
| | | | ification System, ft = feet, bgs cable, GW = groundwater, N | - | | |
| | MUNUNCIN IN/A | | JUDIC, UNV - YIUUIUWALCI, I | ioico, ouiu diue di lu huiluw | שומה אמובו ומחוב ווופ | anto represent deptit to War |

| ARC | ADIS | | | Well Const | ruction Log | | Sheet: 3 of 8 |
|--|--|--------------|---|--|--|--------------------------------|--|
| ate Started: | 04/20/2022 | | | Surface Elevation: | 504.57 ft amsl | Well ID: E | R-01 |
| ate Completed: | | | | Shallow Well Elevation: | | | |
| Prilling Co.: | ABC LIOVIN | | | Deep Well Elevation: | <u>N/A</u> | Client: <u>PG&</u> | |
| Prilling Method: | Sonic Drilling | | | Northing (NAD83): | 2101089.85 | • | GW Remedy Phase 2A |
|)riller Name: | Eddie Ramos | | _ | Easting (NAD83): | 7616510.53 | Location: <u>PG&</u> | E Topock, Needles Californ |
| Orilling Asst: | J. Candelaria | F. Perez | Z | Borehole Diameter: Static Water Level: | 10-12 inches See Log for Depths | Project Numbe | xr: 20126255 |
| .ogger: Editor: | Sean McGran | ۵ | | Development End Date: | ÷ . | | 1. <u>30120233</u> |
| otal Depth: | 143.1 ft bgs | 0 | | Well Completion: | ∑ Flush Stick-up | To Be Completed | l in Well Vault |
| Groundwar Ge Sample II | | USCS Code | USCS Class | Constru | ction Details | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actua volume vs the calculated volume |
| 41 41 42 43 | | | **** | (0.7 - 45.3') 6" Sch. 80 PVC Casing (40.5 - 41.5') SS Centralizer (39.0 - 43.4') Cemex #0/30 (30x50) Lapis Lustre Sand | | (39.0 - 43.4') 3.5 bags | (39.0 - 43.4') 3 bags (86%) |
| | | | < < < < < < < < < < < < < < < < < < < | (43.4 - 44.0') Enviroplug Medium Chips | | (43.4 - 44.0') 0.3 bags | (43.4 - 44.0') 0.5 bags (167%) Note: Hydrated bentonite with approximately 5 gallons of fress water. Used >20% of the calculated volume due to potent voids that formed during drilling |
| - 46 - 46 - 47 - 48 - 48 - 48 - 48 - 48 - 48 - 48 - 50 Groundwate Samples Collected - 51 - 52 - 53 - 55 - 55 - 56 - 57 - 58 - 59 | Competent Bedrock - conglomerate | N/A | <pre>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre> | (45.3 - 136.2') 6" 0.02-Slot 316L SS Wire Wrap Screen (44.0 - 143.1') Cemex #2/16 (16x30) Lapis Lustre Sand | | (44.0 - 143.1') 79.9 bags | (44.0 - 143.1') 85.5 bags (107% Note: Filter pack swabbed for approximately 5 minutes in 201 lifts for a total of approximately minutes prior to the installation the well seal. |
| <u>60</u> bbreviations: U | SCS = Unified | x | ssificati | on System, ft = feet, bgs | ≓ <u>⊷⊡</u> = below ground surface, | amsl = above mean | sea level, SS = Stainless |
| | | | | | - | | arks represent depth to wat |
| | | nant day | alanma | ent and approximate stati | | n na an a ati sab s | |

| ARC | ADIS | | | Well Const | ruction Log | \$ | Sheet: 4 of 8 |
|--|--|--------------|---------------------------------------|--|---------------------------|--------------------------------|--|
| ate Started: | 04/20/2022 | | | Surface Elevation: | 504.57 ft amsl | Well ID: El | 2-01 |
| ate Completed: | 05/10/2022 | | | Shallow Well Elevation: | 503.83 ft amsl | | |
| rilling Co.: | ABC LIOVIN | | | Deep Well Elevation: | <u>N/A</u> | Client: PG&E | |
| rilling Method: | Sonic Drilling | | | Northing (NAD83): | 2101089.85 | - | GW Remedy Phase 2A |
| riller Name: | Eddie Ramos | | | Easting (NAD83): | 7616510.53 | Location: <u>PG&E</u> | <u>E Topock, Needles Californ</u> |
| rilling Asst: | J. Candelaria | / F. Perez | <u>Z</u> | Borehole Diameter: | 10-12 inches | | |
| ogger: | Grant Willford | | | Static Water Level: | See Log for Depths | Project Numbe | r: <u>30126255</u> |
| ditor: | Sean McGran | е | | Development End Date: | | | |
| otal Depth: | <u>143.1 ft bgs</u> | | | Well Completion: | × Flush Stick-up |] To Be Completed | in Well Vault |
| Groundwat Sample II | | USCS Code | Class | Construc | | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actuvolume vs the calculated volume |
| 61 62 63 64 65 66 66 67 68 69 70 Groundwate Samples Collected 71 73 74 75 76 77 78 80 | Veathered Bedrock - conglomerate | N/A | × × × × × × × × × × × × × × × × × × × | (45.3 - 136.2') 6" 0.02-Slot 316L SS Wire Wrap Screen (44.0 - 143.1') Cemex #2/16 (16x30) Lapis Lustre Sand | | (44.0 - 143.1') 79.9 bags | (44.0 - 143.1') 85.5 bags (1079 Note: Filter pack swabbed for approximately 5 minutes in 20 lifts for a total of approximately minutes prior to the installation the well seal. |
| bbreviations: U | SCS = Unified | Soil Clas | sificati | on System, ft = feet, bgs | = below ground surface, a | amsl = above mean | sea level, SS = Stainless |
| | | | | | - | | arks represent depth to wa |
| cal, m = m = r | | | | ent and approximate station | | | · · |

| ARC | ADIS | | | Well Const | ruction Log | \$ | Sheet: 5 of 8 |
|----------------------|--|--------------|--|--|-----------------------------|--------------------------------|---|
| ate Started: | 04/20/2022 | | | _Surface Elevation: | 504.57 ft amsl | Well ID: Ef | R-01 |
| ate Completed | 05/10/2022 | | | _Shallow Well Elevation: | <u>503.83 ft amsl</u> | | |
| illing Co.: | ABC LIOVIN | | | _Deep Well Elevation: | <u>N/A</u> | Client: PG&E | |
| illing Method: | Sonic Drilling | | | _Northing (NAD83): | 2101089.85 | - | GW Remedy Phase 2A |
| riller Name: | Eddie Ramos | | | _Easting (NAD83): | 7616510.53 | Location: <u>PG&E</u> | Topock, Needles Californ |
| rilling Asst: | J. Candelaria | | rez | Borehole Diameter: | <u>10-12 inches</u> | | 00400055 |
| ogger: ditor: | Grant Willford Sean McGran | | | _Static Water Level: _Development End Date: | See Log for Depths | Project Numbe | r: <u>30126255</u> |
| otal Depth: | <u>143.1 ft bgs</u> | | | _ Well Completion: | Stick-up |] To Be Completed | in Well Vault |
| | - | | | • | ction Details | | |
| Groundwa Sample I | | USCS Code | USCS Class | | | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actu- volume vs the calculated volum |
| | Competent Bedrock - conglomerate | N/A | × × × × × × × × × × × × × × × × × × × | (45.3 - 136.2') 6" 0.02-Slot 316L SS Wire Wrap | | | |
| | Competent | | × × × × × × | Screen | | | |
| | Bedrock - | N/A | | | | | |
| _ | | | | | | | |
| 33 | | | | | | | |
| 4 | | | | | | | |
| 34 | | | | | | | |
| - | | | | | | | |
| 35 | | | | | | | |
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| 6 | | | | | | | |
| _ | | | | | | | |
| 37 | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | F | | |
| | | | $ \times \times \times $ | | | | |
| 00 <u> </u> | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| 39 | | | $\begin{vmatrix} x & x & x \\ x & x & x \\ x & x & x \end{vmatrix}$ | | | | |
| | Competent | | $ \times \times \times $ | | | | (44.0 - 143.1') 85.5 bags (107 |
| 0 Groundwate | Bedrock - | N/A | | (44.0 - 143.1') Cemex #2/16 | | (44.0 - 143.1') | Note: Filter pack swabbed fo approximately 5 minutes in 20 |
| Samples Collected | conglomerate | | | (16x30) Lapis Lustre | | 79.9 bags | lifts for a total of approximately minutes prior to the installation |
| 91 | | | × × × × × × × × × | | | | the well seal. |
| | | | | | | | |
| 92 | | | $\begin{array}{c} \times \times \times \\ \times \times \end{array}$ | | | | |
| _ | | | × × × × × × × × × | | | | |
| 93 | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| - | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| 94 | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| - | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| 95 | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| | | | | | | | |
| 96 | | | $\begin{vmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{vmatrix}$ | | | | |
| | | | $ \times \times \times $ | | | | |
| | | | | | | | |
| | | | $ \rangle / $ | | | | |
| | | NR | | | | | |
| 99 | | | / | | | | |
| ~ | | | $ $ \vee | | | | |
| 00 | | N/A | | | H. | | |
| | ISCS = Unified | Soil Cl | · · · · · · · · · · · · · · · · · · · | ion System, ft = feet, bgs | = below ground surface, a | amsl = above mean | sea level, SS = Stainless |
| eal, NR = No F | Recovery, N/A : | | | | otes: solid blue and hollow | | irks represent depth to wa |
| | | | | ent and approximate stati | | | |

| ARC | ADIS | | | Well Const | ruction Log | | Sheet: 6 of 8 |
|--|---------------------------------|--------------|---------------|--|---|--------------------------------|---|
| ate Started: ate Completed | 04/20/2022 05/10/2022 | | | _Surface Elevation: _Shallow Well Elevation: | 504.57 ft amsl 503.83 ft amsl | Well ID: E | |
| rilling Co.: | ABC LIOVIN | | | _Deep Well Elevation: | <u>N/A</u> | Client: PG&I | |
| rilling Method: | Sonic Drilling | | | _Northing (NAD83): | 2101089.85 | • | GW Remedy Phase 2A |
| riller Name: | Eddie Ramos | | | _Easting (NAD83): | <u>7616510.53</u> | Location: <u>PG&I</u> | E Topock, Needles Califorr |
| rilling Asst: ogger: | J. Candelaria Grant Willford | | 32 | _Borehole Diameter: _Static Water Level: | 10-12 inches See Log for Depths | Project Numbe | r: 20126255 |
| ditor: | Sean McGran | | | _Development End Date: | • | | 1. <u>30120233</u> |
| otal Depth: | <u>143.1 ft bgs</u> | 0 | | _Well Completion: | X Flush Stick-up |] To Be Completed | in Well Vault |
| Groundwa | | USCS Code | USCS Class | Constru | ction Details | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actuvolume vs the calculated volum |
| 101 102 103 104 105 106 106 107 108 109 110 111 112 111 112 114 114 115 116 117 118 119 119 119 111 | conglomerate | N/A | | (45.3 - 136.2') 6" 0.02-Slot 316L SS Wire Wrap Screen (44.0 - 143.1') Cemex #2/16 (16x30) Lapis Lustre Sand | | (44.0 - 143.1') 79.9 bags | (44.0 - 143.1') 85.5 bags (107' Note: Filter pack swabbed fo approximately 5 minutes in 20 lifts for a total of approximately minutes prior to the installation the well seal. |
| | | | | | = below ground surface, a | | |
| | - | | - | - | otes: solid blue and hollow c measured during drilling | | arks represent depth to wa |
| has) statis | | | | | | | |

| ARC | ADIS | | | | ruction Log | ŝ | Sheet: 7 of 8 |
|--|---|-----------|----------|--|---|--------------------------------|---|
| riller Name: rilling Asst: ogger: ditor: | ABC LIOVIN Sonic Drilling Eddie Ramos J. Candelaria Grant Willford Sean McGran | | 2 | Surface Elevation: Shallow Well Elevation: Deep Well Elevation: Northing (NAD83): Easting (NAD83): Borehole Diameter: Static Water Level: Development End Date: | N/A 2101089.85 7616510.53 10-12 inches See Log for Depths 6/1/2022 | Location: <u>PG&</u> | GW Remedy Phase 2A GW Remedy Phase 2A Topock, Needles Califorr r: 30126255 |
| otal Depth: | <u>143.1 ft bgs</u> | | | Well Completion: | X Flush Stick-up Ction Details |] To Be Completed | in Well Vault |
| Groundwat Sample II | | | Class | | | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actuvolume vs the calculated volume |
| 121 122 123 124 125 126 127 128 129 130Groundwate Samples Collected 131 132 133 134 135 136 137 138 138 139 140 bbreviations: U | conglomerate | N/A | ***** | (45.3 - 136.2') 6" 0.02-Slot 316L SS Wire Wrap Screen (44.0 - 143.1') Cemex #2/16 (16x30) Lapis Lustre Sand (138.0 - 139.0') SS Centralizer | (136.2 - 141.6') 6" Sch 40 PVC Sum and SS End Cap | | (44.0 - 143.1') 85.5 bags (107' Note: Filter pack swabbed fo approximately 5 minutes in 20 lifts for a total of approximately minutes prior to the installation the well seal. |
| teal, NR = No F | Recovery, N/A = | = Not App | olicable | e, GW = groundwater, No | otes: solid blue and hollow | blue water table ma | arks represent depth to wa |
| | | | | | c measured during drilling | | |

| ARC | ADIS | | | Well Const | ruction Log | | Sheet: 8 of 8 |
|--|--|--------------|---------------------------------------|--|--|--------------------------------|---|
| Date Started: | 04/20/2022 | | | _Surface Elevation: | 504.57 ft amsl | Well ID: E | R-01 |
| Date Completed: | | | | | 503.83 ft amsl | | |
| Drilling Co.: | ABC LIOVIN | | | _Deep Well Elevation: | <u>N/A</u> | Client: <u>PG8</u> | |
| Drilling Method: | - | | | _Northing (NAD83): | 2101089.85 | Project: <u>Fina</u> | I GW Remedy Phase 2A |
| Driller Name: | Eddie Ramos | | | _Easting (NAD83): | 7616510.53 | Location: <u>PG8</u> | E Topock, Needles Californi |
| Drilling Asst: | <u>J. Candelaria</u> | | ez | _Borehole Diameter: | 10-12 inches | | |
| _ogger: | Grant Willford | | | _Static Water Level: | See Log for Depths | Project Numb | er: <u>30126255</u> |
| Editor: | Sean McGran | ne | | _Development End Date: | | | |
| Fotal Depth: | <u>143.1 ft bgs</u> | | | _Well Completion: | Flush Stick-up | To Be Complete | d in Well Vault |
| Groundwat | | USCS Code | USCS Class | | | Calculated Material Volumes | Material Volumes Installed Note: percentages are the actua volume vs the calculated volume |
| Groundwate Groundwate | r Competent Bedrock - conglomerate | N/A | × × × × × × × × × × × × × × × × × × × | (44.0 - 143.1') Cemex #2/16 (16x30) Lapis Lustre Sand | (136.2 - 141.6') 6" Sch 40 PVC Sump and SS End Cap | (44.0 - 143.1') 79.9 bags | (44.0 - 143.1') 85.5 bags (107%) Note: Filter pack swabbed for approximately 5 minutes in 20 ft lifts for a total of approximately 2 minutes prior to the installation of the well seal. |
| _144 _145 _145 _146 _147 _147 _148 _148 _149 _150 _151 | | | | | | | |
| .152 .153 .154 | | | | | | | |
| | | | | | | | |
| _156 | | | | | | | |
| _157 | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 160 | | | | | | | |
| | | Soil Cl | assificat | ion System ft = feet bas | = below ground surface, an | nsl = above mear | sea level SS = Stainless |
| Abbreviations: U | SCS = Onlined | | | | <u>selett greana</u> eanaee, an | | 1300 level, 00 = 0.001 level, 00 = |
| Steal, NR = No F | Recovery, N/A : | = Not A | oplicabl | e, GW = groundwater, No | | lue water table m | arks represent depth to wat |

Well Development Log



| an D | R-1 | | Measuring Po (ags) | bes) R. | 0.43 | Total Dept | h (ft. BMP) | 132.4 | 2 | Screen Interva | (fe bes) | Greelogist 45-136 |
|-----------------|---------------------|--------|---|--------------------------|-----------------|---------------|-------------------------|----------------------|-------------------------|---------------------------|------------------|----------------------|
| W (ft. BMP): | 50. | 02 | DTW (ft. bgs): | 50.4 | | | 81.97 | | | | Gallons Water | In well: 120.35 |
| | g operator: S | He | FFFFFA | Rig type: | Smeal | 10 | Bailer mi | ike and size: | 31/2 x 5 | ir | added: Water | NA |
| Surge bloc | k make and size: | S'W | 6" rubbe | r polatesman | nake and size: | Grun | dfos 19 | Cond. | 250,3 | | source: | es/Gallons |
| Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | pH (± 1.0) | ORP (mV) (± 10.0 mV) | (µS/cm) (± 0.03%) | Turb NTU (<10.0 NTU) | DO (mg/L) (+ 0.3 mg/L) | Remove | d/Water Clarity |
| 0930 | | | 50.02 | | | | | | | | soft | botton |
| | OTB | | | 132.42 | | | | | | | | |
| 0955 | Begin | ball | ing | | | Thick | | yers. | SUSVEV | Ided se | Jime | nts |
| 1060 | Collect | r int | tial b | oill san | nple - | MICK, | prown, | Sung | Brown, | some | Bailed | approx 20 |
| 1040 | LOILEC | t en | 1 init | jal bo | ul San | npie,s | TOP DOL | acting. | SIH, opo | que | | |
| 1041 | DTB | | 50.11 | 141.21 | | | | | | | | |
| 1213 | Tag | | A CONTRACTOR OF A | | 12114 | 105 | | | | | | |
| 1250 | R Degn | I SUNO | 1000 Mic | 136- 19 136- | K' h | 15 100- | in an | how | a 131- | 1261 | porc | 14 |
| | | | and the second se | 0 | Carl Contractor | 0 | a second of the | a company of the | a superior and | | 100 | |
| | | | | 13 131 | | | and t | L'OIC | | | | |
| | | | | 119 12 | | | degins | havas | ing li | 21-110 | bys | |
| 1420 | (DM) | note | Swice | and | 121-1 | 16'00 | 95,W | ater | areak | - | | |
| 1439 | Begi | n sur | abloine | 116-1 | 11' 69! | 8 | | | | | | |
| 1500 | como | lete s | wabb | ng III | 0-1116 | g5. 30 | gin s | Nable | HON E | R | | |
| | Tag | | | 141.15 | | | | | | | | |
| 1515 | tha | deven | anen | + For | day | | | | | - | 13- | R SIMP |
| | Tay | | 47.53 | 134.14 | | | and the second | | | | soft | bottom |
| 0725 | Begin | n su | labbir | 19 111- | - 106' 1 | ags. | | | | | | |
| | | | | 119 11 | | | Begin | susal | obina | 106-1 | d'be | 15 |
| | | | | 19 106- | | | | | | | | |
| | | | | ng 101 | | | | | | | - | |
| | | 1 SING | Nobina | 96-9 | 1'bas | 1 | a second | | | | | |
| Sample 1D | and Time: | ER | -1 | 6 | 1422 | 15. | 95 | | | | | |
| Color Bando | m An | SEL | Upela | lland, | 6110 | 555 2 Ru | Iner | | | | | |

ER-1 - Well Development Record



| 1 | | | GRAN | DARA | STARON A | | CYNAD SO | | | | | | |
|------------------|--|-----------------------------|--------------------------|-----------------------------|--|-------------------|---------------|-------------------------|----------------------------|--|---------------------------|--------------------|---------------|
| / | | | | | - 5 | re p | age | 1- | | | | 2 of | 22 |
| | Well Develop | | d distant and the second | , | voject Name: J | PG&E Topock | Phase 2A GW | temedy | Flon | Redr | PG_ | | |
| ~ | Date(s) | _ | | Project # 3 Measuring Po | | | 1.1 | 11/ | 9101 | 1100. | Screen Interva | | |
| (10 | Well ID DTW (ft. | ER | -1 | (ags | /bgs) | 10 | Water column | HITE BMP) | - | | | Gallons in w | rell: |
| | DTW (ft. BMP): | | | DTW (ft. bgs): | b | ne | in well (ft): | | Diameter of | well (in.): | | Water added: | |
| | | ig operator: | | - | Rig type: | | | Baller mi | ake and size: | | | Water | |
| | Surge blog | tk make and | _ | | Pump | make and size: | | 1 | Cond. | | | source: Notes/G | allons |
| | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | pH (± 1.0) | ORP (mV) (+ 10.0 mV) | (µ5/cm) (± 0.03%) | | DO (mg/L) (+ 0.3 mg/L) | Removed/Wa | |
| 0/18/22 cont. | 0920 | ump | | burad | the second s | 6-91 | | Bigins | | | 91-86 | 693 | |
| | 0945 | ump | nete e | wabl | jing 9 | 1-86' | bgs. N | later (A | c bre | ak! | | | |
| | 1000 | Begi | nsw | abbin. | 4 86-8 | 1'69 | | | | -17 | 110.0 | | |
| | 1025 | | | | | | | insw | abbin | 981-1 | 6.67: | | |
| | - | | | | ng 81 | | | | | | | | |
| | | | | | ng7 | | | 1000 | | rabbi | na 71- | h6' 6. | 2.5 |
| | A CONTRACTOR OF | | | | | | | | | | 1 66-61 | 66° 60 | 12 |
| | 1235 | | | | | | bgs 1'bac | wat | A DESCRIPTION OF THE OWNER | The local design of the lo | | | |
| Ce | | | - | | ng 61- | The second second | | | | | - | | |
| 1 Ce | 1340 | 000 | 1010+ | SLADO | bing | 101-50 | 6'bas | , begin | sua | blong | 56-51 | 'bgs | |
| | 1405 | | | | | | | s. wat | | | | | |
| | 1420 | and the second state in the | | 100 million (1997) | ng ST | | 1 | | 1 | | | | |
| | and the second design of the s | | | | | | | Done | stnee | 1-10 | swat | 46-4 | 5' 695 |
| | 1445 | | | | and the second s | | | tab | | | | | |
| | 1445 | | | valors | srge 6 | IDCK | | | | | | - | |
| | 1510 | Tag | | 47.50 | 134.3 | 1 | | | 1 | - | | JOFT 1 | |
| | 1515 | End | develo | pment | For | Jay - | | | - | | | Ten | fr 5718122 |
| 5/19/27 | 2 0655 | | | 47.47 | 133.01 | | | 1000 | | | | soft | bottom |
| | 0705 | Begi | n ba | illing | 8 | | Veran | NEK SIH | na Lots | of an | and a | sediment | |
| | 0710 | Colle | of se | and k | ailor | mple: | brow | n some | | - | | - | |
| | | | CA Sec | | | sample | stop be | illing | roman | re bai | er | 25 | approx gal |
| | 0742 | Tag | | 51 | 141.19 | 5 | | | | | | Hard | bottom |
| - | Sample ID a | and Time: | nt completio | SEC | ant Pr | 27 | | | | | | | |
| 2 | Arcadis Stat | | | | C | ~ | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

ER-1 - Well Development Record



| | GAR | | - 1 Design & Descality | - | | -50 | ze pa | ge 1 | L- | | | 3 of 22 |
|---------|-----------------------------------|---|---|---|---------------------------|--|--|-------------------------|----------------------|----------------|----------------|---|
| | Well Devel | opment Reco | nd | | Project Name: 30126255 | PG&E Topock | Phase 2A GW | Remedy | Eller | Redr | PG | DIS Job Title: |
| 0 | Well ID | FO | -1 | Measuring F | Point (MP) ft. | | | th (ft. BMP) | | | Screen Intervo | |
| | DTW (ft | | | DTW (ft. | ; /bgs) | 1 | Water column | bll | Diametere | er well (in.): | | Gallons in well: |
| | BMP) | : | | _bgs): | - | lu | Lin well (rt): | | - | | | Water added: |
| | | Rig operator: ock make and | | | Rig type: | | | _ Bailer m | ake and size | : | | Water source: |
| | | size; | - | | Pump | make and size: | | | Cond. | Turb NTU | DO (mg/L) | Notes/Gallons |
| 5/19/22 | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | pH (±1.0) | ORP (mV) (± 10.0 mV) | (µS/cm) (± 0.03%) | (<10.0 NTU) | (+ 0.3 mg/L) | Removed/Water Clarity |
| wint. | 0830 | | - C | | | | lobing | | | | 1311 | and a state of the second s |
| | | | | swab | | | | | | | | 26' bgs |
| | 0920 | ump | ete si | Nabb | ng 13 | 1-126 | bgs, b | eginsi | Nabl | oing 12 | 6-121 | 1001 |
| | 1010 | | 1000000000 | | | - | | 1991 | | oing 17 | | |
| | - | | and the second se | | 9 | | bgs. A | civic | | break | - | |
| | | | | | 116-111 | | 1 | | 2.0 | 12 101 | 11 | |
| | 1110 | Contraction of the second | and the second se | the second se | | | A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O | Sincell | oing | 111-104 | . Odz | |
| 6 | | 100 and 100 and 100 | Concerns and the | 1000000000000 | ing 111 | and the second s | gs. Be | ER | | | | |
| | | | | | - | | | | CINICA | hina | 101-91 | o'bgs. |
| 01 | 1250 | | | | 9 | | | | | ng 96 | 1 | |
| | | Cur the | | | 1 | | 95. B. | Y | | | 91-86 | 1. |
| | | | | | | | | | | areak | | - <u>-</u> |
| | | | | 1.1.1 | ng Bl | | 1.4 | - | | | | |
| | | | | 100000000000000000000000000000000000000 | 3 | | 0 | KS. BE | in | sware | Ding | 81-76 bys |
| | 1445 | | | | | | | | | ward | | 76-71 625 |
| 1 | 1510 | | | | bing | | | 0 | | | 0 | |
| | 1515 | | | odin | 1 | | | | | | | |
| Ī | 1525 | Tag | | 47.52 | 141.15 | | | | | | | Hard bottom |
| Ī | 530 | End | Jerrelo | eneny | Ford | lay - | | | | | | - Eup 5#8 |
| 5/20/22 | Contraction of the local distance | and the second se | | 47.38 | | , | | | | | | Hard bottom |
| 1 | 0820 | Begin | sward | dng 7 | 1-66.8 | ogs. | | | | | | Duiton |
| C | 0845 | comple | te su | abbin | 1971-6 | 6' bgs | Begin | Swabl | ping | 66-61 | bgs. | |
| Sa | mple ID and | d Time: _ | | | - | | / | - | | | | |
| | rcadis Staff: | removed at o | ompletion o | fdevelopmer | It | | | - | | | | |
| Ar | Cours storing | | / | 5 | 66 | PAG | 61 | | | | | |
| | | | - | | | | | | | | | |
| | | | | | | | | | | | | |

ER-1 - Well Development Record



| Well | ID | ER | - 1 | Measuring I | 30126255 Point (MP) ft. s /bgs) | | | h (R. 19417) | | | LET ARCA | | |
|--------|---------------|--|-------------|--|---------------------------------------|----------------|-------------------------------|--------------|-------------------|-------------|--------------|------------------|---------------|
| DTW | (ft. BMP): | | | DTW (ft. | | 0 | Water column in well (ft): | 6111 | Diameter of | well (in.): | - | Gations in | well: |
| | | lig operator: | | | and le | e | | | ake and size: | | | Water added: | |
| Su | | ck make and | | / | - Balletype: | | | | | | | Water source: | |
| - | | size: | - | | | make and size: | pH | ORP (mV) | Cond. (µ\$/cm) | Turb NTU | DO (mg/L) | Notes, | /Gallons |
| | me | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp 'C | (± 1.0) | (± 10.0 mV) | (± 0.03%) | (<10.0 NTU) | (± 0.3 mg/L) | | Water Clarity |
| 09 | | | | | ng 66 | -61 % | gs Be | gin su | labbin | 9 61- | 56' 6 | 95 | 1000 |
| - | 35 | | | swable | ing bi- | 56.6 | gs. 15e | 31. 3 | blain | ing si | 11.110 | 35 | |
| - | 00 | - | | and the subscription of the local division o | 956-3 | | | | | | | | |
| 10. | 25 | rowb | | | 4 | | | s hav | e 10 . | surario i | 16-45 | bgs du | 6 70 |
| | - 6 | | eing | | me wa | iter ta | ove. | | | | | | |
| - | 35 | Tag | - | - | 141.15 | | | | | | | Hurd | bottom |
| - | 40 | Begin | n ba | iling | | Brow | IN SIT | u SUS | pendo | 1 soud | s-hi | ahfin | 23 |
| - | 42 | collec | t shir | hur bails | samele | . 0.000 | 2 | away | light | brown | | Balle | s approx. |
| - | 01 | | | | pailso | imple | end:3 | omet | nes | top 100 | iny | 25 9 | al. |
| 119 | | | to p | | | | | | | - | | | |
| 12 | 40 | Tag | - | | 141.15 | | | | | | - | | bottom |
| 13 | 05 | 3".P | bump | , 3 × | | grob | pipe | , 3' | grow | pipe | , 31 | grobb | ipeforn |
| - | | sets | pun | NP (P | 691 | bys | TOTAL | ver s | et P | 0 - | | | |
| 141 |)0 | Tag | 1 | 47.37 | | | | | | | | | |
| 40 | 1 | star | t pu | mpin | 9 | | | | | | | | |
| 14 | 0,6 | pump | 30 | 52.75 | - | 30.9 | 7.14 | 178.6 | 7.626 | 130 | 2.07 | Mostly Isgali | imoved an |
| 14 | 0 | pump | 2.6 | 55.47 | - | 29.9 | 7.58 | 127.7 | 7.886 | 132 | 2.08 | mostiv | laear |
| 41 | S | pump | 2.01 | 56.80 | - | 29.7 | 7.69 | 100.8 | 7.894 | 108 | 2.49 | ** | " |
| | | | | 59.15 | | 29.6 | 7.73 | 96.8 | 7.883 | 202 | 2.31 | ** | 5 |
| 14: | 25 | eump | 278 | 62.3 | - | 29.6 | 7.77 | 69.7 | 7.840 | 206 | 2.18 | ** | " |
| 47 | 16 | Stop P | umpin | 9 - 54 | rge #1 | | | | | | | | |
| | | and the second sec | - | the second se | | | | | | | | | |
| 43 | 51 | Tag | - | 57.17 | | | | | | | | | |
| mpl | e ID and | I Time: | | | | - | | | | | - | | |
| tal g | allons | removed at c | ompletion o | 1 devetopment | te c | PAO | 1 1 | 1 | | | | | |
| Cardia | - acarri | | | | | 10 | 0 1 | - | | | | | |

ER-1 - Well Development Record



| | Date(s) | pment Recor | | Project # | Project Name: 30126255 | 1000.0000 | Are | nemeav adıs Oversight: | Ellen | Redn | fer arca | DIS Job Title: | 4 |
|------|---------------------------------|---------------|--------------|---------------|---------------------------|----------------|------------------------------|---------------------------|------------------|------------------|-----------------|-------------------|-------------|
| ۱. | Well ID | ER | -1 | | voint (MP) Pt. | | Total Dep | th (R. BMP) | 2 | | Screen Interv | et (IE. bgs) | |
| 3 | DTW (ft. BMP): | | | DTW (R. bgs): | | 0 | Water column in well (ft) | 6111 | Diameter of | well (in.): | | Gallons in well: | |
| | , | tig operator: | | | Rig type | e | | Bailer m | ake and size: | | Water added: | | |
| | | ck make and | | / | _ | make and size: | | | | Water source: | | | |
| 2 | - | ante. | | DTW | Total Depth | | pH | ORP (mV) | Cond. (µS/cm) | Turb NTU | DO (mg/L) | Notes/Gallons | |
| ł | Time | Task | GPM | (ft. BMP) | (ft. BMP) | Temp "C | (± 1.0) | (+ 10.0 mV) | (± 0.03%) | (<10.0 NTU) | (+ 0.3 mg/L) | Removed/Water Cla | arity |
| 1 | the | pump | | | | 21.2 | 7 011 | 102 | 0.00 | 195 | 2.68 | mostlyad | w |
| 1 | 1438 | pump | | 61.10 | - | 30.2 | 7.84 | 60.2 | 8.185 | 175 | 2.00 | 5 | |
| 1 | 1440 | PUMI | e off | - SUR | 12 #2 | | | | | | | | |
| - 1 | 1445 | 1 | - | 56.6 | | | | | | | | | |
| 1 | 1447 | | | 50.0 | _ | | | | - | | | | |
| | 1452 | PUMP | | 60.07 | - | 31.1 | 7.85 | 17.9 | 8.283 | 396 | 1.71 | Tot you gump | res cia |
| ł | 1453 | PUMP | 20 | - Svra | 0 #3 | 51.1 | 1.05 | 11.1 | DiLos | 910 | 1.1. | sofar=96 g | <u>a</u> 1. |
| | 1458 | Tag | - | 56.15 | - | | | | | | | | |
| - F | 1459 | pum | pon | 30.12 | | | | | | | | | - |
| 1 | 1504 | | 2.879 | 60.0 | - | 30.9 | 7.89 | -4.2 | 8.477 | 628 | 1.82 | Tot gt = 112 | uan |
| | 1505 | pump | | 10- | 9e #4 | | | | 0.111 | | | 0. 112 | |
| ł | 1510 | Tag | - | 56.7 | - | | | | | | | | |
| - 1- | 1511 | pump | on | | | | | | | 618.01 | | | |
| - | 1516 | pump | 2.790 | 60.75 | - | 30.9 | 7.90 | -15.7 | 8.659 | 866 | 1.81 | Tot gal=129 | light b |
| - | 1517 | pump | off | - sur | 10 # 5 | | | | | | | | light bi |
| | 1523 | Tag | - | 56.88 | - | | - | | | | | | |
| | 1524 | pump | on | | | | | | | | | | |
| Ī | 1529 | pump | 1.87 | 59.48 | - | 31.0 | 7.92 | -20.6 | 8.945 | 846 | 1.97 | Light brown, | doute |
| - | 1534 | pump | 1.41 | 59.8 | - | 30.5 | 7.95 | -38.1 | 9.119 | Turb. Isohigh | 1.62 | Light brown, | Crochy |
| | 1539 | | 1.37 | 60.05 | - | 29.9 | 7.95 | -47.1 | 9.156 | n 11 | 2.10 | ** | N |
| - | 1544 | pump | 1.226 | 60.10 | - | 29.7 | 7.94 | -50.2 | 9.181 | 11 17 | 1.91 | 11 | 11 |
| 1 | 1549 | pump | | | - | 29.9 | 7.96 | -39.9 | 9.310 | 11 11 | 1.79 | ~ | 11 |
| S | Sample ID an | d Time: | | | | | | - | | - | | | |
| | rotal gallons Arcadis Staff: | | completion o | f developme | nt: SEE | E FA | 66-1 | - | | | | | |

ER-1 - Well Development Record



Attachments for ER-1

| - | Oate(s) | ER | -1 | | oint (MP) ft. | | | | | Redn | Screep Interv | | |
|---------|--------------------|------------------------------|-------|---|--------------------------|----------------|-----------------------|-------------------------|----------------------|-------------------------|---------------------------|--|--|
| | Well ID DTW (R. | ER | -1 | (ags DTW (R. | /bgs) | - / | Water column | Lall2 | N | - | Gallons in well: | | |
| | BMP): | | | bgs): | | al | in well (ft): | - | Diameter of | well (in.): | | Water | |
| | | Ng operator: ick make and | | | Rig type: | 0 | | Bailer m | ake and size: | | | added: | |
| 5/2012 | | size: | | _ | Pump | make and size: | | | Cond. | - | po (mall) | Notes/Gallons | |
| COL1+ . | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp 'C | pH (<u>+</u> 1.0) | ORP (mV) (± 10.0 mV) | (µS/cm) (± 0.03%) | Turb NTU (<10.0 NTU) | DO (mg/L) (+ 0.3 mg/L) | Removed/Water Clarity Light brown, cloudy | |
| | 1554 | pump | 1.249 | 60.12 | - | 29.4 | 7.96 | -42.5 | 9.351 | Toohigh | 1.94 | | |
| | 1559 | pump | 1.243 | 60.15 | - | 29.6 | 7,95 | -41.8 | 9.399 | 901 | 1.56 | | |
| | 1600 | stop | pumpi | ng | | | | | | | | Tot gal = 180 | |
| | 1605 | Tag | 1 | 56.36 | - | | | | | | | 51 0 5100100 | |
| | 1610 | | deven | opmen | For . | day - | - | | | | | -El 2 5/20/22 | |
| 5/21/22 | 0720 | Tag | - | 47.67 | - | | | | | | | | |
| | 0731 | Pum | p on | | | | | | | | | 0.00000 | |
| | 0730 | pump | | 51.1 | - | 29.6 | 7.28 | 190.1 | 9.264 | 70.2 | 2.26 | mostly clear | |
| | 0741 | pump | 1.849 | 53.6 | - | 29.5 | 7.61 | 104.3 | | | 1.73 | ciear | |
| 0 | 0746 | pump | 1.74 | 55.5 | - | 29.2 | 7.75 | | 9.281 | 15.1 | 2.50 | dear | |
| | 1270 | pump | 1.689 | 56.98 | - | 29.3 | 7.80 | | 9.299 | 13.5 | 2.06 | aear | |
| | 0756 | Charles Section | | 58.28 | - | 29.4 | 7.92 | 19.0 | 9.334 | 16.8 | 1.97 | clear. tot gal= 229 | |
| | 0757 | pump | | | | | | 1.0 | | | | e | |
| | 0800 | Add | anoth | erjou | nt of | drop p | ppe (2 | 1). | BOH | o mo | of pu | mpnow | |
| | | set | 2 9 | p'bgs | 2. | | | | | - | | | |
| | 0820 | TONS | - | 54.9 | - | | | | | | | * | |
| | 0823 | PUM | pon | | | | | | | | | | |
| | 0828 | Pump | 4.75 | 59.8 | - | 32.4 | 8.03 | 40.5 | 9.669 | 48 | 1.50 | uear | |
| | | pump | | | - | 29.8 | 8.07 | | | 42.1 | - | clear | |
| | | pump | | | - | 29.0 | 8.05 | 6.2 | 9.443 | 44.4 | 2.21 | | |
| | | | | the second se | urge | #1 | | | | | | | |
| | 0843 | | | 64.05 | the second second second | | | | | | | | |
| | 0844 | RUM | | | | | | | | | | | |
| | | nd Time: | | | | - | | | | | | | |

ER-1 - Well Development Record



| | Well Develo | CADIS | a sincernal a | Project # | Project Name: J 90126255 | PG&E Topock | Phase 2A GW P | temedy dis Oversight: | EIRN | Redn | er anci | s_7_ or 22 | | |
|---------|--------------|------------------------------|------------------|-----------|---------------------------------|----------------|---------------------------------|--------------------------|------------------|-------------|---------------------|-----------------------|--|--|
| 5 | Well ID | ER | -1 | | oint (MP) ft. /bgs) | | Total Dept | h (R. BMP), | 1. | | Screen Integ | alifet Sar | | |
| | DTW (Ht. | | | DTW (ft. | | , | Water column 9 in well (ft): | 6/1/2 | Diameter of | well (in.): | _ | Gailons in well: | | |
| | | | | | Rig type: Baller make and size: | | | | | | | Water added: | | |
| | | tig operator: ck make and | | - | - | Le la | | | ent ent set. | | | Water seurce: | | |
| | | size: | | DTW | Pump Total Depth | nake and size: | pH | ORP (mV) | Cond. (µS/cm) | Turb NTU | 00 (mg/L) | Notes/Gaillons | | |
| 5121/22 | Time | Task | GPM | (ft. SMP) | (ft. BMP) | Temp 'C | (±1.0) | (+ 10.0 mV) 21.5 | (+ 0.03%) | | (+0.3 mp/L) 1.88 | Removed/Water Clarity | | |
| cont. | 0849 | 1 | 1220122 | 71.05 | - | 29.7 | 8.07 | 21.9 | 9.462 | 50 | 1.00 | dear | | |
| | | 11 | 110 | | le #2 | - | | | | | | | | |
| | 0855 | Tag | 0.00 | 65.1 | _ | | | | | | | | | |
| | 0901 | pump | 11 | 72 20 | | 30.1 | ann | 38.0 | 0 240 | 00.0 | 071 | MASILY | | |
| | - | PUM | | 73.38 | ge #3 | | 0.00 | 0.60 | 1.210 | 78.7 | 2.76 | QEAN | | |
| | 0907 | | - | 68.2 | JCHJ | | | | | | | | | |
| | | Pump | | 00.6 | | | | | | | | | | |
| | | Pump | | 73 1 | - | 29.8 | 8.03 | 475 | 9 275 | 75 5 | 256 | Gear | | |
| 0 | 0914 | Pung | 0 | | 1190 # | | 0.05 | 11.5 | 1.7 67 | 13.5 | 2.00 | year | | |
| | 0919 | PLUT | | 67.2 | - | 1 | | | | | | 4 | | |
| nann | 0928 | bumo | 1 | 67.2 | ER | | | | | | | 1 | | |
| 0110 | 0925 | pump | | 73.7 | - | 30.1 | 8.01 | 46.1 | 9.392 | 80.9 | 3.28 | Mostlyclear | | |
| | 0926 | PUMP | | | rge # | | | | | 00.1 | 0.40 | Juin | | |
| | 0931 | Tag | - | 67.45 | - | | | | | | | | | |
| | 0932 | pum | p on | | | | | | | | | | | |
| | | pump | | | - | 29.6 | 8.03 | 39.7 | 9.560 | 20 | 2.77 | alar | | |
| - | 0941 | | | 69.8 | - | 29.4 | 8.01 | 34.0 | | | 2.20 | clear | | |
| | | pum | | | | | | | | | | Tot gal = 434 | | |
| 8 | | | | | pint p | f dur | o ni n | e (21 | .) 0 | bottom | a of | pump | | |
| | | how | 501 | 0 11 | 1'bgs | | et bit | 010 | 1. 2 | 201101 | VI ON | komb | | |
| | 1000 | | | 57.90 | V | - | | | | | | | | |
| | 1002 | Pump | | 5/10 | 11 | | 1 | | | | 1000 | | | |
| | Sample ID an | | | | | | 6E 1 | | | | | | | |

ER-1 - Well Development Record



| 1 | - | - | - Andrews | | | | | 4 | -> | | | | | 1 |
|----------|---|-----------------------------|--------------------------|---|---------------------------|-------------------------|--------------------------------------|-------------------------------|---------------------|-------------------|-------------------------|---------------------------|--|-----|
| | | | | | | ~~ ~ | | no A | | | | | | |
| | | | | | | - 50 | e p | age | 1- | | | | 2 17 | |
| | | AR | CADIS | S Brinkland | | Project Name: | PG&E Topock | Phase 2A GW R | temedy | | 0.1 | ' PG | 8 of 22 | |
| | | Well Develo Date(s) | pment Recor | b | Project # | | | Arca | dis Oversight: | Ellen | Kedn | et arcai | DIS Job Title: | |
| 5 | 2 | Well ID | ER- | -) | Measuring P (ags | oint (MP) ft. (/bgs) | - | Total Dept | h (ft. BMP) | in | - | Screen Intervi | il (ft. bgs) | |
| | 1 | DTW (ft. BMP): | | | DTW (ft. bgs): | 0 | l | Water column in well (ft): | 611 | Diameter of | well (in.): | | Gallons in well: | |
| | | | Rig operator: | | _ | Rig type: | _ | | Bailer ma | ike and size: | | | Water added: | |
| | | | ck make and size: | / | | Pump | nake and size: | | | | | | Water source: | |
| | [| | | | DTW | Total Depth | | pH | ORP (mV) | Cond. (µS/cm) | Turb NTU (<10.0 NTU) | DO (mg/L) (+ 0.3 mg/L) | Notes/Gallons Removed/Water Clarity | |
| c 5/21/2 | 2 | Time 1007 | PUMP | GPM | (ft. BMP) 71.9 | (ft. BMP) | Temp*C 31.0 | (+1.0) | (± 10.0 mV) 59.8 | (±0.03%) 9.553 | 25.5 | 296 | clear | |
| · cont | | 1012 | pump | 7.26 | 96 | - | 30.2 | 7.99 | | 8.762 | Tooh | 2.66 | light brown, cloud | Y |
| | - | 1015 | PUMP | 5.12 | 110 | - | | pump | | | 1001 | an | | |
| 1016 | | 1018 | Pum | | -501 | rge # | the set of the set of the set of the | e | | | | | Tot 9a1 = 582 | |
| | | 1027 | TUG | - | 83.7 | - | | | | | | | | |
| | | 1029 | Pum | p or |) | | | | | | | | | |
| | Ī | 1034 | | 6.34 | 92.7 | - | 30.8 | 7.89 | 29.2 | 9.472 | 188 | 1.96 | Tot, gal = 624 W | ea |
| | | 1035 | Pumi | 01 | | srge # | 2 | | | | | | 0 | |
| 1 | | 1040 | Tag | - | 82.8 | 5 - | | | | | | | | |
| T | 3 | 1042 | PUM | p on | | | | | | | | | | |
| | | 1047 | Pump | 3.2 | 83.75 | | 31.2 | 7.92 | 29.1 | 9.486 | 86 | 1.95 | Tot, gal= 643 c | rel |
| | | 1048 | PUM | poff | SI | Jrge # | 3 | | | | | | R | |
| | H | 1053 | Tag | - | 76.73 | - | | | | | | | | |
| | H | 1054 | Pur | | | | 211 | | 2.1 | | | - 011 | | |
| | | 1059 | Pump | 3.45 | 1 | - | 31.1 | 7.92 | 30.1 | 9.496 | 78.0 | 2.24 | CLEAN | |
| | - | 1100 | PUW | | Contraction of the | surge | #4 | | | | | | Tot gal= 66 | 7 |
| | | 105 | Tag | | 72.87 | - | | - | | | | | | |
| | | 1107 | | por | | | | 700 | 20.0 | alu | 102 | 0.20 | | |
| | | | | 5.02 | | | | 7.90 | 39.0 | 7.41 | 68.3 | 2.50 | dear | |
| | | 1113 | CONTRACTOR OF THE OWNER. | p off | Sector Contraction (1971) | urge | #5 | | | | | | TO+ gal= 695 | |
| | | 118 | Tag | - | 73.5 | - | | | | | | | | |
| | | | pum | Contract of the local division of the local | 211.0 | | 20 d | 100 | 21.2 | 9110 | CH O | | | |
| | - | - | rump | 6,90 | 84.2 | - | 30.8 | 1.89 | 36.0 | 1,96 | 51.8 | 2.07 | clear | |
| 7 | | ample ID an otal gallons | | completion o | fdevelopme | ent: | EE | PAGE | 1 | | | | | |
| | | rcadis Staff: | | | | | | - | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | Juma | | uounu | munu | | MUNICAL | | annas | n nasani | | distance in the second second | |

ER-1 - Well Development Record





| - | Date(s) | C .2 | | | 30126255 Point (MP) ft. | - | Area | adis Oversight | EINI | NEOI | | CADIS Job Title: | | |
|------------------|---------------------|-------------------------------|---------------|------------------|----------------------------|----------------|---------------|-------------------------|-----------------|---------------------------|---------------------------|--|--|--|
| DTV | Well ID DTW (ft. | ER-I | | (ags DTW (ft. | : /bgs) | 1 | Total Dep | th (ft. BMP) | 12 | / | Sereen Interval (ft. bgs) | | | |
| | BMP): | | | bgs): | | al | in well (ft): | - | | Gations in well: Water | | | | |
| | | Rig operator: ick make and | | - | Big type: | | | Bailern | added: Water | | | | | |
| | | size: | | | Pump | make and size: | | | Cond. | - | | source: | | |
| Cipilia | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | pH (± 1.0) | ORP (mV) (+ 10.0 mV) | (µS/cm) | Turb NTU (<10.0 NTU) | DO (mg/L) (+ 0.3 mg/L) | Notes/Gallons Removed/Water Clarity | | |
| 5121/22 cont. | 1125 | Pump | p off | . Bre | ak for | r lun(| h | | | | | | | |
| | 1205 | Tag | - | 56.07 | - | | | 1 | | | | | | |
| | 1218 | PUM | p on | 13:35 | | | - / | | / | | | | | |
| | 1223 | pump | 4.734 | 83.2 | 7 - | 31.5 | 7.90 | | 9.383 | | 2.51 | Uear | | |
| | 1228 | pump | 4.69 | 68.8 | - | 30.5 | 7.85 | 48.2 | 9.395 | | 2.35 | clear | | |
| | 1233 | pump | 4.89 | | - | 30.2 | 7.83 | 44.6 | 9.343 | 13.8 | 2.26 | clear | | |
| | 1234 | pum | p off | • | | | | | | | | Tot gal= 812 | | |
| | 1235 | | | | nt of | guob | pipe (| 21).1 | B0110 | mof | pump | now | | |
| - | 1250 | | 2 13 | 0 | 5, | | | | | | | | | |
| (L) | 1259 | Tag | 1001 | 58.1 | - | | | - | | | | | | |
| | 1300 | Pum | | 64.5 | | 24.0 | 200 | | | 10.0 | | cliantura | | |
| | 1305 | | 1.00 | | < | 34.8 | 7.99 | 46.6 | 10.225 | 32.3 | 2.21 | ctordy alar | | |
| | 1310 | pump | 5.11 | 70.28 | | 30.9 | 7.97 | 48.8 | 9.646 | 18.2 | 2.30 | alear | | |
| | | pump | 6.02 p off | 79.3 | vge + | 30.0 | 7.89 | 41.4 | 9,011 | 10.0 | 2.64 | clear | | |
| | 1316 | pum Tag | p 011 | Sold State | nge + | * 1 | | | | | | | | |
| 1200 | 1321 | | o on | 73.1 | | | | | | | | | | |
| 1322 | | pump | 6 | 990 | - | 29.5 | 182 | 27 8 | 9 782 | 8.13 | 2.70 | (0.0 | | |
| | 1321 | PUIL | 0.11 | f - | surge | | 1.05 | 51.0 | 1-205 | 0.15 | 2.10 | Clear Dear | | |
| | 1320 | Tag | - 01 | 80.3 | - | - 2 | | | - | | | Tot gal 935 | | |
| | | pum | | | | | | | | | | | | |
| | | PUMP | | | - | 29.8 | 7.84 | 28 G | 9.235 | 6.55 | 2.67 | 11.0.0 | | |
| | 1340 | PUMP | C | | urge | | 1.01 | L0. D | 1.055 | 0.55 | 2.01 | Tot gae = 982 | | |
| 1 | - | d Time: | p 01 | 4 | orge | H J | | | | | | 107 gav = 192 | | |

ER-1 - Well Development Record



| W | Vell ID | ER-1 | | | Point (MP) ft. s /bgs) | | | | | | | |
|------|---|---------------------------------------|----------------|------------------|---------------------------|----------------|-------------------------------|-------------------------|------------------------------|-------------------------|---------------------------|---------------------|
| D | DTW (ft. BMP):_ | | | DTW (ft. bgs): | ~ | a calil | Mater column in well (ft): | / | Diameter of | f well (in.): | | Gallons in well: |
| | P | lig operator: | | | al | - Cr. | | | | | | Water added: |
| | | ck make and | | / | Rog type. | | | Baner na | nake and size: | | | Water |
| Г | | sizer | _ | | | make and size: | | | Cond. | - | | source: |
| - | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | рН (<u>+</u> 1.0) | ORP (mV) (+ 10.0 mV) | (µS/cm) (<u>+</u> 0.03%) | Turb NTU (<10.0 NTU) | DO (mg/L) (± 0.3 mg/L) | - I but the Clarity |
| F | 1345 | | - | 82.6 | - | | | | | | | |
| F | 1347 | Pum | - | | | | | | | | | |
| | and the second se | Pump | | 95.9 | - | 30.3 | 7.85 | 42.3 | 9.226 | 013.4 | 3.01 | clear |
| 10 | 353 | pum | 6 ot | | lurge t | #4 | | | | | | Tot gae=1029 |
| F | 1358 | 1 | - | 86.8 | - | | | | | | | |
| | 1359 | pumi | - | | | | | | 10 | | | ~ |
| H | | pump | 0. | 99.4 | - | 30.3 | 7.84 | 44.3 | 9.267 | 11.3 | 3.25 | 1 |
| 1 | 1405 | pum | - | - | rge # 9 | 5 | | | | | | Tot gal 2 1081 |
| | 1410 | Tag | 0.0 | 90.2 | - | | | | | | | |
| 1 | 1411 | pum | 4.5 | - | | | | | | | | |
| | 1415 | pump | 1 | 99.7 | - | 30.1 | 7.86 | 1 | 9.206 | | 3.25 | clear |
| - 1- | 1420 | pump | | 101.5 | ~ | 29.7 | 7.86 | | | | 3.17 | Uear |
| - 1 | 1425 | pump | 6.25 | | A LOSS COTA D | 29.5 | | 37.2 | | | 3.28 | alar |
| | 1426 | Pum | p off | . Wa | it for | recho | rge t | 0 10% | of sto | Mic u | sater | level: 10% |
| | | of u | 17.67 1 | (where | water v | was tug | gged thi | s mor | ning) | = 4.7 | 1-7000 | ater level |
| | | must | rech | arge t | \$ 52.4 | 14'bgs | | | | | | |
| | 1450 | | - | 76.8 | - | | | | | | | Tot ga1=1179 |
| | 1500 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | - | 70.1 | - | | | | | | | |
| | 1510 | | | 66.1 | ~ | | | | | | | |
| - 1 | | | | | ent fo | ir day | | | | | - | - Elip STZ |
| 2 | 0765 | Tag | - | 48.34 | - | | | | | 60 | | |
| | 0720 | | | | | | mp s | 5) / (it. | 0 13 | 2'a | prox. | will run |
| | | | | | capac | | | | | | | |
| | Sample ID a | | | - I developm | . See | e PAGE | 61 | | | | | |
| 7 | Total gallons Arcadis Staff | | t completion o | of developme | nt | - | | | | | | |

ER-1 - Well Development Record



| | | | | | - | - see | pag | e 1 | - | | | | 1 |
|------------------|--|--------------------|--------------------|--------------------|------------------------|----------------|-----------------|---------------------------|-------------------|-------------|--------------|--|-------------|
| | | | Desta A Desta dest | - | Project Name: | PG&E Topock | Phase 2A GW F | Remedy | | 0.1 | PG | 11_ or Z | L |
| | Date(s) | | | Project # | | | Arca | Remedy adis Oversight: | Filen | Rear |] er arca | DIS Job Title: | - |
| 0 | Well ID | ER | -1 | | oint (MP) ft. /bgs) | | Total Dept | th (ft. BMP) | | | Screen Inten | et (ft. bgs) | _ |
| | DTW (ft. BMP): | | | DTW (ft. _bgs): | | ^ | Water column | | Diameter of | well (in.): | | Gallons in well: | |
| | | Rig operator: | | | Rigeror | 6 | 100 | | ake and size: | | | Water added: | _ |
| | Surge blo | ock make and size: | | | Pumpi | make and size: | | | | | | Water source: | - |
| | | | | DTW | Total Depth | | рН | ORP (mV) | Cond. (µS/cm) | Turb NTU | DO (mg/L) | Notes/Gallons Removed/Water Clarity | |
| 5/22/22 cont. | Time 0725 | PUMP | брм 1.55 | (ft. BMP) 51.4 | (ft. BMP) | Temp *C | (<u>+</u> 1.0) | (<u>+</u> 10.0 mV) | (<u>+</u> 0.03%) | (<10.0 NTU) | (± 0.3 mg/L) | | |
| | 0730 | pump | | 53.0 | - | | | | | N | / | | |
| | 0732 | pump | | 53.35 | - | | | | 11 | N | | | |
| | 0734 | pump | | 53.65 | - | | | 1 | 0 | | | | |
| 0736 | | PUMP | | 54.95 | - | | n. | 4/ | | | | | |
| | 0738 | pump | 1.10 | 55.25 | - | | N | / | | | | | |
| | 0742 | pump | 1.60 | 51,40 | - | / | / | | | | | | |
| | 0744 | pump | 1.60 | 55.8 | - / | / | | | | | | | |
| - | 0746 | pump | 1.58 | 56.5 | 2 | inea | | into | He VRG | use | | | |
| 0 | 0750 | pump | 2.91 | 59.1 | - | want | to get | down | toper | 0° 693 | , where | water stab | 11785 befor |
| | 0752 | pump | 2.88 | 60.48 | - | | | | | | | / | / |
| | 0755 | pump | 1.40 | 60.48 | - | | | | | 4/2 | N | | |
| | 0757 | pump | 1.20 | 60.38 | - | | | | , | 1/2 | / | | |
| | 0759 | bruch | | 60.38 | - | | | 0 | 61 | / | | | |
| | 0802 | pump | 1.31 | 60.39 | - | | 1 | P | / | | | | |
| | 0805 | pump | | 60.45 | - | | - | / | | | | 123 | 7 |
| | | | | 60.56 | - | | / | | | | | | |
| | | gump | | | - | / | | | | | | | |
| | | gump | | | -/ | | | | | | | | |
| | | pump | off. | Remo | | | 13 too | | | | | Tot gal= 126 | 8 |
| | | speci | | | | | 1.25 gp | m/(1 | 00.75- | 48.34= | 12.41 |)= 0.101 00 | 10000 |
| | 0940 | | | 49.03 | | | | | | | | | In |
| 0 | 0945 | Begiv | 1 bay | iling | | | | | | | | | - |
| ٦ | Sample ID and Total gallons Arcadis Staff: | removed at co | ompletion of | f developmen | - 54 | ee F | 266_ | Z | | | | | |

ER-1 - Well Development Record



| | | pment Reco | rd | | Project Name: 30126255 | PG&E Topock | Phase 2A GW | Remedy dis Oversight | Eller | Redr | 10 TARCA | 12 o | - | |
|----|---------------------|------------------------------|-------------|-----------------------|---------------------------|---------------|------------------------|-------------------------|------------------|-------------------------------------|----------------|--|--------------|----|
| • | Date(s) | ER | -1 | Measuring F | Point (MP) ft. | | | th (ft. BMP) | 1 | | Screen Interg | and a start of the | | |
| | Well ID DTW (ft. | | ` | (ags DTW (ft. | (/bgs) | | Water column | 1/1 | 1 Diameter of | mette | / | Gallons in w | ek | |
| | BMP): | | _ | bgs): | | - C | Dwell (ft) | - | - | and furth | | Water added: | | |
| | | tig operator: ck make and | - | - | Rig type | - | | - Bailer n | take and size: | | | Water | | |
| - | | size | | | Pump | make and size | | 1 | Cond. | | | source: | alloss | |
| 22 | Time 0950 | Task COLL C | GPM C+ F | (ft. BMP) | Total Depth (ft. BMP) | Temp "C | рн (±1.0) р\С. Р | marino 8 | DAAR C | TUID NTU (<10.0 NTU) (+1 Fi M | 15 | Removed/Wa | iter Clarity | |
| 1- | 1005 | colle | Ct ft | ugh. | bail | end i | samp | e: Clea | ines in | mall a | NOUT | APPYON O | = 20 | |
| | 1007 | Tag | - | | 141.15 | 10000 | - mar | | | | | Hord 1 | ootton | 2 |
| | 0101 | Prep | to | swak | (thi | wa a | (ae) | | | | | | | |
| | 1035 | Bea | in s | wald | oing | 36-13 | 1 69 | 5 | | | | | | |
| | 1100 | comp | lote | swak | bing | 136- | 131'6 | gs, b | regin | swal | obing | 131-1 | 26'68 | 15 |
| | 1125 | | 1242 | | 0 | | 26'69 | | | | | | | |
| | 1215 | Begi | h su | Jabbi | ng 12 | 6-121 | 695. | | | | | | | |
| | 1240 | | | and the second second | 5 | | | in s | Nabi | oina 1 | 21-11 | 6'bgs | | |
| | 1305 | | | | | h | | | | | | 11'bgs | | |
| | | | | | | | bas. | | | | | 0 | | |
| | 1340 | Begi | n sv | 1000 | ngi | -106 | bgs. | | | | | | | |
| | | | | | | | | egin | swak | lang | 106-10 | 1' logs | | |
| 1 | 430 | | | | 0 | | | 10 | | | | 101-9 | | Ţ |
| | 1455 | com | stete | swal | doing | 101-9 | 6. WO | Her / | ac lor | can | 0 | | -0 | |
| | 1510 | Rem | ove | swal | o, veta | ana : | sand 1 | inéo | s ne | eded | | | | |
| 1 | 1520 | End | der | 48.39 10pm | 141.15-4 | for da | ay - | | | | | -80 | up | 51 |
| | Nod | | pm | inf/u | VOrk | 1 on | 0 | 122. | | | | - 5/1. | DISI | 20 |
| | | TAG | Ē | 47.62 | .141.15 | | | | | | | Hari | they - | |
| 1 | 0750 | Begi | n su | Jabbi | na 96 | -91'6 | as- | | | | | TICAT OF | 100110 | r |
| | 010 | comp | | SINO | whind | 96 | 10 | 95.B | anna | wable | 0009 | 1-9/11 | | |
| 0 | alin | Lompi | 0010 | wabk | ina | 91-81 | 1 bas | 10 | - | abbi | 10 81 | 20.1 | ogs- | |
| 1 | 0.80 | comp | etes | Nable | ing | 86-81 | 1695.0 | hogi | 1 54 | habbir | y or | 7116 | gs | |
| Si | ample ID and | Time: | | Y | | | 1-0- | ecji | 1 | quui | 1 <u>9</u> 01- | 16 00 | 5 | |
| T | otal gallons n | emoved at c | ompletion o | of developmen | t: | SEE | PAG | 61 | | | | | | |

ER-1 - Well Development Record



| Well ID ER-1 | Measuring Point (MP) ft. (ags /bgs) | | | ndis Oversight Page H(fr. Bhsp) | | | Screen Interv | al (ft. bgs) |
|--|--|---------|---------------|---------------------------------------|--------------------------------|-------------------------|---------------|--|
| Time Task GPM | DTW Total Depth (ft. BMP) (ft. BMP) | Temp 'C | pH (+ 1.0) | ORP (mV) | Cond. (µ\$/cm) (+ 0.03%) | Turb NTU (<10.0 NTU) | (+ 0.3 mg/L) | Notes/Gallons Removed/Water Clarity |
| 20930 complete | swabbing | 81-71 | 'bas | Ma | ter 19 | te br | Pak. | |
| UTIS Degnin SI | Nadoma 7 | 6-71'1 | Ogs. | | | | cours | |
| 0120 10056 S | walapina. | 19 1 | nain | tan | ace | | | |
| 1025 Resume | swabbing | 76-7 | 1'60 | 5 | | | | |
| 1045 complete | swabbin. | a 76- | 71' bg | s. Beg | in su | Jabbi | ng7 | 1-66' has |
| 1110 complete | Swapping | 71-66 | bas. | | | | 5 | |
| 1155 Begin su | habbing bi | 0-61' | bgs | | | | | |
| 1220 complet | re swarbbir | y 66- | 61 bg | S.Be | ins | NOR | oing | 01-56' bgs. |
| 1210 Winplut | C. SNIQDDI | 1961 | -56' V | ogs. | Begi | nsu | abbit | 1956-51 bgs |
| is complet | a swappon | nas | -46 | 56- | 51.1 | a.5 0 | min | support FI-41 |
| 1335 complete | suadoing | 51-44 | ' 695 | DON | otn | eed th | NUEC | 0 46-45 bgs |
| 1350 Re1000 | rea of sur | en v | eing | above | wat | terle | vel. | ACTOPEAK |
| 1350 Remove. 1420 Tag - | 47.67 141.15 | np ot | r dr | m | prep | tot | | |
| 1423 Begin b | | in) | | | | | | Hard botton |
| 1425 WILECT F | fan bails | inna | e.sow | ne sitt | Fine | s, lovo | un | |
| 1435 cotteet th | | | | | | 2 | | |
| troublesh | noot/main | tanor | 10 0 | Dill T | 0 | need | F | ailing, |
| IUUR Dacina L | hailung | | | | | | | be greased |
| 1455 collect FS | Fth bail r | nd san | nple,5 | top 10 | ailin | 9. Fein | TIKes | w. Bayles agp |
| i - ivig | 49.21 141.15 | | | | | | 4 | tavd bottom |
| 1503 Prep to | SUDA (FOU | (AN) C | ycre) | | | | | and borrow |
| 1510 Begin to | sunday sh | abbi | 19136 | -131 | bgs | | | |
| 1535 complete | suaboing | 136-1 | 31'60 | S. Br | gint | R | | |
| 1540 Tag - | | | | | - | | | - |
| 1541 End deut | CONTRACTOR AND | or De | ay | | | | | -9 lip 5/21 |
| Concentration of the Concentra | 17.65 141.15 | 10.1 | 1 | | | | F | tard botton |
| 5130 Begin Swi | abbing 131 | -126 | ogs | - | | | | |
| 1755 Complete : | swallang 13 | 1-126 | 695. | Begin | SW | abbin | 19 126 | 2-121' bgs. |

ER-1 - Well Development Record



| - | | a local and the second | | | | | |
|---------|---|--|-----------------------|--|--------------------------|---------------------------|---------|
| | | | | | | | |
| | G | | -see po | ige 1 - | | | - |
| | Well Development Record | Project Name: PG | &E Topock Phase 2A GW | U | | PG_14_ of 2 | 12 |
| - | Date(s) | Project # 30126255 | Arc | adis Oversight Ellen | Redner AN | | |
| | Well ID ER-1 | Measuring Point (MP) ft. (ags /bgs) | Total Dep | th (ft. BMP) | Screen Int | erval (ft. bgs) | - |
| | DTW (ft. BMP): | DTW (ft. bgs): | Water column | the second s | | | _ |
| | Bia | | P. l 61 | 12 Diameter of | or weatern.): | Gallons in well: Water | _ |
| | Rig operator: Surge block make and | Rig type: | 0 | Bailer make and size | K | added: | _ |
| | | Pump make | e and size: | | _ | Water source: | _ |
| FIGEL | Time Task GPM | DTW Total Depth (ft. BMP) (ft. BMP) T | pH 'emp *C (+ 1.0) | Cond. ORP (mV) (μS/cm) (± 10.0 mV) (± 0.03%) | Turb NTU DO (mg/L) | Notes/Gallons | |
| Cont | 20820 complete | | | 5. Begin SI | (<10.0 NTU) (± 0.3 mg/L) | Removed/Water Clarity | |
| | 0845 complete | swabbing | 121-116 6 | as Baain a | wadang 1 | 41-116 0g5 | |
| | 0910 complete a | anabling III- | Il'he Pe | gs. Legini- | wavang | 116-111 bgs | - |
| | 0935 complete | in abbing 116- | LOG'LOGO | gin swabb | ping 111-106 | 095 | - |
| | 0950 Begin SINO | Idoing 11-106 | he vys. | #C/Watter | break | | - |
| | | ualdana lu lo | (1) D D | | | | - |
| | 1 | Vabbing 111-10 | 10 wgs. Dec | in swabb | ing 106-101 | 1 bgs | - |
| | was | swabbing in | 26-101 K | gs Begin | swabbing 1 | 01-96.692 | |
| 0 | anyor | swaldoing 101- | | | | | |
| (0) | | Joldang 96- | | | | | |
| | - my great | swabbing | 96-91.09 | 5 Begin a | waldbing 9 | 1-86 bgs | |
| | 1245 complete | swabbing q | 1-00 69 | S, AC/WAA | er break | 0 | |
| 6 | | bbing 86-81 | | | | | |
| | | Jabloing 86- | or logs, B | regin swa | abbing 8- | 76'bgs | |
| | 1405 complete su | Nabbing 81- | 76 695 | Water/Ac | break | | |
| | 1430 Begin swa | bbing 76-71' | bgs | | | | |
| | 1455 complete su | Jabbing 76-71 | bgs, beg | in swaldon | ng 71-66' | ms | |
| | 1520 UN PIETC 30 | Javang 11766 | bgs | | 3 | 95 | |
| 6 | | 17.71 141.15 | | | | thavy bottom | - |
| | 1530 End develo | | day- | | | - 2012 | 5/25/22 |
| 5/26/22 | | 7.67 141.15 | | | | Carte | - |
| | 0820 begin swa | bbing 66-61' | bgs | | | tard bottom | 2 |
| | 0845 completes | wabbing bb-1 | ol' bgs. Bee | in swabbi | 19 61-561 N | 2015 | |
| 0 | 0910 Compute S | wabbing bi- | -Slo has 1 | Legio Sural | ni Ci ci | 242 | |
| | | | | ocynt owyk | Jung 56-p | 1 logs | |
| | Total gallons removed at completion of de Arcadis Staff: | velopment: SEE | PAGE 1 | | | | |
| | | | - | | | | |
| | | | | | | | |
| | | | | | | | |

ER-1 - Well Development Record



| Wellow | RCAD | DIS min | aufancy M | | - | -see p | age ? | 1- | • | | ir 27 |
|---------------------|--------------|---------------|--|------------------------------|---|----------------|---------------|-------------------|------------------|------------|---------------------------|
| Date(s) | velopment R | lecord | | Project Nat ct # 30126255 | me: PG&E To | pock Phase 2A | PG_15_ of 21/ | | | | |
| Well ID | E | R-1 | | ing Point (MP) | ft. | | Arcadis Over: | light: <u>THE</u> | in Red | and a | RCADIS Job Title: |
| DTW | (ft. AP): | | DTW | (ags /bgs) (ft. | | Total | Depth (ft. BM | P) 112 | | Screen Int | erval (ft. bgs) |
| | | | bgs): | | - / | | (ft): 614 | Diamet | er of well (in.) | | Gallons in well: |
| Surge | Rig opera | | / | Rigty | pe(| 10 | Bail | er make and s | size: | | Water added: |
| | | lize: | | Pun | np make and : | size: | | | _ | | Water source: |
| Time | 100% | GPM | DTW (ft. BMI | P) (ft. BMP) | | рН с (±1.0) | ORP (m | | n) Turb NT | | |
| 26/22 09? | is con | nelete | swab | bing s | and the second se | | | | | -46.6 | A C |
| 100 |) con | plate | swak | bing S | 1-46'1 | oas. Do | not r | ued + | TO SIAL | 10 46- | US' bas |
| | OUR | TOU | offer l | evel be | ing b | elow. | that | SPETI | n of | Screa | water Ac brea |
| 1015 | Pre | e to b | ail (| sixthti | met | ital.t | ird ti | mein | a servi | a rou | nd of |
| 102 | der | epphy | (nt) | | | / | | 1 | - autor | 100 | |
| | | gin bu | | | | | | | | | |
| 1030 | | | | oail sc | | | | | | | |
| 1100 | | G SIN | th bai | lend so | mple, | end ba | iling | | | | Bailed out approx 25 gal. |
| - 110; | 2 1019 | | 52.(| 1141.15 | 1 | | 0 | | | | Hard bottom |
| 110 | | 9 960 | | nentf | | ing - | | | | | -genp 51 |
| 51/22 0802 | | - | | 141.15 | | | | | | | Harris I. |
| 0820 | 1.101 | 011 3 | ×21' | grop bi | mp | + 3'd | NOP p' | ipe + | 3' du | OP PID | tor riser=> |
| AGIE | 0011 | ANT O | T pur | AP SET | @ 69 | bgs.7 | iotali | zer se | 101 | | |
| 0915 | 109 | - | 97.94 | - | | | | | | | |
| 0925 | Star | + pu | mpin | 6 | | K | 5 | | | | |
| | 1.1 | 3.959 | | - | 32.1 | 162.9 | 7.32 | 7.926 | 36.5 | 2.46 | |
| 0930 | 1 mill | 3.845 | | - | 30.9 | 7.82 | 117.7 | 8.102 | 51.1 | 1.86 | |
| 0935 | pump | 4.10 | 64.80 | - | 30.5 | 7.76 | 97.3 | 8.004 | 101 | 251 | |
| 0936 | Tag | post | Contraction of the local distance of the | ge #1 | | 0 | | | | | |
| 0942 | | - | 60.77 | - | 30.4 | 7.80 | 81.5 | 8.132 | | 4.21 | ER |
| | pump | 1 2 | ~ ~ | | | 2 | | | | | |
| 0947 | 1 1 | 4.03 | 66.7 | | 30.4 | 1.80 | 81.5 | 8.132 | 106 | 4.21 | |
| 0948 Sample ID a | pump | ott | -Surk | je #2 | | | | | | | |
| | | completion of | developmen | t Se | 66 | PAGE . | 1 | | | | |
| Arcadis Staf | | | | | | | | | | | |
| | | | | | | | | | | | |

ER-1 - Well Development Record



| | Date(s) | opment Rec | | Projec | Project Name | e: PG&E Topo | ock Phase ZA G | rcadis Oversig | ht F11ex | Redo | er / N | PG 16 of 22 Incadis Job Title: |
|------|----------------|-------------|----------|---------------|-------------------------------|----------------|----------------|----------------|--------------|----------------|--------------------------|-----------------------------------|
| • | Well ID | EK | 2-1 | | ng Point (MP) fr ags /bgs) | t | | epth (ft. BMP) | Insell | Mca | ellan | erval (ft. bes) |
| | DTW (R BMP) | | | | ft. | | | nn, 1,12 | 2 | af welt (In.): | - | Gallons in well: |
| | | Rig operato | | | | Cu | 2 | - | - | | | Water |
| | | ock make an | d d | - | Rig typ | | | Bailer | make and siz | ie: | | added: Water |
| | | | | DTW | Total Depth | o make and siz | pH | ORP (mV) | Cond. | - | 00/01 | source: |
| 1/22 | 0953 | Task TQ9 | GPM | (ft. BMP |) (ft. BMP) | Temp *C | | (± 10.0 mV | | | DO (mg/L) (+ 0.3 mg/L | |
| 17. | 0954 | pum | | 22 | 1 | | | | | | | |
| | 0959 | | - | 2 66.65 | - | 30.7 | 7.79 | 77.2 | 8405 | 35 | 3.25 | |
| | 1000 | 1 | | | surge # | - | 1. 3 3 | 11.6 | 0.905 | 55 | 5.23 | |
| | 1005 | Tag | 0 192255 | 61.7 | - | | | | | | | |
| | 1006 | PUN | p or | | | | | | | | | |
| | (011 | pump | 3.95 | 66.50 | 1 - | 30.4 | 7.87 | 81.0 | 8.523 | 32.6 | 3.21 | |
| | 1012 | pum | p of | if - si | rge # | 4 | | | | 04.0 | | |
| - | 1017 | Tag | - | 61.7 | - | | | | | | | |
| | 1018 | | 1p or | 2 | | | | | | | | |
| | 1023 | pump | | | - | 30.3 | 2.89 | 84.0 | 8.608 | 29.5 | 2.74 | |
| | 1024 | pum | | | rge # | 5 | | | | | | |
| 034 | 1029 | Tag | 10000 | 59.3 | - | | | | | | | |
| | 1035 | pump | | | | | | | | | | |
| | 1040 | pump | 00 | | ar corry | 31.1 | | 76.2 | | 26.3 | 2.50 | |
| | 1041 | pumi | | - | - | | grop | 616 | e-6 | otton | 1 OF | pung |
| | 1103 | how | Set | @ 9k 53.78 | s' logs | | | | | | | Pumped= 174 gal |
| | | | | | | - | | | | | | |
| | 12:08 | PAG P | - | 48.65 | - | | | | | | | |
| | 12000 | 2 | 400 | s in | 111 | 0711 | 799 | 2- | | | | |
| | 12:10 | Perms | 3.85 | 5000 | - | 31.9 | 1.11 | ++ | 6.089 | 1.03 | 272 | |
| - | 12:15 | emp | 3.78 | 13.0 | - | 20.8 | TIT | 81.2 | 7.11 | 37. 9 | \$2.95 | |
| 1. | Sample ID an | 2000 | | | | 69.5 | 8.93 | pers | 1.026 | 16.8 | 2.51 | |

ER-1 - Well Development Record



| | Date(s) Well ID | | | Measuring R | 30126255 Point (MP) ft. | | | adis Oversight | - <u>Min204</u> | ACCEN | | CADIS Job Title: |
|---|--------------------|------------------------------|---------------------------|---|----------------------------|---------------|--------------|-------------------------|-----------------|-------------------------|--------------------------|--|
| | DTW (ft. | | | DTW (ft. | (/bgs) | n d | Total Der | pth (Rt. BMIP) n | _ | / | Scale Hite | nal (ft. bgs) |
| | BMP): | | | bgs): | -0 | l | in mai-jit | * | Diameter d | sf well (in.): | | _ Gallons in well: Water |
| | | tig operator: ck make and | | / | Rig type: | | | Baller m | take and size | e | | added: Water |
| - | 11 | size: | | | Pump | make and size | | 1 | Cond. | - | | source: |
| 1 | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp 'C | pH (순1.0) | ORP (mV) (± 10.0 mV) | (µ5/cm) | Turb NTU (<10.0 NTU) | 00 (mg/L) (±0.3 mg/L) | Notes/Galions Removed/Water Clarity |
| | | Romp | | 67.70 | - | 29.8 | 7.96 | 77.5 | 8.87 | 15.9 | 3.08 | |
| | 12:22 | Ping | off | | | | | | | | | 5 |
| 1 | | TAG | Concernance of the second | 63.55 | | | | | | | | |
| | 12:30 | Permp | on | | | | | | | | | 1st cycle |
| ſ | | Perop | | | | 30.7 | 9.99 | 742 | 4.28 | 17:9 | 3.42 | |
| | | Perp | | | | | | | | | | 5 |
| I | | TAG | | | 5 | | | | | | | |
| | | Pom | | | | | 1 | | | | | 2nd cycles |
| | | Emp | | | - | 31.1 | 7.97 | 82.9 | 8.91 | 18.4 | 6.93 | |
| | | Permy | | | | | | | | | | |
| 1 | | 746 | | 62.54 | | - | | | | | _ | |
| | | Puny | the second second second | and the second se | | | | | - | | | 3rd cycle |
| | | Parapy | | | - | 29.8 | 7.94 | 87.5 | 8.89 | 18.9 | 3.27 | |
| - | | lom | | | | | | | | | | « |
| 1 | | TAB | | 62.69 | | | | | | | | |
| | | Permy | | | | | 7.0. | | | | | 4th cycle |
| | | Parap | | 69.97 | - | 29.2 | 6.71 | 88.5 | 8.84 | 11.7 | 3.24 | |
| | | Permp | | 12.70 | | | | | | | | 1 |
| | | TAG Permp | | an | | - | | | | | | |
| I | | 1000 | 1000 | 1001 | | 20 1 | 7 | (10) | | 10 | | Sth cycle |
| | | Pemp | 1 | | | | | 86.1 | | | | - |
| | 2.52 | Romp | oft. | - | | | | de. | | | | |
| 1 | Sample ID ar | nd Time: | | | of p. | ipe | down | 10/L . | hory | now | set at | 111' BTC |

ER-1 - Well Development Record



| V | Well Develop | Ment Record | Design & Consultancy for extend and built costs | , | - | | Phase 2A GW | Remedy | N / | 1/001.11 | | PG_18 of Z |
|---|----------------------------|---------------|---|-------------------|---------------------------|---------------|-------------|----------------|------------------|----------------|--------------|------------------|
| C | Date(s) _ | | | Project # | 30126255 oint (MP) ft. | | _ Arc | adis Oversight | Ansel | MCLU | Cont AN | ADS 300 TIDE |
| | | ER- | L | | /bgs) | | Total Des | th (ft. BMP) | | / | Screen Inte | rval (ft. bgs) |
| | DTW (ft. BMP): | | | DTW (ft. bgs): | A | 6/ | Water colum | n | Diameter o | of well (in.): | | Gallons in well: |
| | R | ig operator: | | | Ang type: | - | | Bailer m | ake and size | = | | Water added: |
| | Surge bloc | k make and | / | | Rumo | make and size | | | | | | Water source: |
| [| | | | DTW | Total Depth | | pH | ORP (mV) | Cond. (µS/cm) | Turb NTU | DO (mg/L) | Notes/Gallons |
| + | Time | Task | GPM | (ft. BMP) | (ft. BMP) | Temp *C | (± 1.0) | (± 10.0 mV) | | | (± 0.3 mg/L) | |
| 1 | 13:55. | | | 57.48 | | | | - | | | - | |
| + | 13:56 | Firmt | ON | | | | | | | | | |
| - | 19:02 | Permp | 3.83 | 66.32 | - | 302.1 | | 104.9 | | | | |
| - | 14.08 | Imp | 3.78 | 69.27 | - | 29.1 | 7.84 | 103.8 | 8.816 | 8.74 | 3.03 | |
| - | 14:12 | Pemp | 3.78 | 12.5\$ | - | 21.2 | 7.83 | 1.90.5 | \$.489 | 13.1 | 3.03 | |
| | 14:14 | Por | p or | F | | | | | | | | 1st cycle |
| | 14:22 | 7+06 | - | 85.54 | | | | | | | | - |
| | 14:23 | Permy | nes | | | | | | | | | |
| | 14:28 | Pinp | 4.4 | 21.49 | - | 29.2 | 2.81 | 99.8 | 8.79 | 13 16.3 | 2.83 | |
| | 14:30 | Pony | 0 07 | f | | | | | | | | 2nd cyde |
| | 14:33 | TAG | - | 65.31 | | | | | | | | |
| | 14:38 | Pin | np of | 2 | | | | | | | | |
| | | Pemp | 1 | | - | 29.6 | 7,81 | 1,02.6 | 8.79 | 10.2 | 3.44 | |
| | 19:46 | Pimp | off | | | | | | | | | 3rd cycle |
| | | TAG | | 66.37 | | | | | | | | you |
| | 14:52 | Pun | 20 01 | 2 | | | | | | | | |
| | | Pomp | 1 | | _ | 29.6 | 7.82 | 93.1 | 8.809 | 6.06 | 3.37 | |
| | | Pinp | | | | | | | | | | 4th and |
| | | TAG | | 8591 | | | | | | | | 4th cycle |
| | | Pump | | | | | | | | | | |
| | 15110 | Permp | 3.97 | 1197 | - | 29.6 | 2.83 | 105.5 | 9.504 | 466 | 3.96 | |
| | | Pomp | | Chair P | | | | | | 2.00 | | 50 1 |
| | 15119 | | | 66.29 | | | | | | | | Sth cycle |
| | Sample ID | | | | | | - | | | | | |
| | Total gallo Arcadis Sta | ns removed at | completion o | development | nt: 4 | 566 | PAGE | T | | | | |

ER-1 - Well Development Record



| bat | :e(s) _ | (| | Project # | | | Arca | dis Oversight: | Ansel | with | Uondarca | UIS 700 Title: | - |
|-----|-----------------|------------------|------------|---|--------------------------|----------------|-------------------------------|-------------------------|----------------------|-------------------------|---------------------------|--|-----|
| Ne | II ID _ | ER- | - 1 | | oint (MP) ft. /bgs) | | Total Dept | th (ft. BMP) | 1- | | Screen Interv | et (ft. bgs) | - |
| DT | W (ft. BMP): | | | DTW (ft. bgs): | | 0 0 | Water column in well (ft): | | Diameter of | f well (in.): | | Gallons in well: | - |
| | pi | g operator: | | | | al | / | | ake and size: | | | Water added: | |
| | | k make and | | / | Rig type: | | | - Baller m | ake and size: | | | Water | |
| | | size: | | | Pump | make and size: | | | Cond. | - | | source: | i |
| | Time | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | pH (±1.0) | ORP (mV) (± 10.0 mV) | (µS/cm) (± 0.03%) | Turb NTU (<10.0 NTU) | DO (mg/L) (± 0.3 mg/L) | Notes/Gallons Removed/Water Clarity | |
| 110 | 5:20 | Pomp | on | | | - | | | | | | | |
| | | | | 22.12 | - | 29.4 | 7.80 | 96.0 | 8,74 | 3.73 | 3.21 | - | |
| | | | PO | | | | | | | | | 11 | 1 |
| | | | | | mont | for t | the d | by - | | | | AMPL | 5/3 |
| | 5:05 | Ada | 1 2 | i'd | 190 | Dia | - Pui | no | sat | at . | 132' | BTC | |
| 9 | F:24 | TAG | | 47.92 | | pa | 101 | - | | | | | |
| | | | | | | ~ / / | SWAB | anc | Inn | ine m | LAVE | | |
| | | 05 | | Inte | | 100 | JWAB | DIN'S / | Deve | 000 901 | | | |
| 1 | ?:Z₹ | Pun | | | o Pan | 4.4 | T. | PUM | 0 | | | | |
| | 1:31 | | pon | N | J TSh | Ca | 23 | 10m | P | | | | |
| | 9:36 | 101 | 10 | 55.72 | - | 318 | 7.84 | 153.3 | 9.58 | 387 | 321 | | |
| - | 9:41 | | | 59.88 | | | 7.19 | | | | | | |
| - | F:46 | | | 64.40 | | 1 | 7.41 | | | | | | |
| | | | | | | LI.L | 7.11 | 1970 | 40.47 | 13.2 | | 1 4 1 | |
| | | | 0 01 | | | | | | | | | 1st cycle | |
| | | | 01 | | | | , | or | | | | | |
| - | 1.58 | | 0 0 | and the second se | - ORF | 1.00 | ULS E | s He | | | | | |
| - | - | | | | TELU, | | | | | | | | |
| 1 | \$138 | remp | 294 | >7.53 | | | ~ | 271- | | - | | 2nd cycle | |
| F | Pfis | emp | 24 | 64.1 | - | 28.6 | 2.55 | 2 +53 | 8.76 | 7.85 | 3.15 | | |
| - | \$18 | P | 3.85 | 6857 | | 24.0 | 7.48 | -9.1 | 8.74 | 6.16 | 2.68 | | |
| - | \$ 12G | Pemp | 3.72 | 73.78 | | 29 | 7.43 | -80 | 8.54 | 6.26 | 3,25 | 2nd cycle | |
| | | | p of | | | | | | | | | 40 | |
| - | \$:46 | - and the second | | 65.89 | 1 | | | | | | | | |
| | ample ID a | | compliates | of developme | 56 | e PAG | 6 1 | | | | | |] |

ER-1 - Well Development Record



| Date(s) | | | | Project # | 30126255 | | Arca | dis Oversight: | Anot | Man | ellordanc | a 20 of 22 ADIS JOB TITLE: |
|----------------|--------|----------------|--|---|--------------------------|----------------|---------------|-------------------------|-------------------------------|-------------------------|---------------------------|--|
| Well ID | 4 | ER- | 2 | | oint (MP) ft. /bgs) | | Total Dep | th (ft. BMP) | | | Screen Inter | val (ft. lugs) |
| DTW BA | (R. | | | DTW (ft. | Gallons in well: | | | | | | | |
| | | | | | 0 | 26 | Water column | - | Diameter of | | | Water |
| - | Sec. 1 | operator: | _ | | Marrise | / | | Bailer m | ake and size: | | | added: |
| Suike | DIDEK | make and size: | | _ | Pump | make and size: | | | | | | source: |
| Time | | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp *C | pH (± 1.0) | ORP (mV) (± 10.0 mV) | Cond. (µS/cm) (± 0.03%) | Turb NTU (<10.0 NTU) | DO (mg/L) (+ 0.3 mg/L) | Notes/Gallons Removed/Water Clarity |
| Time LØ <4 | 17 | Pump | on | | | | | | | | | |
| 18:5 | 2 | | | 72.22 | - | 30.6 | 7.69 | 36.5 | 8.61 | 6.74 | 3.44 | |
| | | | off | | | | | | | | | 3.d cycle |
| | | 126 | | 55.81 | | | | | | | | |
| 11.0 | 31 | Pemp | on | | | | | | | | | |
| | | | | 72.55 | - | 32.3 | 7.85 | -26.6 | 8.64 | 1.78 | 3.29 | |
| | | | off | | | | | | | | | 4 ed cycle |
| | | | 4,08 | 67.6 | _ | 35.2 | 7.82 | >14.0 | 8.72 | 1.52 | 3.23 | 4rd cycle Peremotere ware |
| | | Romp | | | | | | | | | | from 11:09 disregard |
| | _ | 1 | | 73.25 | - | 29.8 | 2.44 | -15.Z | 845 | | 3.55 | - sieja a |
| | | - | off | | | | | | | | | Sth cycle |
| | | TAC | | 55.5 | (1 | 0.(4: | 7.92/ | 5 5)= | 15 | 8.63 | 0/ | |
| | | TAC | Contraction of the local distance of the loc | 54.59 | | | 1.5 | 5.2) | | 0.00 | 1.9 | |
| | | | np or | | | TAR | | PLL.C | | ~ 1 01 | | TIT |
| | | | | 57.87 | | 1 AK | | 10014 | ic o | APAC | TTY | TEST |
| | | | | 59.95 | | | | | | | | |
| | | | 1.95 | and the second se | | | | | | | | 12AAAA |
| | | Imp | | | | 30 4 | 7.88 | 1.3 | 9.115 | | 2 111 | Xesting - |
| | | Imp | | | | | 7.51 | | | | 1.08 | YEL HE YSIN |
| 101 | | | 194 | 62.35 | | 61.1 | 1.01 | 504 | 4.58 | | 9.9 | YS1#Z |
| | | | | 63,32 | | | | | | | | |
| | | | | 63,32 | | | | | | | | |
| | | | | 64.17 | | | | | | | | |
| 12:4 Sample | | | | 0.06 | | | | | | | | |
| | | | completion | of developme | ot: C | ec + | 266 | 1 | | | | |

ER-1 - Well Development Record



| | t Name: PG&E Topock Phase 2A | GW Remedy Arcadis Oversight: A1.5 & | 1 MCC IN A | PG_2_ of _2 |
|--|------------------------------|--|--------------------------|---------------------------|
| Date(s) Project # 30125 | | Arcadis Oversign: <u>J.S.1.5 - C</u> | | |
| Well ID <u>ER~(</u> (ags /bgs) DTW (R. DTW (R. | Total | Depth (ft. BIMIP) | | terval (ft. bgs) |
| SIMP):bp): | in well | White V Diamete | | Gallons in well: |
| Rig operator: a | ie type Of GI | Bailer make and si | | Water added: |
| Surge block make and size: | Pump make and size: | | | Water source: |
| | Depth pH | ORP (mV) (µS/cm | | |
| Time Task GPM (ft. 8MP) (ft. 1 12:45 TAG 1.91 (5.41 | BM(P) Temp "C (±1.0) | (± 10.0 mV) (± 0.03% | 6) (<10.0 NTU) (± 0.3 mg | /L) Removed/Water Clarity |
| 12:50 746 1.89 68.92 | | | | / |
| 12:55 +26 200.3 66.45 | | | 1 | / |
| 13: 00 TAG 200.5 66.92 | | | 11/2 | |
| 13:35 TAG 1.29.267.51 | | 16 | 11/22 | |
| 13:10 726 199 67.88 | | 1.4/ | | |
| 13:15 TAG (18.368.15 | | V | | |
| 3:20 TAG 678.3 68.41 | / | | | |
| 3125 TAG 188.1 68.75 | | | | |
| 3:30 TLC 198.2 6 8.92 / | | | | |
| 13:35 Parel 196.769.1 - | - 31.3 7.27 | 74 926 | 10100 | |
| 13198 Rump 196.769.26 - | 38 3 7 51 | 110 756 | 1.21 3.72 | |
| 3145 Pump 1.96.669.45 - | 286 7.0 | 1.50 - Gia | 0.80 3.59 | |
| 3150 Pump 196.1 69.59 - | - 295 7/1 | 178.3 2.19 | 1.87 3.51 | |
| 1:55 Rump 1.96.1 69.7 - | 293 769 | 1126.7 1.92 | Ø.12 3.55 | |
| 4:00 Rump 195.5 69.78 - | | | | TOTAL GAL |
| 4: \$\$ Rumo 195.3 69.88 - | 1.00 | 199,5 | 2.04 3.56 | 921.7 |
| 4110 Pemp 1953 70.03 - | 29.0 7.69 | 902 1323 | 1.80 3.84 | < A 44 2 + + + |
| 4.13 Pemp off | 1.0 1.01 | 10.5 1.282 | 1.13 3.54 | TAKEN |
| Hiz Peny on | | | | SPECIFIC CAPACITY |
| 1125 Pomp 293 67.23 - | 200 7-0 | 711 6 | | |
| 4:20 Roma 2 pm (292 | 29.8 7.78 | 35.6 7.43 | 2.0 4.2 | |
| 4:30 Rump 2.02 67.92 - | 29.3 7.79 | 42.5 9.18 | \$.96 3.66 | |
| ple ID and Time: | 29.3 7.78 | 35.2 9.17 | 8.99 3.63 | |
| gallons removed at completion of development: | SEE PAGE | 2 | | |

ER-1 - Well Development Record



| Well Develo | pment Recon | d | | Project Name: 30126255 | PG&E Topock | Phase 2A GW | | 1 | LMa | PG | 22 of Zi |
|--|---|--------------|-------------------|---------------------------|----------------|-----------------------|-------------------------|-------------------------------|---------------------------|---------------------------|--|
| Well ID | ER- | . 1 | Measuring P | oint (MP) ft. | | _ Arci | iais Oversight: | PNSE | L Ma | ICHEARCA | IDIS Job Tibe: |
| DTW (ft. BMP): | | - | DTW (ft. bgs): | ; /bgs) | | Water column | th (ft. BMP) | | _ | Screen Interv | |
| | Rig operator: | | _ ugs). | | 20 | in well (ft): | 20 | | Gallons in well: Water | | |
| | ck make and | | | Kig type: | 1 | | Bailer m | ake and size: | | | added: Water |
| | size: | | | Pump | make and size: | | | L find | | | source: |
| Time 19:44 | Task | GPM | DTW (ft. BMP) | Total Depth (ft. BMP) | Temp °C | рН (<u>+</u> 1.0) | ORP (mV) (± 10.0 mV) | Cond. (µS/cm) (± 0.03%) | Turb NTU (<10.0 NTU) | DO (mg/L) (± 0.3 mg/L) | Notes/Gallons Removed/Water Clarity |
| 022 18:40 | Pump | 2.07 | 68.88 | - | 29.3 | 7.91 | 73 | 9.19 | 1.18 | 3.79 | |
| 14:45 | Pump | 2002 | 69.22 | - | 29.3 | 7.82 | 77 | \$.36 | 1.42 | 3,65 | |
| 14:50 | Pump | 2.01 | 69.58 | - | 29.2 | 7.80 | 48,6 | 9.19 | 1.35 | 3.86 | |
| | | | | - | | 7.80 | 35,4 | 9.37 | 1.19 | 3.45 | SPECIFIC CAPACITY |
| 13:00 | Pump | 2.00 | 10.08 | - | 29.1 | 7.80 | 54.5 | 9.37 | \$.93 | 3.72 | (2.0/(70.07- |
| 15:01 | In | st-U | £.11 | ter | | | | | | | = 8. 29 |
| 15:03 | TUR | BIDIT | y w! | FILTER | | | | | \$.49 | | |
| 15:05 | SAM | PLES | ou | ECTE | 6 | | | | | | |
| and the second sec | and the second se | | 70.22 | | 29.Ø | 7.90 | 101.2 | 9.37 | 1.34 | 5.87 | |
| 1540 | | y of | | | | | | | | | TOTALILER |
| | | D. | 1 | 200 | 1.0 | c c | PIDA | | | et . | 1,\$53 +174 = |
| 1 | 000 | | CH . | 516 | 0151 | | ATA | City | 16 | 51- | |
| - | | | | | | | | | | | |
| - | | | | | | | | - | | | |
| | - | | | - | | 0 | | | | | |
| - | | | | | | 1 | | - | | | |
| - | | 100 | | 1 | | K | A | | | | |
| | | | | - | | - | T | - | - | | |
| | | - | | | | | 2 | 6 | 1. | | |
| | | | | | | | | K | 1. | 2 | |
| | | | | and the second | | 200000 | | | 12 | 20. | > |
| | | | | | | | | | | 1. | 2 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Sample ID a | ind Time: | | | | | | | | | | |
| | | completion o | of development | nt | | | | | | | |
| Arcadis Sta | | | | | | | | | | | |
| | | | | | | | | | | | |

ER-1 - Well Development Record

Attachment 5

Specific Capacity Testing Package



| Location/Well ID | ER-01 |
|--------------------------|---|
| Date | 6/2/2022 |
| Screened Interval Tested | 45 to 136 ft bgs |
| Packer Set Depth | N/A |
| Packer Seal Test | N/A |
| Tests Conducted | Four-step specific capacity test (1.5, 2.0, 2.5, and 5.0 gpm, respectively) |
| Purpose | Well performance test |
| Summary | Specific capacity: 1.5 gpm = 0.10 gpm/ft, 2.0 gpm = 0.09 gpm/ft, 2.5 gpm = 0.08 gpm/ft, and 5.0 gpm = 0.07 gpm/ft. |
| Notes | First step was extended past 2 hours to download and re-program the transducers, and collect water quality parameters. |
| | During the third step of the pump test it was noticed that the timer that was synchronized with the transducer was off by 1 minute. |
| | Manual readings and transducer data are well matched at ER-01 and MW- 62-065. |
| | The third step was conducted at a flow rate of 5 gpm to determine the maximum flow rate possible for the well. The test plan originally intended a flow rate of 3 to 4 gpm. |
| Oversight Signature | Ch. Sill |
| Date | 7/25/2022 |



| Location/Well ID | ER-01 |
|--|----------------------------|
| Date | 6/2/2022 |
| Screened Interval | 45 - 136 ft. |
| Pump Depth (ft btoc) | 132 |
| Packer Depth (ft btoc) | N/A |
| Packer Leak Test (Pass/Fail) | N/A |
| Initial Water Level (ft btoc) | 48.33 |
| Initial Totalizer Reading (gal) | 4176.27 |
| Final Totalizer Reading (gal) | 5611.88 |
| Approx Pumped Volume (gal) | 1435.61 |
| Calculated Volume Purged (gal) | 1466.37 |
| Difference in Volume Pumped vs. Calculated | -30.76 |
| Number of Specific Capacity Steps | 4 |
| Pumping Rates (in order) | 1.5, 2.0, 2.5, and 5.0 gpm |

| Step 1 (1.5 GPM) Time | Change in Time Between Measurements | Elapsed Time | Pumping Rate | Total Volume | Depth to | Drawdown |
|-----------------------------|---|-----------------|-----------------|--------------|------------|----------|
| (HR:MN:SEC) | (min) | (min) | (gpm) | Pumped (gal) | Water (ft) | (ft) |
| 8:44:00 | 0.00 | 0.00 | 0.00 | 0.00 | 48.32 | -0.01 |
| 8:45:00 | 1.00 | 1.00 | 0.00 | 0.00 | 48.73 | 0.40 |
| 8:45:30 | 0.50 | 1.50 | 0.00 | 0.00 | 48.82 | 0.49 |
| 8:46:00 | 0.50 | 2.00 | 1.58 | 0.79 | 49.00 | 0.67 |
| 8:47:00 | 1.00 | 3.00 | 1.39 | 2.18 | 49.68 | 1.35 |
| 8:48:00 | 1.00 | 4.00 | 1.49 | 3.67 | 50.03 | 1.70 |
| 8:49:00 | 1.00 | 5.00 | 1.45 | 5.12 | 50.62 | 2.29 |
| 8:50:00 | 1.00 | 6.00 | 1.45 | 6.57 | 51.05 | 2.72 |
| 8:51:00 | 1.00 | 7.00 | 1.47 | 8.04 | 51.66 | 3.33 |
| 8:52:00 | 1.00 | 8.00 | 1.52 | 9.56 | 51.83 | 3.50 |
| 8:53:00 | 1.00 | 9.00 | 1.52 | 11.08 | 52.19 | 3.86 |
| 8:54:00 | 1.00 | 10.00 | 1.51 | 12.59 | 52.60 | 4.27 |
| 8:55:00 | 1.00 | 11.00 | 1.51 | 14.10 | 52.91 | 4.58 |
| 8:57:00 | 2.00 | 13.00 | 1.50 | 17.11 | 53.58 | 5.25 |
| 8:59:00 | 2.00 | 15.00 | 1.49 | 20.09 | 54.22 | 5.89 |
| 9:01:00 | 2.00 | 17.00 | 1.49 | 23.07 | 54.73 | 6.40 |
| 9:03:00 | 2.00 | 19.00 | 1.49 | 26.04 | 55.26 | 6.93 |
| 9:05:00 | 2.00 | 21.00 | 1.48 | 29.00 | 55.76 | 7.43 |
| 9:07:00 | 2.00 | 23.00 | 1.50 | 32.01 | 56.19 | 7.86 |
| 9:09:00 | 2.00 | 25.00 | 1.52 | 35.04 | 56.68 | 8.35 |
| 9:11:00 | 2.00 | 27.00 | 1.51 | 38.06 | 57.06 | 8.73 |
| 9:13:00 | 2.00 | 29.00 | 1.50 | 41.07 | 57.41 | 9.08 |
| 9:15:00 | 2.00 | 31.00 | 1.50 | 44.08 | 57.79 | 9.46 |
| 9:20:00 | 5.00 | 36.00 | 1.50 | 51.56 | 58.55 | 10.22 |
| 9:25:00 | 5.00 | 41.00 | 1.49 | 58.98 | 59.24 | 10.91 |
| 9:30:00 | 5.00 | 46.00 | 1.48 | 66.39 | 59.82 | 11.49 |
| 9:35:00 | 5.00 | 51.00 | 1.47 | 73.76 | 60.33 | 12.00 |
| 9:40:00 | 5.00 | 56.00 | 1.48 | 81.15 | 60.81 | 12.48 |
| 9:45:00 | 5.00 | 61.00 | 1.47 | 88.52 | 61.11 | 12.78 |



| Location/Well ID | ER-01 |
|--|----------------------------|
| Date | 6/2/2022 |
| Screened Interval | 45 - 136 ft. |
| Pump Depth (ft btoc) | 132 |
| Packer Depth (ft btoc) | N/A |
| Packer Leak Test (Pass/Fail) | N/A |
| Initial Water Level (ft btoc) | 48.33 |
| Initial Totalizer Reading (gal) | 4176.27 |
| Final Totalizer Reading (gal) | 5611.88 |
| Approx Pumped Volume (gal) | 1435.61 |
| Calculated Volume Purged (gal) | 1466.37 |
| Difference in Volume Pumped vs. Calculated | -30.76 |
| Number of Specific Capacity Steps | 4 |
| Pumping Rates (in order) | 1.5, 2.0, 2.5, and 5.0 gpm |

| Step 1 (1.5 GPM) Time (HR:MN:SEC) | Change in Time Between Measurements (min) | Elapsed Time (min) | Pumping Rate (gpm) | Total Volume Pumped (gal) | Depth to Water (ft) | Drawdown (ft) |
|--|--|--------------------------|--------------------------|------------------------------|------------------------|------------------|
| 9:50:00 | 5.00 | 66.00 | 1.48 | 95.91 | 61.41 | 13.08 |
| 9:55:00 | 5.00 | 71.00 | 1.46 | 103.22 | 61.72 | 13.39 |
| 10:00:00 | 5.00 | 76.00 | 1.46 | 110.53 | 61.96 | 13.63 |
| 10:05:00 | 5.00 | 81.00 | 1.47 | 117.90 | 62.16 | 13.83 |
| 10:10:00 | 5.00 | 86.00 | 1.47 | 125.25 | 62.34 | 14.01 |
| 10:15:00 | 5.00 | 91.00 | 1.46 | 132.56 | 62.53 | 14.20 |
| 10:20:00 | 5.00 | 96.00 | 1.46 | 139.87 | 62.67 | 14.34 |
| 10:25:00 | 5.00 | 101.00 | 1.47 | 147.21 | 62.82 | 14.49 |
| 10:30:00 | 5.00 | 106.00 | 1.47 | 154.57 | 62.97 | 14.64 |
| 10:35:00 | 5.00 | 111.00 | 1.46 | 161.85 | 63.07 | 14.74 |
| 10:40:00 | 5.00 | 116.00 | 1.46 | 169.16 | 63.19 | 14.86 |
| 10:45:00 | 5.00 | 121.00 | 1.46 | 176.46 | 63.29 | 14.96 |
| 10:50:00 | 5.00 | 126.00 | 1.46 | 183.77 | 63.37 | 15.04 |
| Total Volume Pumpe | Total Volume Pumped for Step 1 (gal) | | | | | |
| Average Pumping Ra | te (gpm) | | 1.48 | | | |
| Specific Capacity (gp | m/ft) | | 0.10 | | | |



| | Locati | on/Well ID | ER-01 | | | | |
|----------------------|----------------------|------------------|-------------|------------------|----------------|----------------|----------------|
| | | Date | 6/2/2022 | | | | |
| | | ed Interval | | 45 - 136 ft. | | | |
| | | oth (ft btoc) | 132 | | | | |
| | • | oth (ft btoc) | N/A | | | | |
| | Packer Leak Test | | N/A | | | | |
| | Initial Water Lev | · · · | 48.33 | | | | |
| | Initial Totalizer Re | 0.0 / | 4176.27 | | | | |
| | Final Totalizer Re | | 5611.88 | | | | |
| | Approx Pumped V | .0 / | 1435.61 | | | | |
| | Iculated Volume P | - ·· · | 1466.37 | | | | |
| | olume Pumped vs. | | -30.76 | | | | |
| Num | ber of Specific Cap | | 4 | | | | |
| | Pumping Rate | s (in order) | 1.5, 2.0, 2 | 2.5, and 5.0 gpm | | | |
| | | | | | | | |
| Step 2 | Change in Time | Elapsed | | | | | Elapsed |
| (2.0 GPM) | Between | Time from | Pumping | | | | Time from |
| Time | measurements | Test Start | Rate | Total Volume | Depth to | Drawdown | Step 2 Start |
| (HR:MN:SEC) | (min) | (min) | (gpm) | Pumped (gal) | Water (ft) | (ft) | (min) |
| 11:05:00 | 15.00 | 141.00 | 2.04 | 214.31 | 63.65 | 15.32 | 4.10 |
| 11:05:20 | 0.33 | 141.33 | 2.04 | 214.99 | 63.74 | 15.41 | 4.43 |
| 11:05:30 | 0.17 | 141.50 | 2.04 | 215.33 | 63.77 | 15.44 | 4.60 |
| 11:05:40 | 0.17 | 141.67 | 2.04 | 215.67 | 63.80 | 15.47 | 4.77 |
| 11:05:50 | 0.17 | 141.83 | 2.04 | 216.01 | 63.83 | 15.50 | 4.93 |
| 11:06:00 | 0.17 | 142.00 | 2.04 | 216.35 | 63.88 | 15.55 | 5.10 |
| 11:07:00 | 1.00 | 143.00 | 2.05 | 218.40 | 64.15 | 15.82 | 6.10 |
| 11:08:00 | 1.00 | 144.00 | 2.04 | 220.44 | 64.33 | 16.00 | |
| 11:09:00 | 1.00 | 145.00 | 2.04 | 222.47 | 64.48 | 16.15 | |
| 11:10:00 | 1.00 | 146.00 | 2.03 | 224.50 | 64.69 | 16.36 | |
| 11:11:00 | | | 2.03 | 226.53 | 64.88 | | |
| 11:12:00 | 1.00 | | 2.03 | 228.57 | 65.04 | 16.71 | 11.10 |
| 11:13:00 | | | 2.03 | 230.59 | 65.20 | | 12.10 |
| 11:14:00 | 1.00 | 150.00 | 2.02 | 232.61 | 65.37 | 17.04 | |
| 11:15:00 | 1.00 | 151.00 | 2.02 | 234.63 | 65.52 | 17.19 | |
| 11:17:00 | 2.00 | 153.00 | 2.02 | 238.67 | 65.79 | 17.46 | |
| 11:19:00 | 2.00 | 155.00 | 2.01 | 242.69 | 66.08 | 17.75 | |
| 11:21:00 | 2.00 | 157.00 | 2.01 | 246.71 | 66.50 | 18.17 | 20.10 |
| 11:23:00 | 2.00 | 159.00 | 2.01 | 250.73 | 66.53 | 18.20 | |
| 11:25:00 11:27:00 | 2.00 | 161.00 163.00 | 2.00 | 254.73 258.75 | 66.77 66.95 | 18.44 18.62 | 24.10 26.10 |
| 11:27:00 | 2.00 | 163.00 | 2.01 | 258.75 | | 18.62 | |
| 11:29:00 | 2.00 | 165.00 | 2.01 | 262.77 266.77 | 67.13 67.32 | 18.80 | |
| 11:31:00 | 2.00 | 167.00 | 2.00 | 270.77 | 67.32 | 18.99 | |
| 11:33:00 | 2.00 | 169.00 | 2.00 | 270.77 | 67.66 | 19.16 | |
| 11:35:00 | 5.00 | | 2.00 | 274.77 284.72 | 68.04 | 19.33 | 34.10 |
| 11:45:00 | 5.00 | | 1.99 | 284.72 | 68.33 | 20.00 | |
| 11:43:00 | | 181.00 | 2.00 | 304.63 | 68.60 | 20.00 | 44.10 |
| 11:55:00 | | | 1.99 | 314.59 | 68.80 | 20.27 | |
| 11.55:00 | 5.00 | 191.00 | 1.99 | 514.59 | 00.01 | 20.48 | 54.10 |

Total Volume Pumped for Step 2 (gal)

Average Pumping Rate (gpm)

Specific Capacity (gpm/ft)



Elapsed Time from Step 2 Start

(min)

59.10

64.10

74.10

84.10

94.10

104.10

114.10

124.10

| | | | ER-01 | | 1 | |
|--|---|--|---|--|---|---|
| | Location/Well ID | | | | | |
| | Date | | | | | |
| | | ed Interval | 45 - 136 f | t. | | |
| | | oth (ft btoc) | 132 | | | |
| | Packer Dep | oth (ft btoc) | N/A | | | |
| | Packer Leak Test | (Pass/Fail) | N/A | | | |
| | Initial Water Lev | vel (ft btoc) | 48.33 | | | |
| | Initial Totalizer Re | eading (gal) | 4176.27 | | | |
| | Final Totalizer Re | eading (gal) | 5611.88 | | | |
| | Approx Pumped V | olume (gal) | 1435.61 | | | |
| Ca | Iculated Volume P | urged (gal) | 1466.37 | | | |
| Difference in Vo | olume Pumped vs. | Calculated | -30.76 | | | |
| Num | ber of Specific Cap | acity Steps | 4 | | | |
| | Pumping Rate | s (in order) | 1.5, 2.0, 2 | 5, and 5.0 gpm | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Step 2 | Change in Time | Elapsed | | | | |
| Step 2 (2.0 GPM) | Change in Time Between | Elapsed Time from | Pumping | | | |
| - | • | - | Pumping Rate | Total Volume | Depth to | Drawdown |
| (2.0 GPM) | Between | Time from | | Total Volume Pumped (gal) | Depth to Water (ft) | Drawdown (ft) |
| (2.0 GPM) Time | Between measurements | Time from Test Start | Rate | | • | |
| (2.0 GPM) Time (HR:MN:SEC) | Between measurements (min) | Time from Test Start (min) | Rate (gpm) | Pumped (gal) | Water (ft) | (ft) |
| (2.0 GPM) Time (HR:MN:SEC) 12:00:00 | Between measurements (min) 5.00 | Time from Test Start (min) 196.00 201.00 | Rate (gpm) 1.99 | Pumped (gal) 324.52 | Water (ft) 69.05 | (ft) 20.72 |
| (2.0 GPM) Time (HR:MN:SEC) 12:00:00 12:05:00 | Between measurements (min) 5.00 5.00 | Time from Test Start (min) 196.00 201.00 | Rate (gpm) 1.99 1.98 | Pumped (gal) 324.52 334.42 | Water (ft) 69.05 69.22 | (ft) 20.72 20.89 |
| (2.0 GPM) Time (HR:MN:SEC) 12:00:00 12:05:00 12:15:00 | Between measurements (min) 5.00 5.00 10.00 | Time from Test Start (min) 196.00 201.00 211.00 | Rate (gpm) 1.99 1.98 1.97 | Pumped (gal) 324.52 334.42 354.14 | Water (ft) 69.05 69.22 69.52 | (ft) 20.72 20.89 21.19 |
| (2.0 GPM) Time (HR:MN:SEC) 12:00:00 12:05:00 12:15:00 12:25:00 | Between measurements (min) 5.00 5.00 10.00 10.00 | Time from Test Start (min) 196.00 201.00 211.00 221.00 | Rate (gpm) 1.99 1.98 1.97 1.98 | Pumped (gal) 324.52 334.42 354.14 373.97 | Water (ft) 69.05 69.22 69.52 69.81 | (ft) 20.72 20.89 21.19 21.48 |
| (2.0 GPM) Time (HR:MN:SEC) 12:00:00 12:05:00 12:15:00 12:25:00 12:35:00 | Between measurements (min) 5.00 5.00 10.00 10.00 10.00 | Time from Test Start (min) 196.00 201.00 211.00 221.00 231.00 | Rate (gpm) 1.99 1.98 1.97 1.98 1.97 | Pumped (gal) 324.52 334.42 354.14 373.97 393.66 | Water (ft) 69.05 69.22 69.52 69.81 69.93 | (ft) 20.72 20.89 21.19 21.48 21.60 |

268.99

2.01

0.09



| | | | - | | | | |
|-------------|----------------------|---------------|-------------|------------------|------------|----------|--------------|
| | Locati | on/Well ID | ER-01 | | | | |
| | | Date | 6/2/2022 | | | | |
| | | ed Interval | | 45 - 136 ft. | | | |
| | | oth (ft btoc) | 132 | | | | |
| | • | oth (ft btoc) | N/A | | | | |
| | Packer Leak Test | • • • | N/A | | | | |
| | Initial Water Lev | | 48.33 | | | | |
| | Initial Totalizer Re | 0.0 / | 4176.27 | | | | |
| | Final Totalizer Re | eading (gal) | 5611.88 | | | | |
| | Approx Pumped V | | 1435.61 | | | | |
| | Iculated Volume P | | 1466.37 | | | | |
| | olume Pumped vs. | | -30.76 | | | | |
| Num | ber of Specific Cap | | | | | | |
| | Pumping Rate | s (in order) | 1.5, 2.0, 2 | 2.5, and 5.0 gpm | | | |
| | | | | | | | |
| Step 3 | Change in Time | Elapsed | | | | | Elapsed |
| (2.5 gpm) | Between | Time from | Pumping | | | | Time from |
| Time | Measurements | Test Start | Rate | Total Volume | Depth to | Drawdown | Step 3 Start |
| (HR:MN:SEC) | (min) | (min) | (gpm) | Pumped (Gallons) | Water (ft) | (ft) | (min) |
| 13:10:00 | 5.00 | 266.00 | 2.35 | 464.50 | 70.56 | 22.23 | |
| 13:10:20 | 0.33 | 266.33 | 2.60 | 465.37 | 70.61 | 22.28 | |
| 13:10:46 | 0.43 | 266.77 | 2.59 | 466.49 | 70.70 | 22.37 | |
| 13:11:00 | 0.23 | 267.00 | 2.58 | | 70.85 | 22.52 | |
| 13:12:00 | 1.00 | 268.00 | 2.58 | | 70.99 | 22.66 | |
| 13:13:00 | 1.00 | 269.00 | 2.58 | | 71.25 | 22.92 | |
| 13:14:00 | 1.00 | 270.00 | 2.58 | | 71.41 | 23.08 | |
| 13:15:00 | 1.00 | 271.00 | 2.58 | | 71.62 | 23.29 | |
| 13:16:00 | 1.00 | 272.00 | 2.57 | 479.98 | 71.84 | 23.51 | |
| 13:17:00 | 1.00 | 273.00 | 2.56 | 482.54 | 72.02 | 23.69 | 9.00 |
| 13:18:00 | 1.00 | 274.00 | 2.56 | 485.10 | 72.22 | 23.89 | 10.00 |
| 13:19:00 | 1.00 | 275.00 | 2.55 | 487.65 | 72.36 | 24.03 | 11.00 |
| 13:20:00 | 1.00 | 276.00 | 2.55 | 490.20 | 72.52 | 24.19 | 12.00 |
| 13:22:00 | 2.00 | 278.00 | 2.54 | 495.28 | 72.85 | 24.52 | 14.00 |
| 13:24:00 | 2.00 | 280.00 | 2.54 | 500.37 | 73.17 | 24.84 | 16.00 |
| 13:26:00 | 2.00 | 282.00 | 2.54 | 505.45 | 73.41 | 25.08 | 18.00 |
| 13:28:00 | 2.00 | 284.00 | 2.60 | 510.65 | 73.81 | 25.48 | 20.00 |
| 13:30:00 | 2.00 | 286.00 | 2.60 | 515.85 | 74.03 | 25.70 | 22.00 |
| 13:32:00 | 2.00 | 288.00 | 2.60 | 521.05 | 74.31 | 25.98 | 24.00 |
| 13:34:00 | 2.00 | 290.00 | 2.59 | 526.23 | 74.59 | 26.26 | 26.00 |
| 13:36:00 | 2.00 | 292.00 | 2.58 | 531.39 | 74.82 | 26.49 | 28.00 |
| 13:38:00 | 2.00 | 294.00 | 2.57 | 536.53 | 75.04 | 26.71 | |
| 13:40:00 | 2.00 | 296.00 | 2.58 | 541.69 | 75.25 | 26.92 | |
| 13:45:00 | 5.00 | 301.00 | 2.57 | 554.53 | 75.71 | 27.38 | |
| 13:50:00 | 5.00 | 306.00 | 2.56 | | 76.12 | 27.79 | |
| 13:55:00 | 5.00 | 311.00 | 2.56 | 580.13 | 76.48 | 28.15 | 47.00 |
| 14:00:00 | 5.00 | 316.00 | 2.55 | | 76.81 | 28.48 | 52.00 |
| 14:05:00 | 5.00 | 321.00 | 2.55 | | 77.19 | | |
| 14:10:00 | 5.00 | 326.00 | 2.54 | 618.33 | 77.35 | 29.02 | 62.00 |



| Location/Well ID | ER-01 |
|--|----------------------------|
| Date | 6/2/2022 |
| Screened Interval | 45 - 136 ft. |
| Pump Depth (ft btoc) | 132 |
| Packer Depth (ft btoc) | N/A |
| Packer Leak Test (Pass/Fail) | N/A |
| Initial Water Level (ft btoc) | 48.33 |
| Initial Totalizer Reading (gal) | 4176.27 |
| Final Totalizer Reading (gal) | 5611.88 |
| Approx Pumped Volume (gal) | 1435.61 |
| Calculated Volume Purged (gal) | 1466.37 |
| Difference in Volume Pumped vs. Calculated | -30.76 |
| Number of Specific Capacity Steps | 4 |
| Pumping Rates (in order) | 1.5, 2.0, 2.5, and 5.0 gpm |

| Step 3 (2.5 gpm) Time (HR:MN:SEC) | Change in Time Between Measurements (min) | Elapsed Time from Test Start (min) | Pumping Rate (gpm) | Total Volume Pumped (Gallons) | Depth to Water (ft) | Drawdown (ft) | Elapsed Time from Step 3 Start (min) |
|--|--|---|--------------------------|----------------------------------|------------------------|------------------|---|
| 14:20:00 | 10.00 | 336.00 | 2.53 | 643.63 | 77.76 | 29.43 | 72.00 |
| 14:30:00 | 10.00 | 346.00 | 2.53 | 668.94 | 78.20 | 29.87 | 82.00 |
| 14:40:00 | 10.00 | 356.00 | 2.52 | 694.14 | 78.46 | 30.13 | 92.00 |
| 14:50:00 | 10.00 | 366.00 | 2.50 | 719.14 | 78.47 | 30.14 | 102.00 |
| 15:00:00 | 10.00 | 376.00 | 2.50 | 744.14 | 79.06 | 30.73 | 112.00 |
| 15:10:00 | 10.00 | 386.00 | 2.50 | 769.14 | 79.37 | 31.04 | 122.00 |
| Total Volume Pumpe | d for Step 3 (gal) | | 316.38 | | | | |
| Average Pumping Ra | te (gpm) | | 2.55 | | | | |
| Specific Capacity (gp | m/ft) | | 0.08 | | | | |

| Step 4 (5.0 gpm) | Change in Time Between | Elapsed Time from | Pumping | | | | Elapsed Time from |
|---------------------|---------------------------|----------------------|---------|------------------|------------|----------|----------------------|
| Time | Measurements | Test Start | Rate | Total Volume | Depth to | Drawdown | Step 3 Start |
| (HR:MN:SEC) | (min) | (min) | (gpm) | Pumped (Gallons) | Water (ft) | (ft) | (min) |
| 15:15:00 | 5.00 | 391.00 | 4.93 | 793.78 | 79.70 | 31.37 | 0.00 |
| 15:15:10 | 0.17 | 391.17 | 4.93 | 794.61 | 79.78 | 31.45 | 0.17 |
| 15:15:20 | 0.17 | 391.33 | 4.93 | 795.43 | 79.85 | 31.52 | 0.33 |
| 15:15:30 | 0.17 | 391.50 | 4.93 | 796.25 | 79.95 | 31.62 | 0.50 |
| 15:15:40 | 0.17 | 391.67 | 4.93 | 797.07 | 80.05 | 31.72 | 0.67 |
| 15:15:45 | 0.08 | 391.75 | 4.93 | 797.48 | 80.15 | 31.82 | 0.75 |
| 15:15:55 | 0.17 | 391.92 | 4.93 | 798.30 | 80.25 | 31.92 | 0.92 |
| 15:16:00 | 0.08 | 392.00 | 4.93 | 798.71 | 80.35 | 32.02 | 1.00 |
| 15:17:00 | 1.00 | 393.00 | 4.97 | 803.68 | 81.35 | 33.02 | 2.00 |
| 15:18:00 | 1.00 | 394.00 | 5.00 | 808.69 | 82.30 | 33.97 | 3.00 |
| 15:19:00 | 1.00 | 395.00 | 5.00 | 813.69 | 83.19 | 34.86 | 4.00 |
| 15:20:00 | 1.00 | 396.00 | 4.94 | 818.64 | 84.05 | 35.72 | 5.00 |
| 15:21:00 | 1.00 | 397.00 | 4.92 | 823.56 | 84.85 | 36.52 | 6.00 |



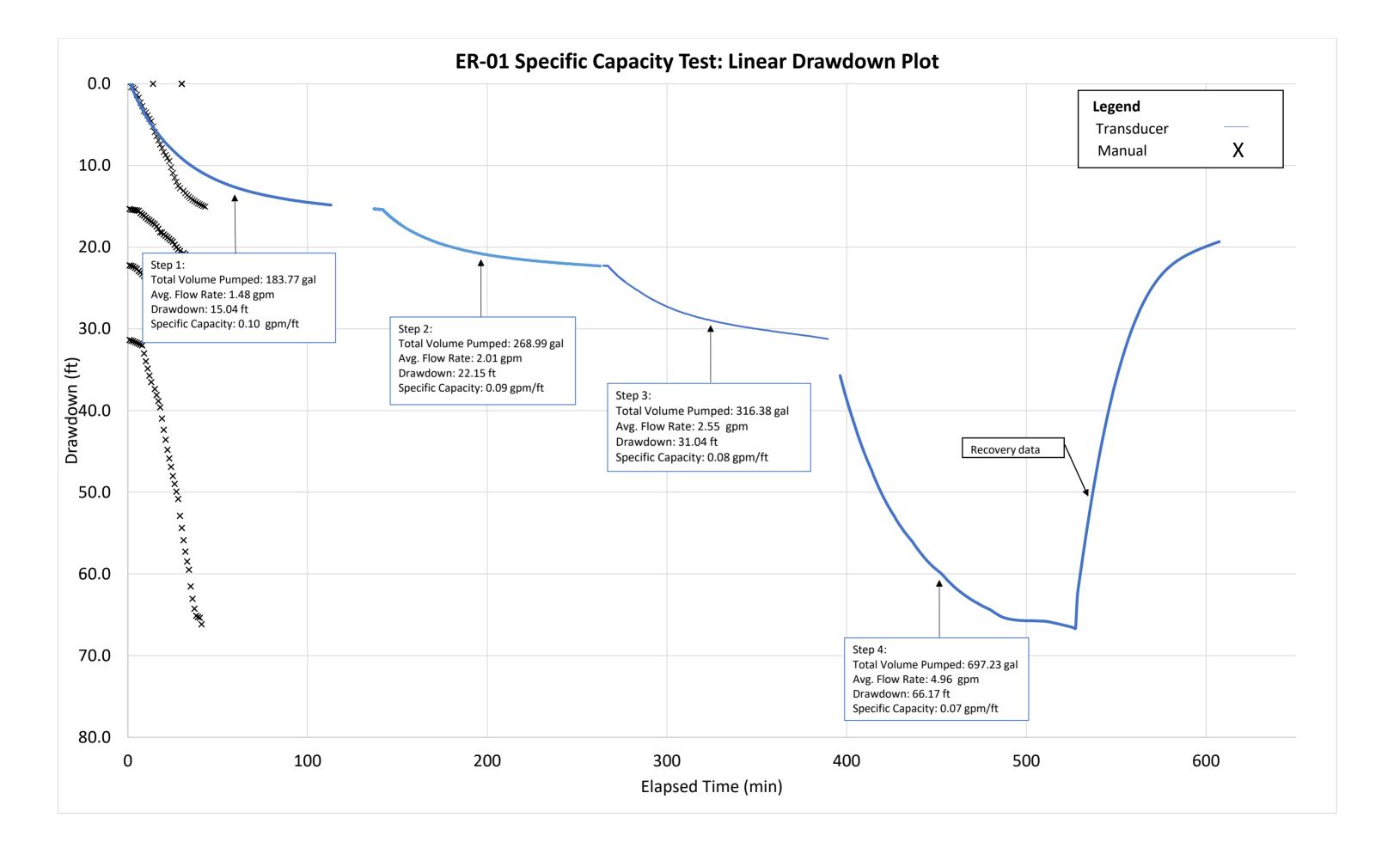
| | | | FD 04 | | l | | |
|-----------------------|-------------------------------------|---------------|-------------------|------------------|------------|----------|--------------|
| | Locati | ion/Well ID | ER-01 | | | | |
| | | Date | 6/2/2022 | | | | |
| | | ed Interval | 45 - 136 1 | rt. | | | |
| | | oth (ft btoc) | 132 | | | | |
| | • | oth (ft btoc) | N/A | | | | |
| | Packer Leak Test | | N/A | | | | |
| | Initial Water Lev | | 48.33 | | | | |
| | Initial Totalizer Re | 0.0 / | 4176.27 | | | | |
| | Final Totalizer Re | | 5611.88 | | | | |
| | Approx Pumped V | | 1435.61 | | | | |
| | Iculated Volume P | | 1466.37 -30.76 | | | | |
| | olume Pumped vs. | | -30.76 | | | | |
| Num | ber of Specific Cap Pumping Rate | | • | 2.5, and 5.0 gpm | | | |
| | Pumping Kate | s (in order) | 1.5, 2.0, 2 | 2.5, and 5.0 gpm | | | |
| | | | | | | | |
| Step 4 | Change in Time | Elapsed | | | | | Elapsed |
| (5.0 gpm) | Between | Time from | Pumping | | | | Time from |
| Time | Measurements | Test Start | Rate | Total Volume | Depth to | Drawdown | Step 3 Start |
| (HR:MN:SEC) | (min) | (min) | (gpm) | Pumped (Gallons) | Water (ft) | (ft) | (min) |
| 15:22:00 | 1.00 | 398.00 | 4.93 | | 85.69 | 37.36 | 7.00 |
| 15:22:00 | 1.00 | 399.00 | 4.94 | 833.42 | 86.43 | 37.30 | 8.00 |
| 15:24:00 | 1.00 | 400.00 | 4.95 | 838.37 | 87.17 | 38.84 | 9.00 |
| 15:25:00 | 1.00 | 401.00 | 4.92 | 843.29 | 87.93 | 39.60 | 10.00 |
| 15:27:00 | 2.00 | 403.00 | 4.89 | 853.07 | 89.31 | 40.98 | 12.00 |
| 15:29:00 | 2.00 | 405.00 | 5.03 | 863.14 | 90.69 | 42.36 | |
| 15:31:00 | 2.00 | 407.00 | 4.99 | 873.12 | 91.91 | 43.58 | 16.00 |
| 15:33:00 | 2.00 | 409.00 | 4.94 | 883.00 | 93.14 | 44.81 | 18.00 |
| 15:35:00 | 2.00 | 411.00 | 4.91 | 892.82 | 94.19 | 45.86 | 20.00 |
| 15:37:00 | 2.00 | 413.00 | 4.97 | 902.76 | 95.22 | 46.89 | 22.00 |
| 15:39:00 | 2.00 | | | | 96.35 | 48.02 | |
| 15:41:00 | 2.00 | | 5.00 | | 97.32 | 48.99 | |
| 15:43:00 | 2.00 | 419.00 | 4.98 | 932.84 | 98.26 | 49.93 | 28.00 |
| 15:45:00 | 2.00 | 421.00 | 4.94 | | 99.15 | 50.82 | 30.00 |
| 15:50:00 | 5.00 | 426.00 | 5.02 | 967.82 | 101.22 | 52.89 | 35.00 |
| 15:55:00 | 5.00 | 431.00 | 4.90 | 992.32 | 102.70 | 54.37 | 40.00 |
| 16:00:00 | 5.00 | 436.00 | 4.85 | 1016.57 | 104.20 | 55.87 | 45.00 |
| 16:05:00 | 5.00 | 441.00 | 5.02 | 1041.67 | 105.60 | 57.27 | 50.00 |
| 16:10:00 | 5.00 | 446.00 | 4.94 | 1066.37 | 106.81 | 58.48 | 55.00 |
| 16:15:00 | 5.00 | 451.00 | 4.89 | 1090.82 | 107.82 | 59.49 | 60.00 |
| 16:25:00 | 10.00 | 461.00 | 5.04 | 1141.22 | 109.87 | 61.54 | 70.00 |
| 16:35:00 | 10.00 | 471.00 | 4.97 | 1190.92 | 111.38 | 63.05 | 80.00 |
| 16:45:00 | 10.00 | 481.00 | 5.04 | 1241.32 | 112.59 | 64.26 | 90.00 |
| 16:55:00 | 10.00 | 491.00 | 5.02 | 1291.52 | 113.45 | 65.12 | 100.00 |
| 17:05:00 | 10.00 | 501.00 | 5.02 | 1341.72 | 113.60 | 65.27 | 110.00 |
| 17:15:00 | 10.00 | 511.00 | 5.01 | 1391.82 | 113.70 | 65.37 | 120.00 |
| 17:30:00 | 15.00 | 526.00 | 4.97 | 1466.37 | 114.50 | 66.17 | 135.00 |
| Total Volume Pumpe | | | 697.23 | | | | |
| Average Pumping Ra | | | 4.96 | | | | |
| Specific Capacity (gp | m/ft) | | 0.07 | | | | |



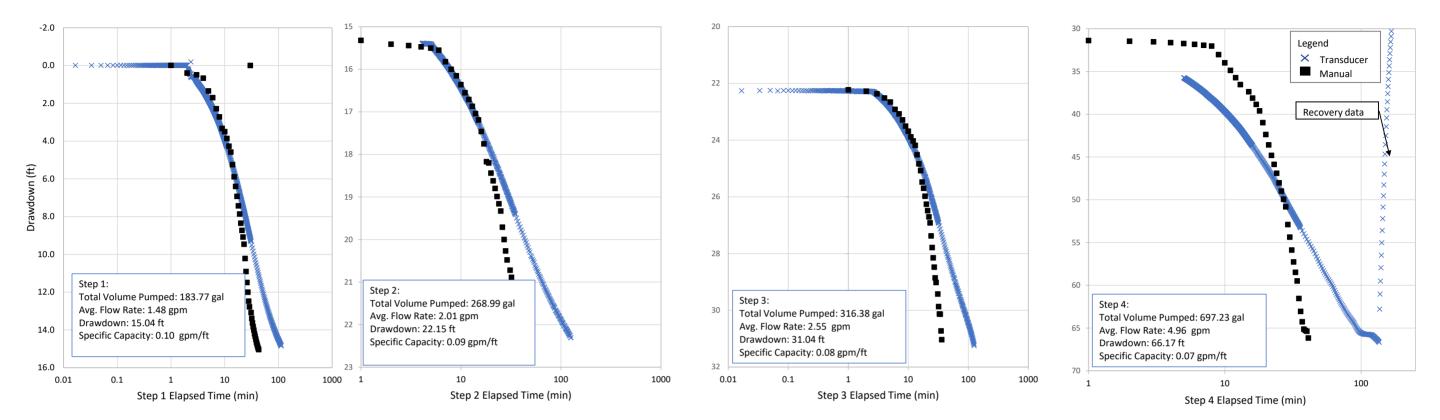
| Location/Well ID | ER-01 |
|--|----------------------------|
| Date | 6/2/2022 |
| Screened Interval | 45 - 136 ft. |
| Pump Depth (ft btoc) | 132 |
| Packer Depth (ft btoc) | N/A |
| Packer Leak Test (Pass/Fail) | N/A |
| Initial Water Level (ft btoc) | 48.33 |
| Initial Totalizer Reading (gal) | 4176.27 |
| Final Totalizer Reading (gal) | 5611.88 |
| Approx Pumped Volume (gal) | 1435.61 |
| Calculated Volume Purged (gal) | 1466.37 |
| Difference in Volume Pumped vs. Calculated | -30.76 |
| Number of Specific Capacity Steps | 4 |
| Pumping Rates (in order) | 1.5, 2.0, 2.5, and 5.0 gpm |

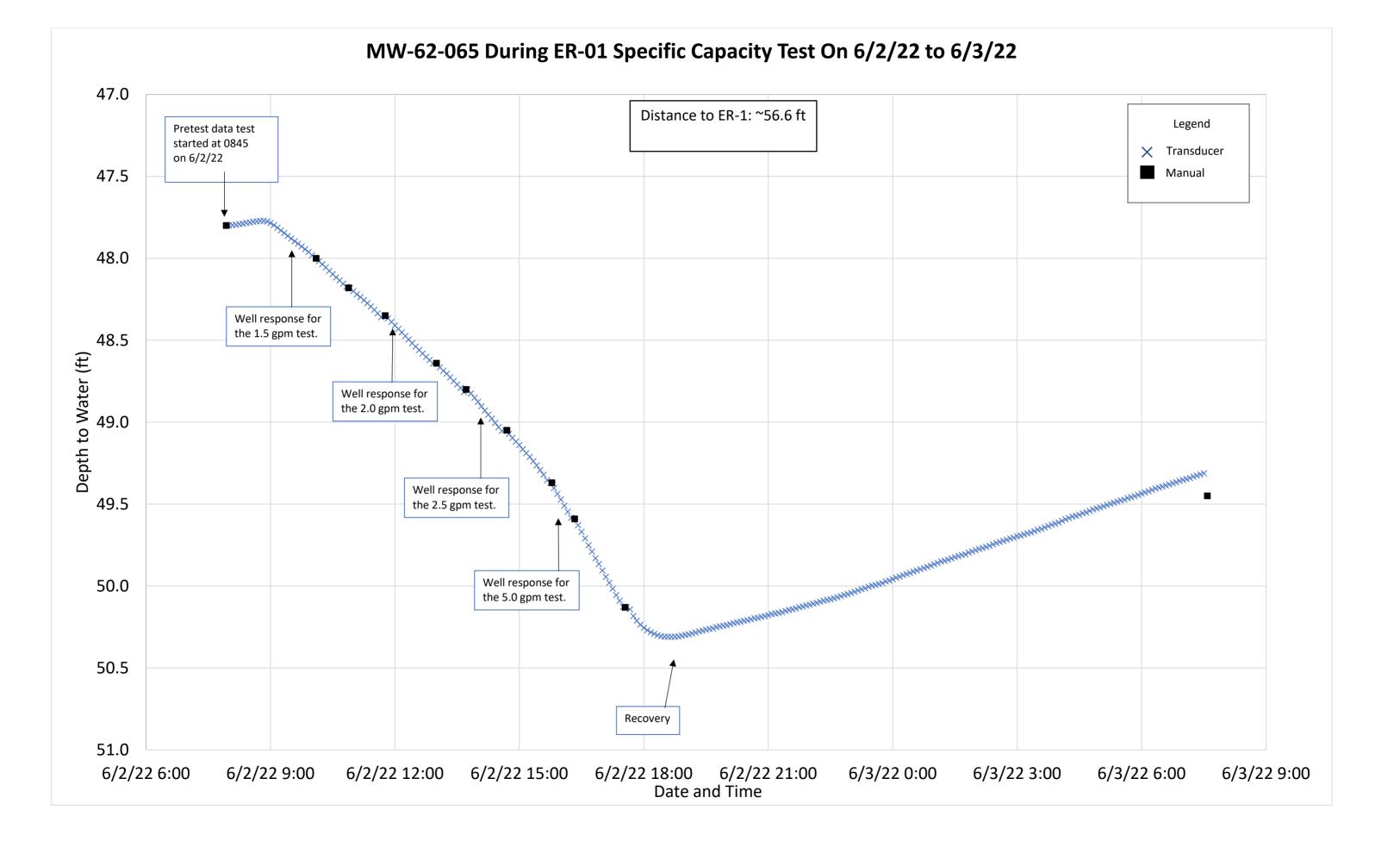
Acronyms & Abbreviations

bgs = below ground surface btoc = below top of casing ft = feet gal = gallons gpm = gallons per minute min = minutes



ER-01 Specific Capacity Test: Semi-Log Drawdown Plot



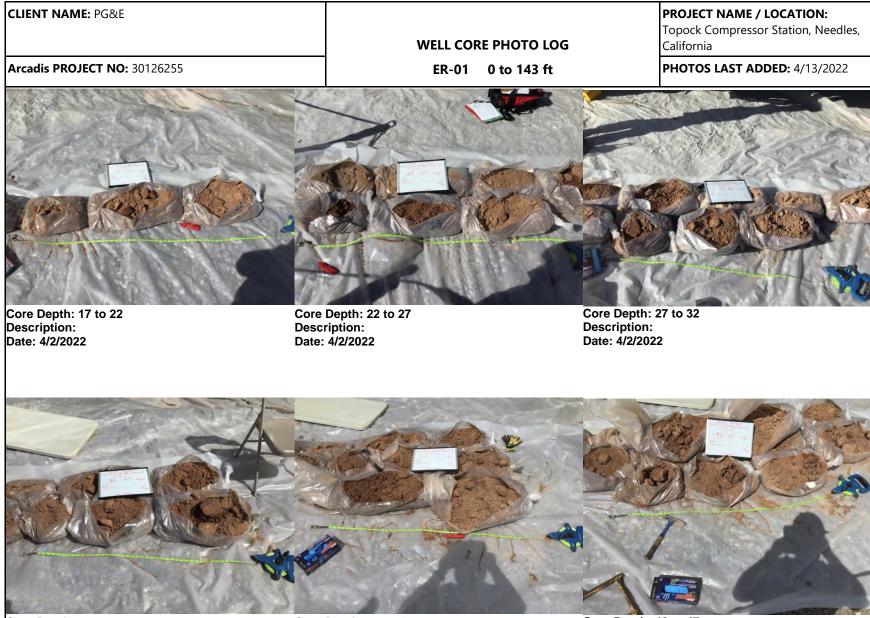


Attachment 7

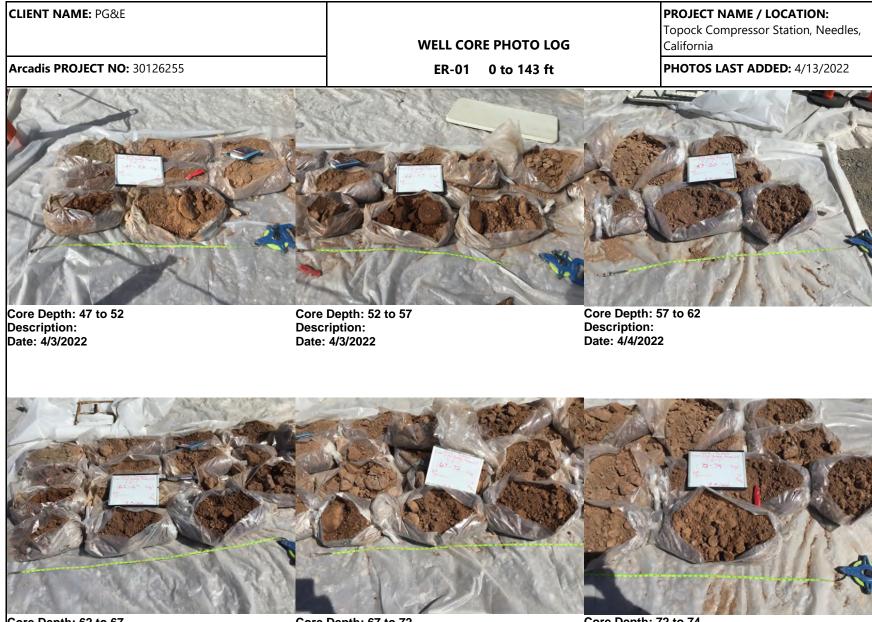
Photo Logs



Core Depth: 7 to 15 Description: Date: 4/2/2022 Core Depth: 7 to 15 Description: Date: 4/2/2022 Core Depth: 15 to 17 Description: Date: 4/2/2022



Core Depth: 32 to 37 Description: Date: 4/3/2022 Core Depth: 37 to 42 Description: Date: 4/3/2022 Core Depth: 42 to 47 Description: Date: 4/3/2022



Core Depth: 62 to 67 Description: Date: 4/4/2022 Core Depth: 67 to 72 Description: Date: 4/4/2022 Core Depth: 72 to 74 Description: Date: 4/4/2022



Core Depth: 87 to 92 Description: Date: 4/5/2022

Core Depth: 92 to 9 Description: Date: 4/5/2022 Core Depth: 97 to 102 Description: Date: 4/12/2022



Core Depth: 117 to 122 Description: Date: 4/13/2022 Core Depth: 122 to 127 Description: Date: 4/13/2022 Core Depth: 127 to 129 Description: Date: 4/13/2022



Core Depth: 129 to 132 Description: Date: 4/13/2022 Core Depth: 132 to 137 Description: Date: 4/13/2022 Core Depth: 137 to 143 Description: Date: 4/13/2022



Core Depth: 137 to 143 Description: Date: 4/13/2022



PROJECT NAME / LOCATION: Final Groundwater Remedy, WELL CONSTRUCTION PHOTO LOG

WELL ID: ER-01

PG&E Topock Compressor Station/Needles, CA







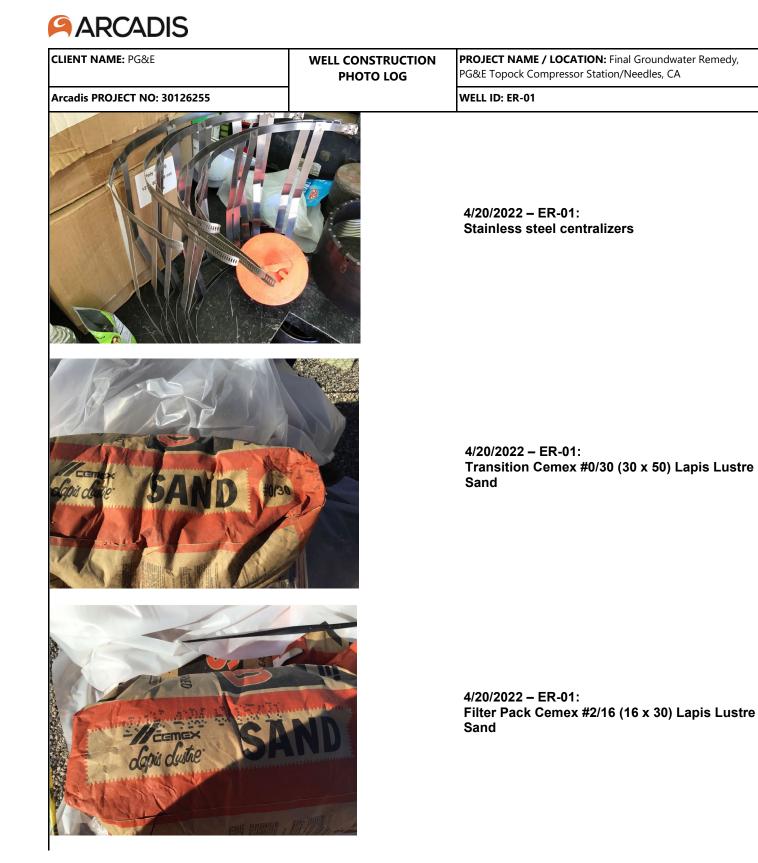
4/20/2022 - ER-01: 6" diameter Schedule 80 PVC casing, and 6-inch diameter 20 slot 316L Stainless Steel Wire Wrapped Screen

4/20/2022 - ER-01: 6-inch diameter 20 slot 316L Stainless Steel Wire Wrapped Screen

4/20/2022 - ER-01: Confirmation gauging of the 20 slot Wire Wrapped Screen



| CLIENT NAME: PG&E | WELL CONSTRUCTION PHOTO LOG | PROJECT NAME / LOCATION: Final Groundwater Remedy, PG&E Topock Compressor Station/Needles, CA |
|--|--------------------------------|---|
| Arcadis PROJECT NO: 30126255 | | WELL ID: ER-01 |
| PVC SCH BO B-RSSR Gin stor PVC Sch BO Riser ZFU Tpes ac | | 4/20/2022 – ER-01: 6-inch diameter schedule 80 PVC well casing |
| PVC SCH 80 B-RSSE Tor Por Sch 80 B-RSSE B- | | 4/20/2022 – ER-01: 6-inch diameter schedule 80 PVC well casing |
| | | 4/20/2022 – ER-01: 6-inch diameter schedule 80 PVC well casing |





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

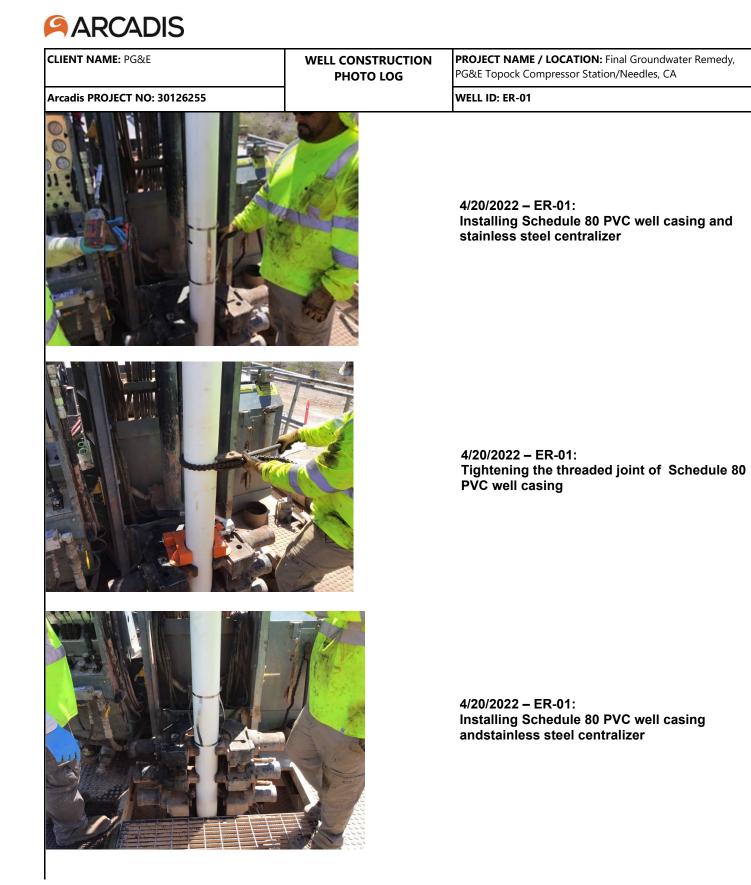
WELL ID: ER-01

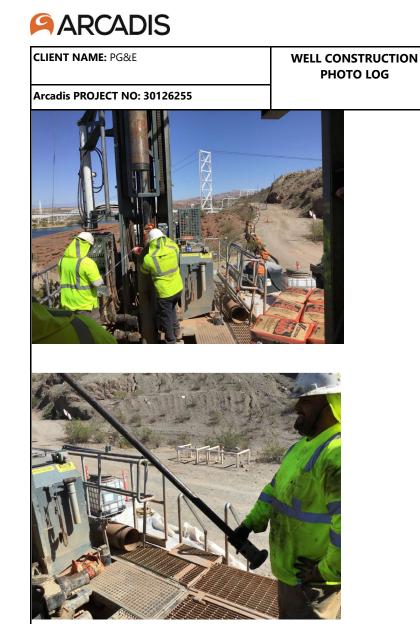
4/20/2022 – ER-01: Installing Schedule 40 PVC sump with stainless steel centralizer

4/20/2022 – ER-01: Installing 20 slot 316L Stainless Steel Screen



4/20/2022 – ER-01: Installing 20 slot 316L Stainless Screen and Schedule 80 PVC well casing







4/20/2022 – ER-01: Installiation of annular well materials

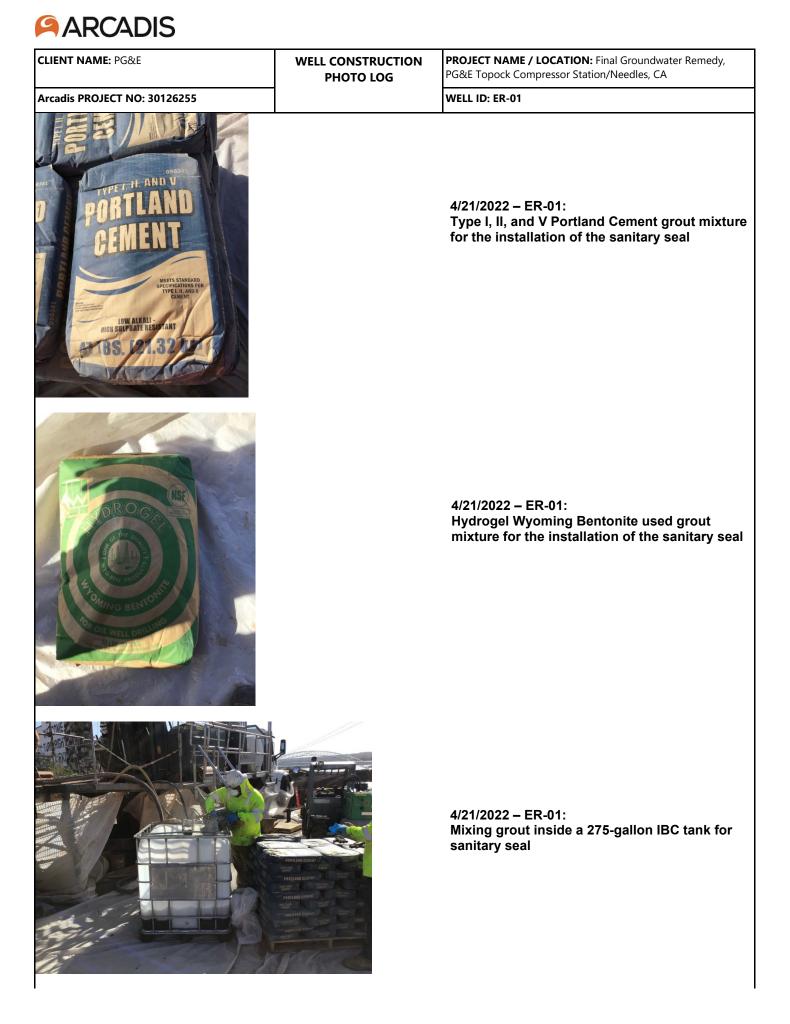
PROJECT NAME / LOCATION: Final Groundwater Remedy,

PG&E Topock Compressor Station/Needles, CA

WELL ID: ER-01

4/20/2022 – ER-01: Swab block used for predevelopment to promote setting of the filter pack prior to the installation of the bentonite seal

4/21/2022 – ER-01: Enviroplug Medium Bentonite Chips used for bentonite seal





CLIENT NAME: PG&E

WELL CONSTRUCTION PHOTO LOG

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

WELL ID: ER-01

4/21/2022 - ER-01:

Arcadis PROJECT NO: 30126255



tremie pipe

I Installation grout for the sanitary seal using a

Measuring the distance from top of casing to ground surface

5/10/2022 - ER-01 2.5x2.5 foot form for the construction of the flush mount well pad

5/10/2022 - ER-01:





| CLIENT NAME: PG&E | WELL CONSTRUCTION PHOTO LOG | PROJECT NAME / LOCATION: Final Groundwater Remedy, PG&E Topock Compressor Station/Needles, CA | | |
|------------------------------|--------------------------------|---|--|--|
| Arcadis PROJECT NO: 30126255 | | WELL ID: ER-01 | | |
| | | 6/3/2022 – ER-01: Confirming outer diameter of "Dummy Tool" used for the alignment test meets Specification 33 22 00 | | |
| | | 6/3/2022 – ER-01: Couple used to construct the 40 foot long "Dummy Tool" | | |
| | | 6/3/2022 – ER-01: Connecting the "Dummy Tool" to the lifting bell | | |

Attachment 8

Video Survey Report



| Company: | | 31 | Pacific Sul Il service geophysical well k Video Survey Re | ogging company | | |
|------------|-------------------------|---|---|----------------|--|--|
| company. | ABC Liovin Drillin | | VILLED SUIVEY KE | ροπ | | |
| Well: | ER-1 | g, inc. | | Date: | 30-Jun-22 | |
| | | | | Run No. | One | |
| Field: | Topock | | | | | Truck PS-9 |
| State: | California | | | Job Ticket: | | |
| Location: | 145453 National | Tenile Links | | Total Depth: | 141.8 ft | |
| | A 10400 HOUUTION | ITAIIS MWY | | Water Level: | 48.4 ft | SWL |
| | | | | Oil on Water | No | |
| SPS: | 34.71515 -114.4 | 48907 | | | | Amount: N/A |
| lero Datum | | nd Level | Tool Zero: Side-Scar | Operator: | Afoh | |
| leason for | Survey: | | Tool Zero: Side-Scar Construction | | | Dead Space 1.08 ft |
| Depth | | A second s | servations | Guides Set | 5.5 inch | |
| .0 R | Begin survey from gro | | servations | | W | ell Details |
| 4 ft | Top of casing. | | | | Perforation: | As-Built |
| 5.9 ft | Transition of casino th | om PVC to Stainless Steel | Carina | | Wire-Wrap | 46 ft to 135.0 ft |
| 5.1 ft | Top of Screen: all are | cost with annual and | uasing. | | | 101100 1001010 |
| 8.4 ft | SWL: Water is clicket | cloudy. Visibility is fair. | Casing. Ible behind the casing wall. | | | |
| 05.0 ft | | | | | | |
| 36.3 ft | Bottom of services are | open with some minor fine | e sediments inside the screens. | | | |
| 16.8 ft | | | | 5. | | |
| 11.5 ft | Top of soft fill. | om Stainless Steel Casing I | to PVC casing. | | | |
| 1.8 tt | Hard fill encountered, | | | | | |
| | | and starter. | | | | |
| | | | | | Casing Size (in) OO ID 6.75 5.75 Casing Material kcreen Material | As-Built 0 ft to 141.3 ft PVC Stainless Steel |
| | | | | | | |
| - | | | | | | |

ER-1 - Downhole Camera Survey Report