Conductor casing Dia: Drill casing Dia:

Rathole Dia:

10.75

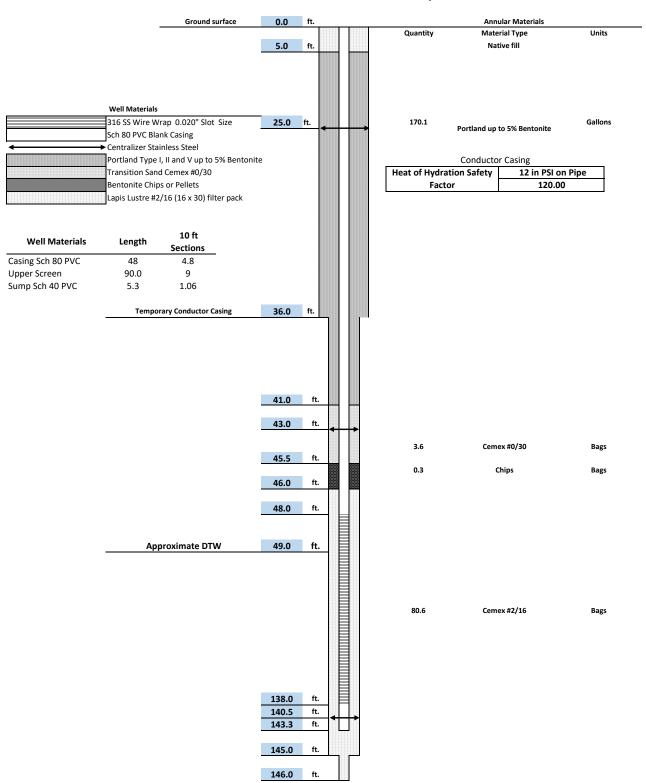
8

ER-02 Final Well Design 05/08/22

Well Casing Outer Diameter: Well Casing Inner Diameter:

6.5 6

Surface Completion:



9	ARC	ADIS			Well Consti	ruction Log	S	Sheet: 1 of 8
Date:	Started:	05/08/2022			_Surface Elevation:	506.35 ft amsl	Well ID: EF	2-02
Date	Completed:	05/10/2022			_Shallow Well Elevation:	506.02 ft amsl		<u> </u>
Drillin	g Co.:	ABC LIOVIN			_Deep Well Elevation:	N/A	Client: PG&E	
Drillin	g Method:	Sonic Drilling			_Northing (NAD83):	2101009.50	Project: <u>Final (</u>	GW Remedy Phase 2A
_∞ Driller	Name:	<u>Eddie Ramos</u>			_Easting (NAD83):	7616642.75	Location: <u>PG&E</u>	Topock, Needles California
[®] Drillin	g Asst:	<u>J. Candelaria</u>	/ F. Pere	ez	_Borehole Diameter:	8-12 inches		
្ឌLogge		Alexis McIntyr			_Static Water Level:	See Log for Depths	Project Number	r: <u>30126255</u>
∯Editor		<u>Sean McGran</u>	е		_Development End Date:			
≝ Total	Depth:	146 ft bgs			_Well Completion:		To Be Completed	in Well Vault
Depth (ft)	Groundwate Sample ID		Code	USCS Class	Construc	tion Details	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
7 2022-08-08/GINT PROJ	-	Fill	SM	* * *	(0.0 - 1.0') Temporary Surface Completion (1.0 - 2.0') Cemex #2/16	(0.0 - 36.0') 12" Diameter Borehole		(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 (16x30) Lapis
2 GINT FILES/00 NEW PHASE 2 GINT FILES/27 CONT FILES/27 CO	-	Weathered Bedrock - Conglomerate		× × × × × × × × × × × × × × × × × × ×	(16x30) Lapis Lustre Sand (2.0 - 5.0') Navite Material (0.3 - 47.1') 6" Sch. 80 PVC Casing			Lustre Sand extended into skirt of vault. Note: Material used to back fill was from the SPY.
	No Groundwater Samples Collected	Weathered Bedrock - Conglomerate	N/A	××××××××××××××××××××××××××××××××××××××	(5.0 - 39.6') Portland Cement 5% Bentonite Type I, II, and V with Hydrogel		(5.0 - 39.6') 139.4 gallons	(5.0 - 39.6') 175 gallons (126%) Note: Grout seal, used >20% of the caculated voume due to potential voids that formed during drilling and grout migration.
Abbre	viations: U	SCS = Unified			ion System, ft = feet, bgs	= below ground surface, an	nsl = above mean	sea level, SS = Stainless
0					•	-		irks represent depth to water

9	ARC	ADIS			Well Cons	struction Log	8	Sheet: 2 of 8
Date S	started:	05/08/2022			_Surface Elevation:	506.35 ft amsl	Well ID: EF	2-02
Date C	Completed:	05/10/2022			_Shallow Well Elevatio	n: 506.02 ft amsl		\-\\\\
Drilling	Co.:	ABC LIOVIN			_Deep Well Elevation:	N/A	Client: PG&E	
Drilling	Method:	Sonic Drilling			_Northing (NAD83):	2101009.50	Project: <u>Final (</u>	GW Remedy Phase 2A
Driller I	Name:	<u>Eddie Ramos</u>			_Easting (NAD83):	7616642.75	Location: <u>PG&E</u>	Topock, Needles California
Drilling		J. Candelaria		rez	_Borehole Diameter:	8-12 inches		
Logge		Alexis McIntyr			_Static Water Level:	See Log for Depths	Project Number	r: <u>30126255</u>
Editor:		Sean McGran	e		_Development End Da			
Total D	Deptn:	146 ft bgs			_Well Completion:	▼ Flush Stick-up truction Details	To Be Completed	in vveli vault
Depth (ft)	Groundwate Sample ID		USCS	USCS Class		udonori Betane	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
21	No Groundwater Samples Collected	Weathered Bedrock - Conglomerate	N/A NR N/A	**************************************	(0.3 - 47.1') 6" Sch. 80 PVC Casing (24.5 - 25.5') SS Centralizer (5.0 - 39.6') Portland Cement 5% Bentonite Type I, II, and V with Hydrogel	(36.0 - 145.0') 10.75" Diameter Borehole	(5.0 - 39.6') 139.4 gallons	(5.0 - 39.6') 175 gallons (126%) Note: Grout seal, used >20% of the caculated voume due to potential voids that formed during drilling and grout migration.
39				X X X X X X X X X X X X X X X X X X		below ground ourfood on	(39.6 - 45.2')	(39.6 - 45.2') 4 bags (89%)

Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, SS = Stainless Steal, NR = No Recovery, N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) static water measured during development and approximate static measured during drilling, respectively.

9	ARC	ADIS			Well Consti	ruction Log	Sheet: 3 of 8			
Date S	Started:	05/08/2022			_Surface Elevation:	506.35 ft amsl	Well ID: EF	R-02		
Date C	Completed:	05/10/2022			_Shallow Well Elevation:	506.02 ft amsl				
Drilling		ABC LIOVIN			_Deep Well Elevation:	N/A	Client: PG&E			
_		Sonic Drilling			_Northing (NAD83):	2101009.50		GW Remedy Phase 2A		
Driller		Eddie Ramos			_Easting (NAD83):	7616642.75	Location: <u>PG&E</u>	Topock, Needles California		
Drilling		J. Candelaria		rez	_Borehole Diameter:	8-12 inches	— — — — — — — — — — — — — — — — — — —	00400055		
Logge Editor:		Alexis McIntyre			_Static Water Level: _Development End Date:	See Log for Depths	Project Number: <u>30126255</u>			
Total D		Sean McGran 146 ft bgs	е		_Development End Date. _Well Completion:		— To Be Completed	in Well Vault		
Total	эсрин.					ction Details	To be completed	iii vvoii vadit		
Depth (ft)	Groundwat Sample II		USCS	USCS			Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume		
41 42 43 44 45		Weathered Bedrock -	N/A	X X X X X X X X X X X X X X X X X X X	(0.3 - 47.1') — 6" Sch. 80 PVC Casing (39.6 - 45.2') Cemex #0/30 (30x50) Lapis Lustre Sand (42.5 - 43.5') SS Centralizer		4.5 bags (39.6 - 45.2') 4.5 bags	Note: Transition sand seal (39.6 - 45.2') 4 bags (89%) Note: Transition sand seal		
		Conglomerate			Enviroplug Medium — Chips		(45.2 - 45.7') 0.3 bags	(45.2 - 45.7') 0.25 bags (83%) Note: Bentonite seal		
47 48 49 50	No Groundwate Samples	r		X X X X X X X X X X X X X X X X X X X	(47.1 - 138.0') — 6" 0.02-Slot 316 SS Wire Wrap Screen					
	Samples Collected	Weathered Bedrock - Conglomerate		X X X X X X X X X X X X X X X X X X X	(45.7 - 146.0') Cemex #2/16 (16x30) Lapis Lustre Sand	= below ground surface, ar	(45.7 - 146.0') 80.9 bags	(45.7 - 146.0') 83 bags (103%) Note: Filter pack. Ran dummy tool and swabbed filter pack for approximately 20 minutes prior to the installation of the bentonite/transition sand seal. Grain-size analysis of the filter pack sand showed a higher percentage of fine-grained sand.		
Steal,	NK = No F	ecovery, N/A =	= Not A	pplicabl	e, نا۷۷ = groundwater, No	otes: solid blue and hollow b	olue water table ma	rks represent depth to water		

Date Started: 05,092,0022 Surface Elevation: 509.35 ft amal Date Completed: 05,002,0022 Shallow Well Elevator: Shallow Well Elevator: Shallow Well Elevator: Shallow Well Elevator: NA Citent: PGAE Topics, Needles California Shallow S	9	ARC	ADIS			Well Const	ruction Log	\$	Sheet: 4 of 8
Date Completed 05/10/2022	Date S	Started:	05/08/2022			_Surface Elevation:	506.35 ft amsl	Well ID: FF	R-02
Drilling Method: Drilling Asst: J. Candelaria / F. Perez Borehole Diameter: Sea Liu chies See Log for Depths Total Depth: J. Berner J. Berne	Date 0	Completed:	05/10/2022			_Shallow Well Elevation:	506.02 ft amsl		<u> </u>
Driller Name: Edde Ramos — Easing (NADSs): 75.168.275 — Location PG&E Topock. Needles California Primiting Asst. J. Candelaria / F. Perez Development End Detection: See Notice (See Notice Canal) Project Number: 30128255 — Project Number: 30128255 — Sea McGrane — Development End Detection: See Log for Depths — Project Number: 30128255 — Projec	Drilling	g Co.:	ABC LIOVIN			_Deep Well Elevation:	N/A	Client: PG&E	<u> </u>
Drilling Assix J. Cancidelaria / F. Percz Borehole Diameter: 8-12 (nches Sept. 10, 10 pc)	Drilling	g Method:	Sonic Drilling			_Northing (NAD83):	2101009.50	Project: Final	GW Remedy Phase 2A
Edgine Alexis Methytre Static Water Level: Sea Log for Depths Project Number: 30126256	Driller	Name:	Eddie Ramos	;		_Easting (NAD83):	7616642.75	Location: PG&E	Topock, Needles California
Total Depth: 1.46 ft bgs.	Drilling	g Asst:	J. Candelaria	/ F. Pe	rez	_Borehole Diameter:	8-12 inches	<u> </u>	
Total Depth: 146 ft bps	ြူ Logge	er:	Alexis McInty	e		_Static Water Level:	See Log for Depths	Project Numbe	r: <u>30126255</u>
Groundwater Sample ID See Supple ID See See See See See See See See See Se	≥			ne		_Development End Date:	6/28/2022		
	Total [Depth:	146 ft bgs			_Well Completion:		To Be Completed	in Well Vault
61	Depth (ft)		Geologic Formation	USCS Code		Constru	ction Details		Note: percentages are the actual
Steal, NR = No Recovery, N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water	— — — — — — — — — — — — — — — — — — —	Groundwate Samples Collected	Bedrock - Conglomerate Weathered Bedrock - Conglomerate Weathered Bedrock - Conglomerate Conglomerate	N/A N/A	x x x x x x x x x x x x x x x x x x x	6" 0.02-Slot 316 SS Wire Wrap Screen (45.7 - 146.0') Cemex #2/16 (16x30) Lapis Lustre Sand tion System, ft = feet, bgs	•	80.9 bags	Note: Filter pack. Ran dummy tool and swabbed filter pack for approximately 20 minutes prior to the installation of the bentonite/transition sand seal. Grain-size analysis of the filter pack sand showed a higher percentage of fine-grained sand.
	∃⊳teal,	NK = N0 F	kecovery, N/A	= inot A	ppiicab	e, هvv = groundwater, Nı	Dies: solia diue and hollow b	olue water table ma	arks represent depth to water

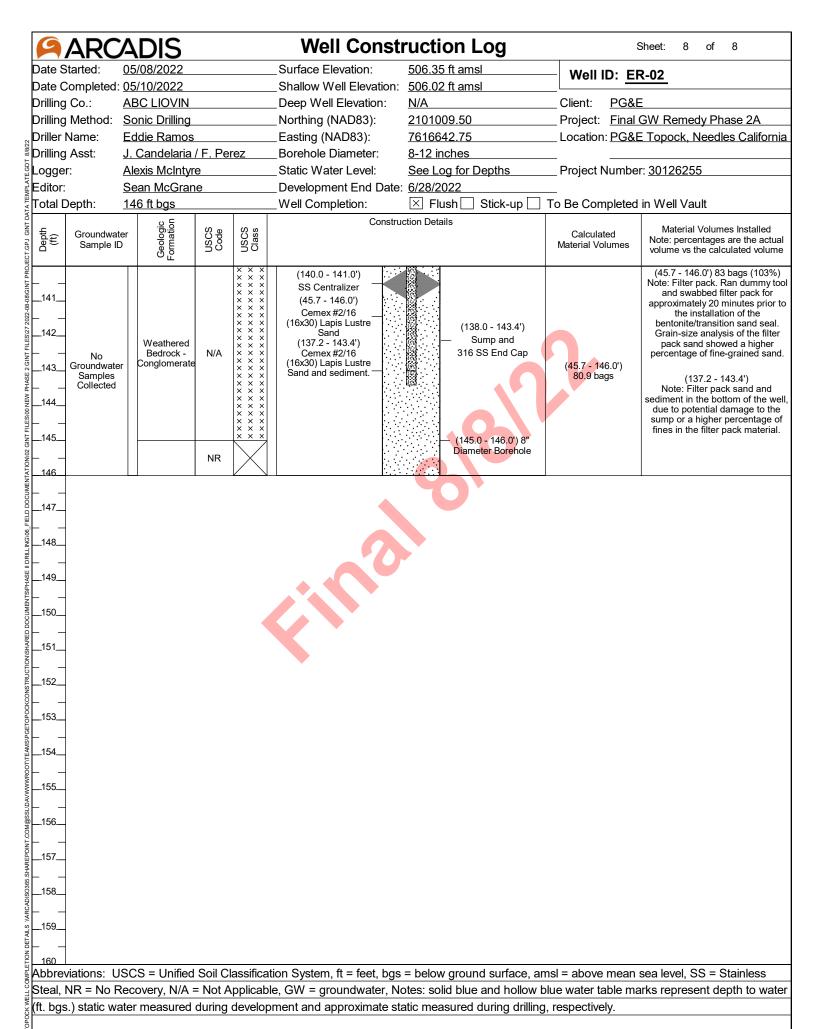
9	ARC	ADIS			Well Const	ruction Log	\$	Sheet: 5 of 8
Date S	Started:	05/08/2022			_Surface Elevation:	506.35 ft amsl	Well ID: EF	R-02
Date (Completed:	05/10/2022			_Shallow Well Elevation:	506.02 ft amsl		<u> </u>
Drilling	g Co.:	ABC LIOVIN			_Deep Well Elevation:	N/A	Client: PG&E	<u> </u>
Drilling	g Method:	Sonic Drilling			_Northing (NAD83):	2101009.50	Project: <u>Final</u>	GW Remedy Phase 2A
Driller	Name:	Eddie Ramos	;		_Easting (NAD83):	7616642.75	Location: PG&E	Topock, Needles California
[®] Drillino	g Asst:	J. Candelaria	/ F. Pe	rez	_Borehole Diameter:	8-12 inches	<u> </u>	
ြူ Logge	er:	Alexis McInty	re		_Static Water Level:	See Log for Depths	Project Numbe	r: <u>30126255</u>
ੂੰ Editor	:	Sean McGrai	ne		_Development End Date:			
≝ Total I	Depth:	146 ft bgs			_Well Completion:		To Be Completed	in Well Vault
Depth (ft)	Groundwat Sample II		NSCS Code	USCS Class	Constru	ction Details	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
8/27 2022-08-08/GINT PRO		Weathered Bedrock - Conglomerat	N/A	X X X X X X X X X X X X X X X X X X X	(47.1 - 138.0') —			
S300 NEW PHASE 2 GINT FILE:	-	Weathered Bedrock - Conglomerat	NR					
1	No Groundwate Samples Collected	Weathered Bedrock - Conglomerat		**************************************	(45.7 - 146.0') Cemex#2/16 (16x30) Lapis Lustre Sand		(45.7 - 146.0') 80.9 bags	(45.7 - 146.0') 83 bags (103%) Note: Filter pack. Ran dummy tool and swabbed filter pack for approximately 20 minutes prior to the installation of the bentonite/transition sand seal. Grain-size analysis of the filter pack sand showed a higher percentage of fine-grained sand.
Abbre	viations: U	SCS = Unified	l Soil C	lassifica	tion System, ft = feet, bas	= below ground surface, ar	nsl = above mean	sea level, SS = Stainless
0					·	-		arks represent depth to water

Date Started: 05/08/2022 Surface Elevation: 506.35 ft amsl Well ID: ER-02 Date Completed: 05/10/2022 Shallow Well Elevation: 506.02 ft amsl				
Date Completed: 05/10/2022 Shallow Well Elevation: 506 02 ft amel	Well ID: ER-02			
Drilling Co.: ABC LIOVIN Deep Well Elevation: N/A PG&E				
Drilling Method: Sonic Drilling Northing (NAD83): 2101009.50 Final GW Remedy F				
Driller Name: Eddie Ramos Easting (NAD83): 7616642.75 PG&E Topock, Nee	<u>dles California</u>			
Drilling Asst: <u>J. Candelaria / F. Perez</u> Borehole Diameter: <u>8-12 inches</u> Alexis McIntyre Static Water Level: <u>See Log for Depths</u>				
Alexis McIntyre Static Water Level: <u>See Log for Depths</u>				
146 ft bgs Well Completion: Stick-up To Be Completed in Well Vault				
Up to Sample ID OF O S O S O S O S O S O S O S O S O S	mes Installed es are the actual			
	alculated volume			
X × X (47.1 - 138.0')				
X X X Wire Wrap Screen X X X X X X X X X X X X X X X X X X				
102				
$\begin{bmatrix} & & & & \\ $	83 bags (103%)			
Note: Filter pack	. Ran dummy tool I filter pack for			
No Groundwater (45.7 - 146.0') (45.7 - 146.0') (45.7 - 146.0') approximately 2 (45.7 - 146.0') the install	minutes prior to ation of the			
Sand Sand Sand Sand Sand Sand Sand Sand	sition sand seal. lysis of the filter			
X X X X X X Pack sand file	owed a higher			
Fig. 1	ne-grained sand.			
111				
[120	Stainless			
Steal, NR = No Recovery, N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent				

9	ARC	ADIS			Well Construct	ion Log	;	Sheet: 7 of 8
Date S	tarted:	05/08/2022			Surface Elevation: 506.0	35 ft amsl	Well ID: El	R-02
	•	05/10/2022			_Shallow Well Elevation: 506.0)2 ft amsl		<u>· · · · · · · · · · · · · · · · · · · </u>
Drilling	Co.:	ABC LIOVIN			_Deep Well Elevation: <u>N/A</u>		Client: <u>PG&E</u>	
Drilling	Method:	Sonic Drilling			_Northing (NAD83): <u>2101</u>	009.50 P	Project: <u>Final</u>	GW Remedy Phase 2A
Driller I		Eddie Ramos			,		ocation: PG&E	Topock, Needles California
Drilling		J. Candelaria		rez		inches		
Logger	:	Alexis McInty				•	Project Numbe	r: <u>30126255</u>
Editor:	\ 4 l	Sean McGrar	ne		_Development End Date: 6/28/		Da Camanlatad	:- \^/-!! \ /!t
Total D	epin:	146 ft bgs			_Well Completion: X F		Be Completed	
Depth (ft)	Groundwat Sample II		Code	USCS		М	Calculated laterial Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
		Weathered Bedrock - Conglomerate	N/A	X X X X X X X X X X X X X X X X X X X	(47.1 - 138.0') 6" 0.02-Slot 316 SS Wire Wrap Screen			
 128 129			NR					(45.7 - 146.0') 83 bags (103%) Note: Filter pack. Ran dummy tool
130	No Groundwate Samples Collected	Weathered Bedrock - Conglomerate	N/A	X X X X X X X X X X X X X X X X X X X	(45.7 - 146.0'). Cemex #2/16 (16x30) Lapis Lustre Sand		(45.7 - 146.0') 80.9 bags	and swabbed filter pack for approximately 20 minutes prior to the installation of the bentonite/transition sand seal. Grain-size analysis of the filter pack sand showed a higher percentage of fine-grained sand.
137 138 139 	riations: U	SCS = Unified	I Soil C	X X X X X X X X X X X X X X X X X X X	(136.2 - 137.2') PVC Well Bung (Plug) (137.2 - 143.4') Cemex #2/16 (16x30) Lapis Lustre Sand and sediment.	ow ground surface, amsl =	= above mean	(136.2 - 137.2') Note: Well bung was installed on 6/8/22 to reduce additional filterp ack from entering the well from potential damage to the sump. (137.2 - 143.4') Note: Filter pack sand and sediment in the bottom of the well, due to potential damage to the sump or a higher percentage of fines in the filter pack material. sea level, SS = Stainless

Abbreviations: USCS = Unified Soil Classification System, π = feet, bgs = below ground surface, amsi = above mean sea level, SS = Stainless

Steal, NR = No Recovery, N/A = Not Applicable, GW = groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) static water measured during development and approximate static measured during drilling, respectively.



9	AR	CADI	S		Bo	ring	g Log		She	eet: 1 of	8
Date S	Started:				Surface Elevation: 506.35 ft amsl			Borin	a No	: <u>ER-02</u>	
Date 0	Comple	ted: <u>05/08/</u>	2022		Northir	ıg (NAI	D83): <u>2101009.50</u>	DOM	ig ivo.	. <u>LIX-02</u>	
Drilling	-	ABC L			Easting		•	Client:	PG&E		
_	, Metho				Total D		146 ft bgs	Project:	Final G	W Remedy Ph	nase 2A
1	, ig Type		Sonic Truck N			•	_	•		Topock, Need	
	Name:		Ramos				Water: 60.0 ft bgs			•	
Drilling			delaria / F. Pe		Sampli		•	Project N	umber:	30126255	
Logge		· · · · · · · · · · · · · · · · · · ·	Willford		Sampli	•		,			
Editor		<u> </u>	McGrane		Conve	-					
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS	USCS	Soil Description			Drilling Notes	Drilling Fluid
 _ 1 _				Fill	SM		(0-1.5 ft) Silty sand with gravel (SM); reddish br fine to very coarse grained, angular to subround small to very large pebbles, angular to subangu angular to subangular; trace small cobbles, ang	d; little silt; lit ılar; little graı	tle nules,		
	5.5			Weathered Bedrock - Conglomerat	N/A	X X X X X X X X X X X X X X X X X X X		r; hard; very rock fragmen are weak an zed by drilling	tts d g		
8 9 10 11 12	5	No Sieve Samples Collected	No Groundwater Samples Collected			X X X X X X X X X X X X X X X X X X X	(7-22 ft) Sedimentary Rock - Conglomerate; rec 5/4); microcrystalline to coarse grained, angula intensely fractured; massive; most fragments o and friable with a few competent rock fragment sample mostly pulverized by drilling process.	r; hard; very bserved are v	weak	(7.0 - 50.0') Rough drilling	(7.0 - 50.0') No drilling fluid used
13 14 15 16 17 18 19	5			Weathered Bedrock - Conglomerat	N/A						
_20		. 11000 - 1	I:E! O:! O!			× × ×				- II ND - I	

9	AR	CADI	S		Bo	ring	J Log	Sh	neet: 2 of	8
Date S	Started:	03/31/2	2022	;	Surface	Eleva	tion: <u>506.35 ft amsl</u>	Boring No	· FR-02	
Date C	Comple	ted: <u>05/08/2</u>	2022	!	Northin	g (NAI	D83): <u>2101009.50</u>	Borning No	<u>LICUL</u>	
Drilling	Co.:	ABC LI	IOVIN		Easting	(NAD	83): <u>7616642.75</u>	Client: PG&E		
Drilling	Metho	od: <u>Sonic [</u>	<u> Drilling</u>		Total D	epth:	146 ft bgs	Project: Final GW Remedy Phase 2A		nase 2A
Drill Ri	ig Type	: <u>Terra S</u>	Sonic Truck N	/lounted	Boreho	le Dian	neter: <u>8-12 inches</u>	Location: PG&E	Topock, Need	les California
Driller	Name:	Eddie F	Ramos		Depth t	o First	Water: 60.0 ft bgs			
Drilling	Asst:	J. Cano	delaria / F. Pe	erez :	Samplii	ng Met	hod: 4 inch x 10 ft. Core Barrel	Project Number:	30126255	
Logge	r:	Grant V	<u> Willford</u>	;	Samplii	ng Inter	rval: <u>Continuous</u>			
Editor:	:	Sean M	<u>//cGrane</u>		Conver	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
21	- 5			Weathered Bedrock - Conglomerate	N/A	X X	(7-22 ft) Sedimentary Rock - Conglomerate; re 5/4); microcrystalline to coarse grained, angula intensely fractured; massive; most fragments of and friable with a few competent rock fragment sample mostly pulverized by drilling process.	ar; hard; very ` bserved are weak		
					NR		(22-23 ft) No Recovery; see Drilling Notes.		(22.0 - 27.0') Top foot of drill	(22.0 - 27.0') No drilling fluid
23					+	× × × × × × × × × × × × × × × × × × ×	(23-50 ft) Sedimentary Rock - Conglomerate; r	eddish brown (2.5YR	run fell out of core barrel during	used
24						× × × × × × × × ×	5/4); microcrystalline to coarse grained, angula intensely fractured; massive; most fragments of and friable with a few competent rock fragment	bserved are weak	extraction onto drill deck/into	
	4					X X X X X X X X X X X X X X X X X X X	sample mostly pulverized by drilling process.	io, ary, 11012. 0010	hopper.	
25						× × × × × ×	170'			
26						× × × × × ×	0-1			
	-					× × × × × ×	. "0"			
27						× × × × × ×				
28						× × × × × × × × ×				
┡ -	-					$\times \times \times$				
29						$\begin{array}{c} \times \times \times \times \\ \times \times \times \times \end{array}$				
30	5	No Sieve Samples	No Groundwater			× × × × × × × × ×				
		Collected	Samples Collected			$I \times \times \times I$				
31				Weathered		× × × × × × × × ×				
32				Bedrock - Conglomerate	N/A					
						$\begin{bmatrix} \times & \times & \times \\ \times & \times & \times \\ \times & \times & \times \end{bmatrix}$				
33						× × × × × × × × ×				
34										
	- 5					× × × × × × × × ×				
35						× × × × × × × × ×			(35.0') 6-inch casing	(35.0') No drilling fluid
36						× × × × × ×			getting hung up at	used
ļ -						× × × × × ×			approxmately 35 ft. bgs. Trip	
37						× × × × × × × × ×			out 6-inch to drill with larger	
 38						× × × × × × × × ×			diameter tooling (see	
	6					× × × × × ×			Drilling Logs). 6-inch pilot	
39						× × × × × × × × ×			hole drilling resumes on	
-						× × × × × ×			4/25/22.	
40 • • • • • •			Initial Call C	 :::::	Cueta		foot has - holow ground surface, ame	.l — ab ava maaan a		Na Danayamı

ARCADIS				Boring Log					Sh	eet: 3 of	8	
Date S	Started:				_ Surface Elevation: 506.35 t			506.35 ft amsl	Borin	a No	: <u>ER-02</u>	
Date 0	Comple	ted: <u>05/08/</u> 2			Northin		•	2101009.50				
Drilling		ABC L			Easting		83):	7616642.75	Client:	PG&E		
1	Metho		-		Total D			146 ft bgs	Project:		W Remedy Pl	
	ig Type		Sonic Truck N	<u>/lounted</u>					Location:	PG&E	Topock, Need	<u>les California</u>
	Name:	Eddie I			-			60.0 ft bgs	5		00400055	
Drilling			<u>delaria / F. Pe</u>	erez	Sampli	-		4 inch x 10 ft. Core Barrel	Project N	umber:	30126255	
Logge Editor:		Grant \	/viiiiord //cGrane		Sampli Conve	•		Continuous				
Euitoi.		<u>Sean N</u>	licGrane		Tonver	Ted to	VVEII.	△ res 🗀 NO				
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS	USCS	(00.50.6	Soil Description		(0.5)(D	Drilling Notes	Drilling Fluid
41 42 43	6					X X X X X X X X X X X X X X X X X X X	5/4); mi intensel and fria	t) Sedimentary Rock - Conglomerate; recrocrystalline to coarse grained, angula y fractured; massive; most fragments of ble with a few competent rock fragment mostly pulverized by drilling process.	r; hard; very bserved are	· weak		
44 45	4			Weathered Bedrock - Conglomera	N/A	× × × × × × × × × × × × × × × × × × ×		18/1				
- 40				Congramora		× × ×						
46						X		Chi				
 47						× × ×						
						× × ×						
48						× × × ×						
L _						× × ×	70					
49						× × ×						
	5		No			× × × × × ×						
50	-	No Sieve Samples	Groundwater Samples			× × × × × ×	/50 ₋ 72 f	t) Sedimentary Rock - Conglomerate; re	addish brown	(2.5VR	¥ (50.0 - 52.0')	(50.0 - 52.0')
		Collected	Collected			× × × × × ×	5/4); m	icrocrystalline to coarse grained, angula	ar; hard; very	· ` .	` Drilling ´	No drilling fluid
51						× × × × × ×	and fria	y fractured; massive; most fragments ol ble with a few competent rock fragment			becoming significantly	used
<u> </u>						× × ×	sample	mostly pulverized by drilling process.			rougher.	
52						× × ×					(52.0 - 64.0')	(52.0 - 64.0')
 53						× × × × × × × × × × × × × × × × × × ×					Rough drilling	No drilling fluid used
55						x x x						
 54						× × ×						
	5					x x x x						
55				Weathered Bedrock -	d N/A	× × ×						
				Conglomera								
56						× × ×						
-						× × ×						
57						× × ×						
-						× × ×						
58						× × ×						
	- 5					X X X X X X X X X X X X X X X X X X X						
59	-					× × ×						
60						X X X X X X X X X X X X X X X X X X						
		11000			-						•	

9	AR	CADI	S		Bo	ring	g Log	9		Sh	eet: 4 of	8
Date S	Started:	03/31/2			Surface	e Eleva	ation:	506.35 ft amsl	Borin	a No	: <u>ER-02</u>	
Date 0	Comple	ted: <u>05/08/</u>	2022		Northin	g (NAI	D83):	2101009.50	Бопп	ig ito.	<u>LIX-UZ</u>	
Drilling	Co.:	ABC L	IOVIN		Easting	- '	•	7616642.75	Client:	PG&E		
_	, Metho				Total D		,	146 ft bgs	Project:	Final G	W Remedy Ph	nase 2A
1	, ig Type		Sonic Truck N			•	neter:	8-12 inches	Location: PG&E Topock, Nee		•	
	Name:		Ramos					60.0 ft bgs			•	
Drilling			delaria / F. Pe		Sampli			4 inch x 10 ft. Core Barrel	Project N	umber:	30126255	
Logge		Grant \	Willford		Sampli	-		Continuous				
Editor:		Sean N	McGrane		Conver	-						
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS	USCS Class		Soil Description			Drilling Notes	Drilling Fluid
61626364656667687171	5	No Sieve Samples Collected	No Groundwater Samples Collected	Weathered Bedrock - Conglomerat	N/A	X X X X X X X X X X X X X X X X X X X	Š/4); mi intensely and friad sample i (60 ft) O) Sedimentary Rock - Conglomerate; recrocrystalline to coarse grained, anguly fractured; massive; most fragments of le with a few competent rock fragmen mostly pulverized by drilling process. bserved slight moisture on rock fragmentary in the competent of the c	ar; hard; very observed are v ts; dry; NOTE	veak	(64.0 - 67.0') Drilling becoming significantly rougher. (67.0 - 105.0') Rough drilling	(64.0 - 67.0') No drilling fluid used (67.0 - 105.0') No drilling fluid used
72 73				Weathered Bedrock - Conglomerat	N/A		(72-73.5	ft) No Recovery; see Drilling Notes.			(72.0 - 77.0') Top portion of drill run fell out of core barrel	(72.0 - 77.0') No drilling fluid used
74 75 76 77 78 79	3.5			Weathered Bedrock - Conglomerat	N/A	/	(2.5YR 5 intensely and friab sample (74-74.3	ft) Sedimentary Rock - Conglomerate 5/4); microcrystalline to coarse grained of fractured; massive; most fragments of the with a few competent rock fragmen mostly pulverized by drilling process. ft) Rock fragments are moist.	l, angular; har bserved are v	rd; very weak	during extraction onto drill deck/soil hopper.	
80		. 11000 - 1	<u> </u>	<u> </u>		×××					<u> </u>	<u>. – </u>

9	AR	CADI	S		Во	ring	J Log	S	heet: 5 of	8
Date C Drilling Drilling Drill Ri Driller I Drilling							D83): 2101009.50 83): 7616642.75	Client: PG&E Project: Final GW Remedy Phase: Location: PG&E Topock, Needles C Project Number: 30126255		
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS	USCS Class	Soil Description		Drilling Notes	Drilling Fluid
81 82 82	5			Weathered Bedrock - Conglomerate	N/A e	× × × × × × × × × × × × × × × × × × ×	(73.5-82 ft) Sedimentary Rock - Conglomerate (2.5YR 5/4); microcrystalline to coarse grained intensely fractured; massive; most fragments of and friable with a few competent rock fragments ample mostly pulverized by drilling process. (82-84.5 ft) No Recovery; see Drilling Notes.	l, angular; hard; very observed are weak	(82.0 - 87.0') Top portion of drill run fell out	(82.0 - 87.0') No drilling fluid used
83 84 85 86	2.5			Weathered Bedrock - Conglomerate	NR e		(84.5-117 ft) Sedimentary Rock - Conglomerat (2.5YR 5/4); microcrystalline to coarse grained intensely fractured; massive; most fragments of and friable with a few competent rock fragment sample mostly pulverized by drilling process.	l, angular; hard; very observed are weak	of core barrel during extraction onto drill deck/soil hopper.	300
87 88 89 90 91 92	5	No Sieve Samples Collected	No Groundwater Samples Collected	Weathered		x x x x x x x x x x x x x x x x x x x				
93 94 95 96	5			Weathered Bedrock - Conglomerate	1,, .	X X X X X X X X X X X X X X X X X X X	(94 ft) Slight increase in competent rock fragm	ents.		
98 98 99 100 Abbrey	6	s: USCS = I	Inified Soil C	lassification	System	× × × × × × × × × × × × × × × × × × ×	feet, bgs = below ground surface, ams	sl = above mean s	(97.0 - 127.0') Began using water to advance in 6-inch casing.	(97.0 - 127.0') 500 gallons of water used; 450 gallons of water recovered; 50 gallons of water lost

9	AR	CADI	S		Bo	oring	g Log	9		She	eet: 6 of	8
, ,	tarted:				Surfac	e Eleva	ation:	506.35 ft amsl	Borin	a No	: <u>ER-02</u>	
Date C	Comple	ted: <u>05/08/</u> 2	2022		Northir	ng (NAI	D83):	2101009.50		g 110.	. <u>LIX-UL</u>	
Drilling	Co.:	ABC L	IOVIN		Easting	g (NAD	83):	7616642.75	Client:	PG&E		
Drilling	Metho	od: <u>Sonic [</u>	<u>Orilling</u>		Total D	epth:		146 ft bgs	Project:	Final G	W Remedy Pl	nase 2A
Drill Ri	ig Type	: <u>Terra S</u>	Sonic Truck N	<u>/lounted</u>	Boreho	ole Diar	neter:	8-12 inches	Location:	PG&E	<u> Fopock, Need</u>	les California
Driller	Name:	Eddie F			Depth	to First	Water:	60.0 ft bgs				
Drilling		· ·	<u>delaria / F. Pe</u>		Sampli	-		4 inch x 10 ft. Core Barrel	Project N	umber: 🤅	30126255	
Logge		Grant \			Sampli	-		Continuous				
Editor:		Sean N	<u>//IcGrane</u>		Conve	rted to	Well:					
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class		Soil Description			Drilling Notes	Drilling Fluid
	6					X X X X X X X X X X X X X X X X X X X	(2.5YR solve) intensely and frial sample	7 ft) Sedimentary Rock - Conglomerats 6/4); microcrystalline to coarse grained y fractured; massive; most fragments of ole with a few competent rock fragment mostly pulverized by drilling process. 101 ft) Rock fragments are moist.	l, angular; har bserved are v	d; very veak		
104 105						× × × × × × × × × × × × × × × × × × ×		,0				
						× × × × × ×					(105.0 - 107.0')	(105.0 - 107.0')
106						× × ×					Significantly rougher	No drilling fluid used
						× × × × × ×		90)			drilling.	
107						× × ×						
	9					X X X X X X X X X X X X X X X X X X X						
108				Weathered		× × ×						
 				Bedrock - Conglomerate	N/A	× × × × × × × × × × × × × × × × × × ×						
109				Congiomera	le .	× × ×						
		No Sieve	No) (× × ×						
110		Samples Collected	Groundwater Samples			× × × × × × × × ×						
		Concolod	Collected			× × × × × × × × × × × × ×						
111				· ·		$I \times \times \times$						
 112						× × × × ×						
112						× × × × × × × × × × × × × × × × × × ×						
113						× × × ×						
						X X X X X X X X X X X X X X X X X X X						
114	3					X						
						× × ×						
115						X X X						
						X X X X X X X X X X X X X X X X X X X						
116	1.5					× × ×						
						× × ×						
_117				<u> </u>		×××	(117-12	Oft) No Recovery; see Drilling Notes.			(117.0 -	(117.0 -
						\ /	(117-120	Try No Necovery, see Drilling Notes.			120.0')	`120.0')
118						$ \setminus /$					drill run fell out	No drilling fluid used
- -	6				NR	X					of core barrel during	
119						/\					extraction onto drill deck/soil	
120						/ \					hopper.	
		- 11000 - 1	1:61 0-:1 01	: :: :	Cuete	v	faat ba	= bolow ground gurfage, ama			- II ND - I	J- D

9	AR	CAD	IS		Во	oring	J Log	S	heet: 7 of	8
	Comple	ted: <u>05/08/</u>	/2022		Surface Northin	ng (NAI	D83): <u>2101009.50</u>	Boring No		
Drilling Drilling Drill Ri Driller I	Methog Type Name:	od: <u>Sonic</u> : <u>Terra</u>	LIOVIN Drilling Sonic Truck N Ramos	<u>lounted</u>	Easting Total D Boreho Depth t	epth: ole Diar	146 ft bgs	Client: PG&E Project: Final (Location: PG&E	GW Remedy Pl	
Drilling Logge Editor:	r:	<u>Grant</u>	ndelaria / F. Pe Willford McGrane		Samplii Samplii Conver	ng Inte	rval: <u>Continuous</u>	Project Number:	30126255	
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic	USCS Code	USCS	Soil Description		Drilling Notes	Drilling Fluid
 121 122 123	6					X X X X X X X X X X X X X X X X X X X	(120-127 ft) Sedimentary Rock - Conglomerate (2.5YR 5/4); microcrystalline to coarse grained intensely fractured; massive; most fragments of and friable with a few competent rock fragments ample mostly pulverized by drilling process. (120.01-122 ft) Rock fragments are moist.	l, angular; hard; very observed are weak		
124 125 126 127	4			Weathered Bedrock - Conglomerat	N/A		8/8/1		(123.0 - 127.0') Drilling becoming significantly rougher. Core fell out of core barrel took two attempts to recover.	(123.0 - 127.0') No drilling fluid used
128 129 130 131 132	2.6	No Sieve Samples Collected	No Groundwater Samples Collected		NR	X	(127-129.4 ft) No Recovery; see Drilling Notes (129.4-145 ft) Sedimentary Rock - Conglomers (2.5YR 5/4); microcrystalline to coarse grained intensely fractured; massive; most fragments of and friable with a few competent rock fragmen sample mostly pulverized by drilling process.	ate; reddish brown d, angular; hard; very observed are weak	(127.0 - 132.0') Top portion of drill run fell out of core barrel during extraction onto drill deck/soil hopper. (127.0 - 137.0') Drilled with water to advance 6-inch casing.	(127.0 - 132.0') No drilling fluid used (127.0 - 137.0') 500 gallons of water used; 400 gallons of water recovered; 100 gallons of water lost
133 134 135 136 137	5			Weathered Bedrock - Conglomerat	N/A	X X X X X X X X X X X X X X X X X X X				
138 139 	8	w 11000 -	Unified Sell O		Conta	X X X X X X X X X X X X X X X X X X X	feet has = helow around surface am	N = obovo recen	(137.0 - 145.0') Drilled with water to advance 6-inch casing.	(137.0 - 145.0') 300 gallons of water used; 200 gallons of water recovered; 100 gallons of water lost

9	AR	CADI	S		Во	ring	J Log		She	eet: 8 of	8
Date S	Started:			;	Surface	e Eleva		Borin	a No.	: <u>ER-02</u>	
	Comple				Northin		•				
Drilling		ABC LI			Easting		•	Client:	PG&E		
_	Metho		-		Total D	•	146 ft bgs	•		W Remedy Pr	
	д Туре		Sonic Truck N		Boreho			Location:	PG&E	Topock, Need	les California
	Name:						Water: 60.0 ft bgs	Droinet Ni		20126255	
Drilling Logge		<u>J. Cand</u> Grant V	<u>delaria / F. Pe</u> Millford		Samplii Samplii	•		Project N	umber: ,	30120233	
Editor:			// illiord // // // // // // // // // // // // //		Conver	-		-			
5											
Depth (ft)	Recovery (ft)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS	USCS	Soil Description			Drilling Notes	Drilling Fluid
5						× × × × × ×	(129.4-145 ft) Sedimentary Rock - Conglomera (2.5YR 5/4); microcrystalline to coarse grained	l, angular; har	d; very		
141						$ \times \times \times $	intensely fractured; massive; most fragments of and friable with a few competent rock fragment				
						× × ×	sample mostly pulverized by drilling process.				
142				\\\4b		× × ×					
	8	No Ciavo	No	Weathered Bedrock -	N/A	× × ×					
143		No Sieve Samples	Groundwater Samples	Conglomerate	e	X X X X X X X X X X X X X X X X X X X					
		Collected	Collected			× × ×					
144_						X					
						× × ×	.0-1				
_145						× × ×	(145-146 ft) No Recovery; see Drilling Notes.			(145.0 -	(145.0 -
	0				NR	X				146.0') Drilled during	146.0') No drilling fluid
146_				1			End of Boring at 146 ft bgs.			cleanout of 10-inch	used
										casing. Sample not	
										bagged or	
										logged.	
149											
<u> </u>											
150											
151											
152											
<u> </u>											
153											
[<u>_154_</u>											
155											
155											
<u></u>											
ALIO:00											
160											
Abbre	viations	s: USCS = L	Inified Soil Cl	assification	Syster	m, ft = 1	feet, bgs = below ground surface, ams	sl = above r	nean se	a level, NR = l	No Recovery,

Date Sarted: 04/28/20/22 Surface Elevation: 506.35 ft amal 201009.50 Completed Out Com	9	ARC	ADI:	5		Drilling Log				Sheet	: 1 of 8
Darling Co. ABC LOVID Easing (AND83) 2101009 50 Color EASC							50)6.35 ft amsl	Davin	a Na i	ED 02 0 inch
Dalling Co. ABC L LOVIN						-			Boring	g No.:	ER-UZ 8-INCH
Dailing Nethod: Rofus-Sonic Total Depth: 14.5.0 https: Project Final GW Remedy Phase 2A Dailing Rame Project Final GW Remedy Phase 2A Sinches Location: PG&E Tools, Needles Project		-				- '			Client:	PG&E	
Driller Name: Eddie Ramos Drill Casing Diameter: Sinches Project Number: 30126255	_					- ,	14	15.0 ft bgs	Project:	Final GW	/ Remedy Phase 2A
Delight Asst J. Candelaria J. Perez Depth to First Water: Rig Geologist: G. Willford J.A. Michity: Depth of Pereinford State of Code Class C	Drill Ri	g Type:	Terra So	nic Truc	k Mount	Conductor Casing Diameter:	9 i	inches	Location:	PG&E To	opock, Needles
Tool-Pusher: N/A Depth to First Water: So. Off. bys. So. Off. So. Willion / A. McIntyre. Converted to Well: Yes No. Off. So. Willing Run (ft) of So. October 1. Octob	Driller I	Name:	Eddie R	amos		_Drill Casing Diameter:	<u>8</u> i	inches	-	California	a
Rig Geologist G. Willford / A. McInhyre Converted to Well: Yes Neg 100 Portion of the Converted of the Conve	_		J. Cand	elaria / F.	Perez	_Drill Bit:			Project Nu	ımber: <u>30</u>	126255
Depth (iii) Parish (iii) USCS (Code Class (See Filed boring log for (S							<u>60</u>				
Degrift of the presentation flate of the pre	Rig Ge	eologist:	G. Wilfo	<u>rd / A. M</u>	cIntyre	Converted to Well:	×	Yes No			
and Average of Code Class (See Pilot boring log for Internal and Pilot Internal in all particles of Internal in all particles of Internal internal in all particles of Internal interna	D4b	Drilling Run ((ft)			Description		Daillian askes and sharmak			
1			e Code			full geologic descriptions)		temporary backfill ma	aterial in drill c	uttings	Drilling Fluid
2	 1		SM					the 6-inch diameter drill casir	ng through 9-ii		r 100 gallons of water used; 0 gallons of water recovered; 100 gallons
$\begin{bmatrix} - \\ 20 \end{bmatrix}$		rates not documented for sonic drilling not required po Specification	or er	**************************************	(7-22 ft) \$	rown (2.5YR 5/4). Sedimentary Rock - Conglomerate;					of water lost

	<u>ARC</u>	<u> </u>	<u> </u>		Drilling Log				Sheet:	2 of 8
	started:		26/202		Surface Elevation:	506.35 ft a		Borino	No.: E	R-02 8-inch
	completed:				Northing (NAD83):	2101009.				
	Co.:		C LIO		Easting (NAD83):	7616642.			PG&E	lomody Dhass 24
-	Method: g Type:		to-Son		Total Depth: k Mount_Conductor Casing Diameter:	145.0 ft bo	<u>gs</u>	•		emedy Phase 2A ock, Needles
	y rype. Name:		die Rar		Drill Casing Diameter:	8 inches			California	ock, Needles
	Asst:			aria / F.	_	8 inches			mber: 3012	6255
_	usher:	N/A		ana / i .	Depth to First Water:	60.0 ft bgs	3	1 10,001114		0200
	eologist:			l / A. Mo	cIntyre Converted to Well:	× Yes	No			
	Drilling Run	/ft\			Description	T				
Depth (ft)	and Averag Penetration F	e	USCS Code	USCS Class	(See Pilot boring log for full geologic descriptions)		notes and observati emporary backfill ma			Drilling Fluid
21			N/A	× × × × × × × × × × × × × × × × × × ×	(7-22 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).					
_22		-	NR	* * *	(22-23 ft) No Recovery; see Drilling Notes.					
23			INE	× × × ×	(23-50 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).	_	.0			
_24				× × × × × × × × × × × × × × × ×	16001311 DIOWII (2.31 N 3/4).		N			
_25				X X X X X X X X X			6			
_26				× × × × × × × × × × × × × × × ×		9				
_ _27				× × × × × × × × × × × × × × ×						
_28				X X X X X X X X X	-7					
_29	Penetration rates not			× × × × × × × × × × × × × × × ×						
_30	documented f sonic drilling not required p			× × × × × × × × × × × × × × × × × ×						
_31	Specification 33 22 00			× × × × × × × × × × × × × × × ×						
_32			N/A	X X X X X X X X X						
_33				× × × × × × × × × × × × × × ×						
_34				× × × × × × × × × × × × × × ×						
_35				X X X X X X X X X						
_36				× × × × × × × × × × × × × × × × × × ×						
_37				X X X X X X X X X		(37.0 - 4	7.0') Flushing the 8-i	nch diameter o	Irill casina over	(37.0 - 47.0')
_38				× × × × × × × × × × × × × × × ×			h diameter drill casi		J	100 gallons of wa used; 75 gallons water recovered;
_39				X X X X X X X X X						gallons of water I
40				× × × × × × × × × × × × × × × × × × ×						
					Classification System, ft = feet, bgs =					
****	twater Not	es: s	solid bli	ue and l	hollow blue water table marks represei	nt depth to	water (ft. bgs.) fi	rst encounte	ered during	drilling and

9	ARC	ADIS	;		Drilling L	_og				Sheet	t: 3	of 8
	Started:	04/26/202			_Surface Elevation:		<u>50</u>	6.35 ft amsl	Borin	a No .	F₽	-02 8-inch
	Completed:				_Northing (NAD83):		<u>21</u>	01009.50	_		<u> </u>	-02 0-111011
Drilling		ABC LIO			_Easting (NAD83):			16642.75	Client:	PG&E		
_		Roto-Son			_Total Depth:			5.0 ft bgs	Project:			medy Phase 2A
	ig Type: Name:			<u>k iviount</u>	Conductor Casing Dia				Location:	California	•	k, Needles
	name: g Asst:	Eddie Ra J. Candel		Doroz	_Drill Casing Diameter: _Drill Bit:			nches nches	. Project Nu)55
3	usher:	N/A	<u>ana / 1 .</u>	I CICZ	_ Depth to First Water:			.0 ft bgs	. i iojectivi	1111ber. <u>50</u>	71202	200
5	eologist:	G. Wilford	d / A. Mo	cIntyre	Converted to Well:		$\overline{\mathbb{X}}$	Yes No	-			
5					Description		T					
Depth (ft)	Drilling Run and Averag Penetration R	e Code	USCS Class		(See Pilot boring log for full geologic descriptions)			Drilling notes and observati temporary backfill ma			of	Drilling Fluid
Depth (ft) Depth	Penetration rates not documented fing not required p Specification 33 22 00	er	X X X X X X X X X X X X X X X X X X X	reddish b	Sedimentary Rock - Conglon rown (2.5YR 5/4). Sedimentary Rock - Conglon rown (2.5YR 5/4).			(47.0 - 57.0') Flushing the 8-the 6-inch diameter drill casi	inch diameter			(47.0 - 57.0') 300 gallons of water used; 50 gallons of water recovered; 250 gallons of water lost (57.0 - 67.0') 200 gallons of water used; 90 gallons of water recovered; 110
			× × × × × × × × × × × × × × × × × × ×									gallons of water lost
_ 60		1	× × × × × ×	01		L	<u>,</u>		.11		<u> </u>	O14/
J					cation System, ft = feet,							
~					lue water table marks re	epreser	ıī de	epin to water (ft. bgs.) f	ırst encount	ered duri	ng dr	iiirig and
appro:	ximate static	measure	a auring	arıllıng,	respectively.							

9	<u>ARC</u>	<u>4</u> [<u>DIS</u>	<u> </u>	Drilling Log			Sheet: 4	4 of 8
	Started:		/26/202		Surface Elevation:	506.35 ft a		Boring No.: EF	R-02 8-inch
	Completed:				Northing (NAD83):	2101009.			
	Co.:		C LIO		Easting (NAD83):	7616642.		Client: PG&E	1 51 5:
•	Method:		to-Son		Total Depth:	145.0 ft bo	gs	•	medy Phase 2A
	ig Type:				k Mount Conductor Casing Diameter:			Location: PG&E Topod California	CK, Needles
	Name: Asst:		<u>die Rar</u>	<u>nos</u> aria / F.	Drill Casing Diameter: Perez _ Drill Bit:	8 inches		Project Number: 30126	255
	usher:	<u>J. (</u>		<u>ана / г.</u>	Depth to First Water:	60.0 ft bgs	2	Project Number. 30120	200
	eologist:			I / A. Mo	cintyre Converted to Well:	× Yes	No		
3 -					Description	1			
Depth (ft)	Drilling Run and Averag Penetration F	je	USCS Code	USCS Class	(See Pilot boring log for full geologic descriptions)			ons confirming presence of aterial in drill cuttings	Drilling Fluid
 61				X X X X X X X X X X X X X X X X X X X	(50-72 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4). (60 ft) Observed slight moisture on rock fragment.				
62				X X X X X X X X X X X X					
63				X X X X X X X X X X X X X X X			1		
64				× × × × × × × × × × × ×			2//		
65				X			U		
66 _67_			N/A	X	<u> </u>	10			
07 <u></u> 68				X			7.0') Flushing the 8-i h diameter drill casi	nch diameter drill casing over ng.	(67.0 - 77.0') 300 gallons of wa used; 270 gallons
69	Penetration			X					water recovered; 3 gallons of water lo
 _ 70	rates not documented f sonic drilling	or		× × × × × × × × ×					
 71	not required p Specification 33 22 00	er		× × × × × × × × × × × × × × ×					
72				× × × × × × × × ×	•				
73			N/A		(72-73.5 ft) No Recovery; see Drilling Notes.				
 74				× × × × × × × × × × × × × × × × × × ×	(73.5-82 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4). (74-74.3 ft) Rock fragments are moist.				
- _75_ -				× × × × × × × × × × × ×					
76				× × × × × × × × ×					
77			N/A	× × × × × × × × × × × ×			7.0') Flushing the 8-i h diameter drill casi	nch diameter drill casing over	(77.0 - 87.0') 300 gallons of wa
78 _79_				X X X X X X X X X X X X X X X X X X X					used; 270 gallons water recovered; gallons of water lo
 80	<u></u>			× × × × × ×					
Abbre					Classification System, ft = feet, bgs =				
groun	dwater, Not	es: s	solid blu	ue and	hollow blue water table marks represe	nt depth to	water (ft. bgs.) fi	rst encountered during di	rilling and
	vimata atatic	mo	acurad	l durina	drilling, respectively.				

	<u>ARC</u>	<u> 4</u> 1	<u> </u>		Drilling Log				Sheet:	5 of 8
	Started:		/26/202		Surface Elevation:	506.35 ft		Borine	a No.: El	R-02 8-inch
	Completed:				Northing (NAD83):	2101009				<u> </u>
	Co.:		C LIO		Easting (NAD83):	7616642		=	PG&E	
_	Method:		to-Son		Total Depth:	145.0 ft b	ogs	,		emedy Phase 2A
	g Type:				k Mount Conductor Casing Diameter:			_ Location:	PG&E Topo California	CK, Needles
	Name: Asst:		die Rar		Drill Casing Diameter: Perez Drill Bit:	8 inches		- Droiget Nu	mber: 30126	2255
_	usher:	<u>J. (</u>		<u>ана / г.</u>	Depth to First Water:	60.0 ft bg	IS.	_ Project Nu	111ber. <u>3012</u> 6	0200
	eologist:			d / A. Mo	clntyre Converted to Well:	× Yes	No	-		
					Description	<u> </u>				
Depth (ft)	Drilling Run and Averag Penetration F	e	USCS Code	USCS Class	(See Pilot boring log for full geologic descriptions)		g notes and observati temporary backfill m			Drilling Fluid
 _81			N/A	× × × × × × × × × × × × × × × × × × ×	(73.5-82 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).					
_82					(82-84.5 ft) No Recovery; see Drilling Notes.	_				
_83 _84			NR				17			
_85					(84.5-117 ft) Sedimentary Rock - Conglomerate (reddish brown (2.5YR 5/4).	;	911	•		
86				X X X X X X X X X						
- _87				× × × × × × × × ×		10				
88				× × × × × × × × ×			97.0') Flushing the 8- ch diameter drill casi		drill casing over	(87.0 - 97.0') 400 gallons of wate used; 360 gallons o water recovered; 40
_89	Penetration			× × × × × × × × ×						gallons of water los
 _90	rates not documented f sonic drilling			× × × × × × × × × × × × ×						
 _91	not required p Specification 33 22 00	er		× × × × × × × × × × × ×						
 _92	30 22 00			× × × × × × × × ×						
93			N/A	× × × × × × × × × × × × × × ×						
_ _94				X X X X X X X X X X X X	(94 ft) Slight increase in competent rock					
_ _95				× × × × × × × × ×	fragments.					
96				× × × × × × × × ×						
_97				× × × × × × × × ×		(07.0	107.0') Flushing the 8	Rinch diameter	drill casing over	r (97.0 - 107.0')
98				× × × × × × × × ×			ch diameter drill casi		a.m Jasing Ove	300 gallons of wate used; 270 gallons o water recovered; 30
_ _99				X X X X X X X X X						gallons of water los
100_				× × × × × × × × ×						
					Classification System, ft = feet, bgs =					
	INVAIRE NOT	76. (sona bl	ue and	hollow blue water table marks represer	ıı aepin io	water (π. pgs.) f	ırsı encount	erea auring a	mina ana

9	<u>ARC</u>	<u> 4</u> 1	<u> </u>			Drilling Log				Sheet	t: 6	of 8
	Started:		/26/202			Surface Elevation:	506.35		Borin	a No.:	ER-0)2 8-inch
	Completed:					Northing (NAD83):	210100		_			
	Co.:		C LIO			Easting (NAD83):	761664		_ Client:	PG&E	· -	-d. D. C.
_	Method:		to-Soni			Fotal Depth:	145.0 f	-	_ Project:			edy Phase 2A
	g Type:					Conductor Casing Diameter:			_ Location:	California	-	ineedies
	Name: ı Asst:		die Rar	nos aria / F.		Orill Casing Diameter: Orill Bit:	8 inche		- _ Project Nu			 5
_	usher:	N/A		<u> </u>		Depth to First Water:	60.0 ft l		_ 1 10,661141	3111bei. <u>50</u>	12020	<u> </u>
	eologist:			/ A. Mo		Converted to Well:	× Yes		_			
						Description	<u> </u>					
Depth (ft)	Drilling Run and Averag Penetration F	je	USCS Code	USCS Class		(See Pilot boring log for full geologic descriptions)	Drill	ing notes and observa temporary backfill n			of	Drilling Fluid
101				× × × × × × × × ×	reddish bro) Sedimentary Rock - Conglomerate wn (2.5YR 5/4). ft) Rock fragments are moist.	;					
				× × × × × × × × ×		ny recent agriculte are motes.						
102				× × × × × × × × ×	}							
_103				× × × × × × × × × × × ×				1				
_104				× × × × × × × × ×				01				
_105				X X X X X X X X X X X X				D'				
_106				× × × × × × × × ×		•	46					
_107				× × × × × × × × × × × ×				0 - 117.0') Flushing the the 6-inch diameter dri		er drill casir		(107.0 - 117.0 200 gallons of w
_108			N/A	× × × × × × × × × × × ×					-			used; 200 gallon water recovered gallons of water
_109	Penetration rates not			× × × × × × × × ×	}							
_110	documented f sonic drilling not required p	a		× × × × × × × × ×								
_ _111	Specification 33 22 00			× × × × × × × × ×								
112				X X X X X X X X X X X X								
_113				× × × × × × × × × × × ×								
_114				× × × × × × × × ×								
_ _115				X X X X X X X X X X X X								
_116				× × × × × × × × ×								
_ _117				× × × × × × × × ×	(117-120 ft)	No Recovery; see Drilling Notes.		0 - 127.0') Flushing the		er drill casir	ıg	(117.0 - 127.0
_ _118				$ \setminus $			over t	the 6-inch diameter dri	II casing.		l	150 gallons of wased; 150 gallon water recovered
_ _119			NR									gallons of water
120						tion Outles 6 C 1	<u> </u>	and a f	-1 - 1		1 1-2	NA /
						tion System, ft = feet, bgs =						
ji OUH(awaiti, NOL	და. ა	SUIIU DII	u c and	HOHOW DIU	e water table marks represe	ու սերև)	ic water or DOS 1	mor cucony	ıcı cu dufil	ng utililf	ıy arıu

	ARC	<u> 4</u> L	<u> </u>)	Drilling Log			Sheet: 7 of 8
	started:		26/202		Surface Elevation:	506.35 ft ams	Borina N	lo.: <u>ER-02 8-inch</u>
	completed:				Northing (NAD83):	2101009.50		
Drilling			C LIO\ to-Soni		Easting (NAD83):	7616642.75	Client: PG	al GW Remedy Phase 2A
_					Total Depth: Mount Conductor Casing Diameter:	145.0 ft bgs		&E Topock, Needles
			die Rar		Drill Casing Diameter:	8 inches		lifornia
Drilling					Perez Drill Bit:	8 inches	Project Number	
•		N/A			Depth to First Water:	60.0 ft bgs		
Rig G∈	eologist:	<u>G. \</u>	Wilford	I / A. Mo	clntyre Converted to Well:	× Yes □ N	0	
Donth	Drilling Run ((ft)	USCS	USCS	Description	Drilling note	and absentations confirming pro-	names of
Depth (ft)	and Average Penetration R	e	Code	Class	(See Pilot boring log for full geologic descriptions)	tempo	s and observations confirming pres orary backfill material in drill cutting	
				× × × × × × × × × × × × × × × ×	(120-127 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4). (120.01-122 ft) Rock fragments are moist.			
				× × × × × × × × × × × × × × × × × × ×				
. 4				× × × × × × × × × × × × × × × ×				
_123				× × × × ×			OV	
_ _124			N/A					
				× × × × × × × × × × × × × × × ×		1		
.]				× × × ×				
_126				× × × × × × × × × × × × × × × × × × ×		8		
_127	Penetration rates not			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(127-129.4 ft) No Recovery; see Drilling Notes.	retracted to fr	') Approximately 20 ft of drill casing ee up the casing, prior to continuin	ig to 300 gallons of water
	documented for sonic drilling		NR			advance 8-inc	h diameter casing.	used, 270 gallons water recovered, 3 gallons of water lo
_129	not required po Specification 33 22 00	- 1 - 1						
130				× × × × × × × × × × × × × × × × × × ×	(129.4-145 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).			
_131				× × × × × × × × × × × × × × × × × × ×				
_132				× × × × × × × × × × × × × × × ×				
 _133				× × × × × × × × × × × × × × × × × × ×				
				X X X X X X X X X X X X X X X X X X X				
_134				× × × × × × × × × × × × × × × × × × ×				
_135			N/A	× × × × × ×				
				X				
_136				× × × × × × × × × × × × × × × × × × ×				
				× × × ×				
_137				× × × × × × × × × × × × × × × ×			') Flushing the 8-inch diameter dril	
 _138				× × × × × × × × × × × × × × × ×		diameter drill	h diameter drill casing. Tripped ou casing.	t the 6-inch 250 gallons of water used; 225 gallons water recovered; 2
.]				× × × ×				gallons of water lo
_139				× × × × × × × × × × × × × × × ×				
. 4				× × ×				
140	iotiona: LIC	1	- I In:	× × × × × × × × × × × × × × × × × × ×	Classification System ft - fact has - 1	adow ground	urfaco amal – abaya masa	y soo lovel CW =
					Classification System, ft = feet, bgs = t hollow blue water table marks represer			
	u.u.i., I NUL	JU. J	JIN DII	ao ana i	Diac water table marks represen	Gopinio wall	,, ₁ , 1, 290. / mot ontoountelet	a warning armining arta

9	ARC	ADIS	;	Drilling Log			Sheet:	8 of 8
Date S	Started:	04/26/202	22	Surface Elevation:	506.35 ft amsl	Borine	a No · FF	R-02 8-inch
Date C	Completed:	04/27/202	22	Northing (NAD83):	2101009.50	Domi	9 140 <u>L.</u>	<u> </u>
Drilling	Co.:	ABC LIO	√IN	Easting (NAD83):	7616642.75	Client:	PG&E	
Drilling	Method:	Roto-Son	ic	Total Depth:	145.0 ft bgs	Project:	Final GW Re	medy Phase 2A
Drill Ri	g Type:	Terra Sor	nic Trucl	<u>k Mount</u> Conductor Casing Diameter:	9 inches	Location:	PG&E Topod	ck, Needles
Driller I	Name:	Eddie Ra	mos	Drill Casing Diameter:	8 inches		California	
Drilling	Asst:	J. Candel	aria / F.	Perez Drill Bit:	8 inches	Project Nu	mber: <u>30126</u>	255
Tool-P	usher:	N/A		Depth to First Water:	60.0 ft bgs			
Rig Ge	eologist:	G. Wilford	d / A. Mo	cIntyre Converted to Well:	X Yes ☐ No			
Depth (ft)	Drilling Run and Averag Penetration F	je Code	USCS Class	Description (See Pilot boring log for full geologic descriptions)	Drilling notes and observation temporary backfill materials			Drilling Fluid
143 144	Penetration rates not documented f sonic drilling not required p Specification 33 22 00	for g eer N/A	X X X X X X X X X X X X X X X X X X X	(129.4-145 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).				
145_			V V V	End of Boring at 145 ft bgs.				
-				Ç Ç				
_146								
_147								
-								
148								
149								
150								
150								
<u></u>								
_151				•				
152								
150								
153								
154								
155								
 156								
_157								
158								
. 50_								
 159								
160								
	viations: U	SCS = Uni	fied Soil	Classification System, ft = feet, bgs =	pelow ground surface, amsl	= above m	ean sea level	, GW =

groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during drilling, respectively.

ARC	ADIS	<u>, </u>	Drilling Log		Sheet:	1 of 8
	04/24/202		Surface Elevation:	506.35 ft amsl	Boring No.: El	R-02 9-inch
Date Completed:			Northing (NAD83):	2101009.50		<u> </u>
•	ABC LIO\ Roto-Soni		Easting (NAD83): Total Depth:	7616642.75 145.0 ft bgs	Client: <u>PG&E</u> Project: <u>Final GW Re</u>	emedy Phase 2A
_			Mount Conductor Casing Diameter:	_	Location: PG&E Topo	•
	Eddie Rar		Drill Casing Diameter:	9 inches	<u>California</u>	
Drilling Asst:	J. Candela	aria / F. P	_	9 inches	Project Number: 30126	6255
	N/A		Depth to First Water:	60.0 ft bgs	-	
Rig Geologist:	G. Wilford	I / A. McIr	ntyre Converted to Well:	× Yes No		1
Depth (ft) Drilling Run (and Average Penetration R	Code	USCS Class	Description (See Pilot boring log for full geologic descriptions)	temporary backfill ma	ions confirming presence of aterial in drill cuttings	Drilling Fluid
_ 1	SM	b	(0-1.5 ft) Silty sand with gravel (SM); reddish brown (5YR 5/4).	(0.0 - 25.0') Drilled to act as drilling with 6-inch diameter	temporary conductor casing for drill casing.	(0.0 - 25.0') No drilling fluid used
	Pr N/A	X	(7-22 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).			

	<u>ARC</u>	<u> </u>	<u> </u>		Drilling Log			Sheet:	2 of 8				
	Started:		/24/202		Surface Elevation:	506.35 ft a		Boring No.: EF	R-02 9-inch				
	Completed:				Northing (NAD83):	2101009.5							
	Co.:		C LIO		Easting (NAD83):	7616642.7		Client: PG&E	medy Phase 2A				
_	Method: g Type:		to-Son		Total Depth: k Mount_Conductor Casing Diameter:	145.0 ft bo	js	Project: Final GW Results Location: PG&E Topos	•				
	y rype. Name:		die Rar		Drill Casing Diameter:	9 inches		California	or, recuics				
	Asst:				Perez Drill Bit:	9 inches		Project Number: 30126	255				
_	usher:	N/A			Depth to First Water:	60.0 ft bgs	5						
Rig Ge	eologist:	<u>G.</u>	Wilford	d / A. Mo	clntyre Converted to Well:	× Yes	No						
	Drilling Run	(ft)			Description								
Depth (ft)	and Averag Penetration R	e	USCS Code	USCS Class	(See Pilot boring log for full geologic descriptions)			ons confirming presence of aterial in drill cuttings	Drilling Fluid				
21			N/A	× × × × × × × × × × × × × × × × × × ×	(7-22 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).								
_22			NID	* * *	(22-23 ft) No Recovery; see Drilling Notes.								
23			NR	××× ×××	(23-50 ft) Sedimentary Rock - Conglomerate;	\perp	.0						
24 24				× × × × × × × × × × × ×	reddish brown (2.5YR 5/4).								
_25				× × × × × ×		(25.0 - 37	7.0') Flush 9-inch dia	ameter drill casing over 8-inch	(25.0 - 37.0')				
_ _26				× × × × × × × × × × × × × × ×			drill casing to free it		350 gallons of wate used; 150 gallons o water recovered; 20 gallons of water los				
_27								× × × × × × × × × × × × × × ×					ganoris of water los
_28				× × × × × × × × × × × × × × × ×									
_29	Penetration rates not			X X X X X X X X X X X X X X X									
_	documented f sonic drilling not required p Specification	l er		× × × × × × × × × × × ×									
_31	33 22 00	'	N/A	× × × × × × × × × × × ×									
32 _33				× × × × × × × × × × × × × × × × ×									
_33 _34				× × × × × × × × × × × × × × ×									
				× × × × × × × × × × × × × × × ×									
36				X X X X X X X X X									
_37				× × × × × × × × × × × × × × × ×		(36.0') 8-	inch diameter drill c	asing became stuck.	(36.0') No drilling fluid used				
_3 <i>1</i> 				× × × × × × × × × × × × × × × ×			7.0') Flush 9-inch dia drill casing.	ameter drill casing over 8-inch	(37.0 - 47.0') 325 gallons of wate used; 293 gallons o water recovered; 32				
39				× × × × × × × × × × × × × × × ×					gallons of water los				
40				× × × × × × × × ×									
					Classification System, ft = feet, bgs =								
	durator Nat	٠٠. ١	ealid bl	ue and l	hollow blue water table marks represer	nt depth to v	water (ft. bas.) fi	rst encountered durina di	rilling and				

9	ARC	ADI	S		Drillin	g Log					Shee	t: 3	3 of 8
Date S	Started:	04/24/2	022		_Surface Elevation	1:		6.35 ft a		Borin	a No.:	ER	R-02 9-inch
	Completed:				_Northing (NAD83	•		01009.5		_			
Drilling	-	ABC LI			_Easting (NAD83):	•		16642.7		Client:	PG&E		
1	Method:	Roto-S			_Total Depth:	D: 1		5.0 ft bg	S	Project:			medy Phase 2A
	ig Type:			k Mount	Conductor Casing	~				Location:		-	k, Needles
	Name:	Eddie F		Doroz	_ Drill Casing Diam	eter:		nches		- Droiget Nu	Californi		nee .
2	g Asst: Pusher:	J. Cand	<u>lelaria / F.</u>	Perez	_Drill Bit: _Depth to First Wa	ntor:		nches .0 ft bgs		Project Nu	ımber: <u>30</u>	0126	200
5	eologist:		ord / A. M	clntvre	-		×	_	No	-			
			<u> </u>		CONVENED TO VVEI			Tes _	_ INO				
Depth	Drilling Run and Average	. USC			•	, for			notes and observat			of	Drilling Fluid
(ft)	Penetration F		e Class		(See Pilot boring log full geologic description			te	mporary backfill m	ateriai in driii d	uttings		J
Depth (ft) (ft) (70%) 10%			× × × × × × × × × × × × × × × × × × ×	(23-50 π) reddish b) Sedimentary Rock - Co rown (2.5YR 5/4).	ongiomerate;							
	-		× × × × × × × × × × × × × × ×										
44 	-		× × × × × × × × ×					. (2//				
45		N/A	X						O'				
46								5					
47			× × × × × × × × ×						.0') Flush 9-inch di	ameter drill ca	sing over 8-	inch	(47.0 - 57.0')
43 43 44 44 44 44 44 44 44 44 44 46 46 46 47 48 47 48 47 48 48 47 48 48 47 48			× × × × × × × × × × × × × × × ×			7		diameter	drill casing.				325 gallons of water used; 293 gallons of water recovered; 32 gallons of water lost
49	Penetration		× × × × × × × × ×										· ·
	documented t sonic drilling	a 	× × × × × × × × ×	(50-72 ft)	Sedimentary Rock - Co	onglomerate;							
	not required p Specification 33 22 00		× × × × × × × × × × × × × × × × × × ×	reddish b	prown (2.5YR 5/4).								
52	_												
	-		× × × × × × × × × × × × × × ×										
53			X										
			X										
55		N//	X										
56													
57			× × × × × × × × ×					(57.0 67	O') Eluch O inch -	amotor drill s -	eing over	inch	(57.0 .67.01)
54									.0') Flush 9-inch di drill casing.	aineier drill ca	sing over 8-	-inch	(57.0 - 67.0') 175 gallons of water used; 0 gallons of water recovered; 175 gallons of water lost
59			× × × × × × × × ×										
60			× × × × × ×										
	viations: U	SCS = L		l Classifi	cation System, ft =	feet, bgs =	belo	w grour	nd surface, ams	sl = above n	nean sea	level.	GW =
J					olue water table ma								
appro	ximate statio	measu	ed during	drilling,	respectively.								

9	<u>ARC</u>	<u> 4</u> 1	<u> </u>		Drilling Log				Sheet:	4 of 8			
	Started:		/24/202		Surface Elevation:	506.35 ft a		Boring	No.: El	R-02 9-inch			
	Completed:				Northing (NAD83):	2101009.							
	g Co.: g Method:		C LIOV to-Soni		Easting (NAD83): Total Depth:	7616642.		=	PG&E	emedy Phase 2A			
	ig Type:				<u> </u>	145.0 ft bo	<u>ys</u>	•		ck, Needles			
	Name:		die Rar		Drill Casing Diameter:	9 inches			California	ok, recalco			
	Asst:				Perez Drill Bit:	9 inches		Project Nur		 3255			
•	usher:	N/A			Depth to First Water:	60.0 ft bgs	5						
Rig G	eologist:	<u>G.</u>	Wilford	/ A. Mo	clntyre Converted to Well:	× Yes	No						
Depth (ft)	Drilling Run and Averag	je	USCS Code	USCS Class	Description (See Pilot boring log for		notes and observati emporary backfill ma			Drilling Fluid			
	Penetration F	kate		× × × × ×	full geologic descriptions) (50-72 ft) Sedimentary Rock - Conglomerate;								
61 _61				× × × × × × × × × × × ×	reddish brown (2.5YR 5/4). (60 ft) Observed slight moisture on rock fragment.								
62				X X X X X X X X X X X X									
_63 - _64				× × × × × × × × × × × × × × × × × × ×			1						
_ _65_				× × × × × × × × × × × ×			81						
_ _66			N/A	× × × × × × × × × × × ×		9							
- _67_ -				× × × × × × × × × × × ×			7.0') Flush 9-inch dia drill casing.	ameter drill casi	ng over 8-inch	(67.0 - 77.0') 125 gallons of water			
68				× × × × × × × × × × × ×						used; 0 gallons of wat recovered; 125 gallor of water lost			
69 - _70_	Penetration rates not documented for sonic drilling	or						× × × × × × × × × × × ×					
_ _71	not required p Specification 33 22 00	er		× × × × × × × × × × × × × × × × × × ×									
- _72_				× × × × × ×	(70.70.F.#\N-D								
73			N/A		(72-73.5 ft) No Recovery; see Drilling Notes.								
74 				X X X X X X X X X X X X X X X	(73.5-82 ft) Sedimentary Rock - Conglomerate reddish brown (2.5YR 5/4). (74-74.3 ft) Rock fragments are moist.								
_75				× × × × × × × × × × × ×									
76 - _77_			N/A	× × × × × × × × ×									
_77 _ 				× × × × × × × × × × × × × × × × × × ×			7.0') Flush 9-inch dia drill casing.	ameter drill casi	ng over 8-inch	(77.0 - 87.0') 225 gallons of wate used; 0 gallons of wa recovered; 225 gallor			
- _79				× × × × × × × × × × × × × × × × × × ×						of water lost			
80				× × × × ×									
					Classification System, ft = feet, bgs =								
groun					hollow blue water table marks represe	nt depth to	water (tt. bgs.) f	ırst encounte	ered during o	irilling and			
					drilling, respectively.								

	<u>ARC</u>	<u> 4</u> 1	<u> </u>)	Drilling Log				Sheet:	5 of 8
	Started:		/24/202		Surface Elevation:	506.35	ft amsl	Borin	a No.: F	R-02 9-inch
	Completed:				Northing (NAD83):	210100		_		
	Co.:		C LIO		Easting (NAD83):	761664		_ Client:	PG&E	
_	Method:		to-Son		Total Depth:	145.0 ft	bgs	_ Project:		emedy Phase 2A
	g Type:				k Mount Conductor Casing Diameter:			_ Location:	PG&E Topo California	ock, Needles
	Name: ı Asst:		die Rar		Drill Casing Diameter: PerezDrill Bit:	9 inches		– Droiget N		6255
•	usher:	<u>J. (</u>		<u>ана / г.</u>	Driii Bit. Depth to First Water:	60.0 ft b		_ Project N	umber: <u>3012</u>	0200
	eologist:			l / A. Mo	cintyre Converted to Well:	× Yes	∏ No	_		
					Description	1				
Depth (ft)	Drilling Run and Averag Penetration R	e	USCS Code	USCS Class	(See Pilot boring log for full geologic descriptions)	Drilli	ng notes and observa temporary backfill n			Drilling Fluid
_81			N/A	X X X X X X X X X X X X X X X X X X	(73.5-82 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).					
_82				× × × × /	(82-84.5 ft) No Recovery; see Drilling Notes.	_		0		
83 84			NR				17			
 _ 85				× × × ×	(84.5-117 ft) Sedimentary Rock - Conglomerate (reddish brown (2.5YR 5/4).	;	91,			
_05 _ _86				× × × × × × × × × × × ×	roduisii biowii (2.311\ J/4).					
_00 _ _87				× × × × × × × × × × × × × ×						
_07 _ _88				X X X X X X X X X			- 97.0') Flush 9-inch d eter drill casing.	liameter drill ca	asing over 8-inch	(87.0 - 97.0') 75 gallons of water used; 0 gallons of wa
_00 _ _89	Penetration			X X X X X X X X X X X X X X X						recovered; 75 gallons water lost
90	rates not documented f sonic drilling	or		× × × × × × × × × × × × ×						
91	not required p Specificatior 33 22 00	er		X X X X X X X X X X X X X X X						
_ _92			N1/A	× × × × × × × × × × × ×						
93			N/A	X X X X X X X X X						
_94				X X X X X X X X X X X X	(94 ft) Slight increase in competent rock					
_ _95				X X X X X X X X X X X X	fragments.					
- _96				× × × × × × × × × × × × × × × ×						
_97				× × × × × × × × ×			- 107.0') Flush 9-inch		casing over	(97.0 - 107.0')
98				X X X X X X X X X			ı diameter drill casing		-	100 gallons of wate used; 0 gallons of war recovered; 100 gallor of water lost
_99				X X X X X X X X X X X X						5, 114,01 1051
100				× × × × × ×						
	viations: US	SCS	S = Unif	fied Soil	Classification System, ft = feet, bgs =	below gro	ound surface, am	sl = above r	mean sea leve	el, GW =
roun	dwater, Not	es: s	solid bl	ue and	hollow blue water table marks represe	nt depth t	o water (ft. bgs.)	first encoun	tered during	drilling and

6	ARC	<u>\</u>	715			Drillin	ng Log				Sheet	: 6	of 8
	started:		24/202			Surface Elevatio		50	6.35 ft amsl	Τ			
	completed:					_Surface Lievatio _Northing (NAD8			01009.50	−∣ Borin	g No.:	<u>ER</u>	-02 9-inch
Drilling	•		CLIOV			Easting (NAD83	•		16642.75	Client:	PG&E		
_			o-Soni			Total Depth:	.,,.		5.0 ft bgs	_ Project:		/ Rer	nedy Phase 2A
_	g Type:				k Mount	_ Conductor Casir	ng Diameter:		-	, Location:			k, Needles
Driller I	Name:	<u>Edd</u>	lie Ran	nos		Drill Casing Dian	neter:	<u>9 i</u>	nches		<u>California</u>	1	
Drilling	Asst:	<u>J. C</u>	andela	aria / F.	Perez	Drill Bit:		<u>9 i</u>	nches	_ Project N	umber: <u>30</u>	1262	255
Tool-P		N/A				Depth to First W		<u>60</u>	.0 ft bgs	_			
Rig Ge	eologist:	G. V	Vilford	/ A. Mo	Intyre	Converted to We	ell:	×	Yes No				
Donth	Drilling Run (ft)	USCS	USCS		Description			Drilling notes and observ	ations confirmi		ا ء	
Depth (ft)	and Average Penetration R	e	Code	Class		(See Pilot boring lo full geologic descrip	ptions)		temporary backfill	material in drill	cuttings)I	Drilling Fluid
				× × × × × × × × × × × × × ×		ft) Sedimentary Rock rown (2.5YR 5/4).	c - Conglomerate	;					
101				XXX	(100.7-10	1 ft) Rock fragments	are moist.						
				× × × × × × × × × × × × × × ×									
102				× × × ×	}								
				× × × × ×	}								
103				× × × × × × × × × × × × × ×									
				\times \times \times \times	}								
104				× × × × × × × × × × × × × × ×									
				\times \times \times \times	}				.05				
105				× × × × × × × × × × × × × × ×					10'				
 106				× × × ×	}								
100				\times \times \times \times	}		\						
 107				× × × × × × × × × × × × × ×				'					
107				\times \times \times \times					(107.0 - 117.0') Flush 9-ind 8-inch diameter drill casing		casing over		(107.0 - 117.0') 125 gallons of water
 108				× × × × × × × × × × × × ×					o-incir diameter dilli casili	y.			used; 0 gallons of water recovered; 125 gallons
			N/A	\times \times \times \times	}								of water lost
109	Penetration		IN/A	× × × × × × × × × × × × × ×									
	rates not			\times \times \times \times	}								
110	documented for sonic drilling	or		× × × :	}								
	not required pe	er		× × × × × ×	}								
111	Specification 33 22 00			\times \times \times	}								
	00 22 00			× × × × × × × × × × × × × × ×	}	· ·							
112				X X X	}								
				× × × × × × × × × × × × × × ×									
113				× × × × × × × × × × × × ×	}								
				× × × ×									
114				× × × × × × × × × × × × × ×									
				\times \times \times \times	}								
115				× × × × × × × × × × × × × ×									
116				\times \times \times \times	}								
116				× × × × × × × × × × × × × × ×	}								
117				× × × × ×	}								
117		1		\ <u>\</u>	(117-120	ft) No Recovery; see I	Drilling Notes.	\dashv	(117.0 - 127.0') Flush 9-ind		casing over		(117.0 - 127.0')
 118				\ /					8-inch diameter drill casing	g.			175 gallons of water used; 0 gallons of water
1 10													recovered; 175 gallons of water lost
 119			NR	X									
				/ \									
 120		\perp	[_ \									
	diational LIC	200	– Llmifi	od Coil	Cloosifia	nation System #	foot bas -	hala	w ground surface on	aal – abaya	moon oos l	0.40	C\\\ -

Orilling (Orilling I Orill Rig Oriller N Orilling / Fool-Pu Rig Geo	ompleted: Co.: Method: Type: Jame: Asst: usher:	O5/(AB() Rote Terr Edd J. C	C LIOV o-Soni ra Son lie Rar	2 /IN c ic Truck	Northing (NAD83): Easting (NAD83):	506.35 ft a 2101009.5 7616642.	50			ER-02 9-inch
Orilling (Orilling I Orill Rig Oriller N Orilling / Fool-Pu Rig Geo	Co.: Method: Type: Jame: Asst: Jisher: Drilling Run	ABC Rote Terr Edd J. C N/A	C LIOV o-Soni ra Son lie Rar	/IN c ic Truck	Easting (NAD83):					
Orilling I Orill Rig Oriller N Orilling I Fool-Pu Rig Geo	Method: I Type: Iame: Asst: Isher: Iologist: Drilling Run	Rote Terr Edd J. C	o-Soni ra Son lie Rar	c ic Truck	- , ,	<u>7616642.</u>				
Orill Rig Oriller N Orilling / Tool-Pu Rig Geo	Type: Jame: Asst: Jusher: J	Terr Edd J. C N/A	ra Son lie Rar	ic Truck	TOTAL DEDITI.	145.0 ft bo			PG&E Final GW	Remedy Phase 2A
Driller N Drilling / Fool-Pu Rig Geo	lame: Asst: usher: ologist: Drilling Run	Edd J. C N/A	lie Rar		k Mount Conductor Casing Diameter:		J 3	•		ppock, Needles
Cool-Pu	usher: ologist: Drilling Run	N/A	andela	nos	_	9 inches			California	
Rig Geo	ologist: Drilling Run			aria / F.		9 inches		Project Nu	mber: <u>30</u>	126255
Depth	Drilling Run	<u>G. V</u>				60.0 ft bgs	_			
/ft\			<u> Wilford</u>	/ A. Mc	cintyre Converted to Well:	× Yes	No			T
	Penetration Ř	e	USCS Code	USCS Class	Description (See Pilot boring log for full geologic descriptions)		notes and observati emporary backfill ma			f Drilling Fluid
_121				× × ×	(120-127 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4). (120.01-122 ft) Rock fragments are moist.					
122				× × × × × × × × × × × × × × ×						
.]				× × × × ×						
_123			N/A	X X X X X X X X X X X X X X X X X X X			M			
_124				X X X X X X X X X X X X X X X X X X X						
_125				× × × × × × × × × × × × × × × ×			0'			
_126				X X X X X X X X X X X X X X X X X X X	•	16				
_127				* * * *	(127-129.4 ft) No Recovery; see Drilling Notes.		137.0') Flush 9-inch ameter drill casing.	diameter drill o	casing over	(127.0 - 137.0 100 gallons of w
_128			NR	X						used; 0 gallons of recovered; 100 ga of water lost
_129	Penetration rates not			×××	(129.4-145 ft) Sedimentary Rock -					
_130 no	locumented for sonic drilling to the sonic d	er		× × × × × × × × × × × × × × × ×	Conglomerate; reddish brown (2.5YR 5/4).					
_131	Specification 33 22 00			× × × × × × × × × × × × × × × ×						
_132				X X X X X X X X X X X X X X X X X X X						
_133				X X X X X X X X X X X X X X X X X X X						
_134			N/A	X X X X X X X X X X X X X X X X X X X						
_135			\	X X X X X X X X X X X X X X X X X X X						
_136				× × × × × × × × × × × × × × × ×						
_137				× × × × × × × × × × × × × × × × × × ×		8-inch di	145.0') Flush 9-inch ameter drill casing.			
_138				× × × × × × × × × × × × × × × ×		casing.				used; 0 gallons of recovered; 300 ga of water lost
_139				X X X X X X X X X X X X X X X X X X X						
_140 Abbrevi	iations: US	SCS	= Unif		Classification System, ft = feet, bgs = b	elow grou	nd surface, ams	l = above m	ean sea l	evel, GW =
					hollow blue water table marks represen					

9	ARC	ADIS	5	Drilling Log			Sheet: 8	3 of 8
Date S	started:	04/24/20	22	Surface Elevation:	506.35 ft amsl	Borine	a No · FR	2-02 9-inch
Date C	Completed:	05/03/20	22	Northing (NAD83):	2101009.50	Domi	9 140 <u>Liv</u>	1-02 3-IIICII
Drilling	Co.:	ABC LIO	VIN	Easting (NAD83):	7616642.75	Client:	PG&E	
Drilling	Method:	Roto-Sor	nic	Total Depth:	145.0 ft bgs	Project:	Final GW Re	medy Phase 2A
Drill Ri	g Type:	Terra So	nic Trucl	k Mount Conductor Casing Diameter:	N/A	Location:	PG&E Topoc	k, Needles
Driller I	Name:	Eddie Ra	mos	Drill Casing Diameter:	9 inches		<u>California</u>	
Drilling	Asst:	J. Cande	laria / F.	Perez Drill Bit:	9 inches	Project Nu	ımber: 301262	255
Tool-P	usher:	N/A		Depth to First Water:	60.0 ft bgs			
Rig Ge	eologist:	G. Wilfor	d / A. Mo	clntyre Converted to Well:				
Depth (ft)	Drilling Run and Averag Penetration F	ie Code		Description (See Pilot boring log for full geologic descriptions)	Drilling notes and observation temporary backfill ma			Drilling Fluid
141	Penetration		X X X X X X X X X X X X X X X X X X X	(129.4-145 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).				
142	rates not documented f	or						
 143	sonic drilling not required p Specificatior	N/A er	× × × × × × × × × × × × × × × × × × ×		.0			
144	33 22 00		× × × × × × × × ×					
145			× × ×	End of Boring at 145 ft bgs.				
				Life of Borning at 140 it bgs.				
146					401			
 147								
-1-7/								
148								
149								
150								
151								
152								
153								
 154								
155								
156								
157								
150								
158								
 159								
L]								
160								
Abbrev	viations: US	SCS = Un	ified Soil	Classification System, ft = feet, bgs =	below ground surface, amsl	= above m	nean sea level,	GW =

groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during drilling, respectively.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	A			Drilling Log				Sh	eet: 1	of 8
Date Started:		/03/202		Surface Elevation:	506.35 ft		Boring	No.:	ER-02	2 10 & 12-inc
ate Completed				Northing (NAD83):	2101009.					
Orilling Co.:		C LIO		Easting (NAD83):	7616642.		Client:	PG&E		
Orilling Method:		oto-Soni		Total Depth:	146.0 ft b		Project:			nedy Phase 2A
Orill Rig Type:				<u>K Mount</u> Conductor Casing Diameter:			Location:		-	k, Needles
Oriller Name:		<u>Idie Rar</u>		Drill Casing Diameter:	10.5-12 ir			Califo		
Orilling Asst:			aria / F.	Perez Drill Bit:	10.5-12 ir		Project No	ımber:	301262	255
Tool-Pusher:	<u>N/.</u>			Depth to First Water:	60.0 ft bg	<u> </u>				
Rig Geologist:	Ale	exis McI	ntyre	Converted to Well:	× Yes	No				
Depth (ft) Drilling Ru and Aver Penetration	age	USCS Code	USCS Class	Description (See Pilot boring log for full geologic descriptions)		g notes and observati temporary backfill ma			ce of	Drilling Fluid
_ 1		SM		(0-1.5 ft) Silty sand with gravel (SM); reddish brown (5YR 5/4).		6.0') Flushed 12-inch h diameter drill casir		casing o	ver	(0.0 - 16.0') 150 gallons of water used; 30 gallons of water recovered; 120 gallons of water lost
_ 2			X X X X X X X X X X X X X X X X X X X	(1.5-7 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).			7			ganons of water los
_ 3			× × × × × × × × × × × × × × × × × × ×			17				
- 4 - - 5		N/A	× × × × × × × × × × × × × × × × × × ×			91				
. 6			× × × × × × × × × × × × × × × × × × ×							
. 7			× × × × × × × × × × × × × × × × × × ×	(7-22 ft) Sedimentary Rock - Conglomerate;		·				
_ 8			× × × × × × × × × × × × × × × × × × ×	reddish brown (2.5YR 5/4).						
9 Penetrati	t		× × × × × × × × × × × × × × × ×							
documente sonic drilli not required Specificat	ng I per		× × × × × × × × × × × × × × × × × × ×							
33 22 00			× × × × × × × × × × × × × × × × × × ×							
-13_			× × × × × × × × × × × × × × × × × × ×							
_ _14		N/A	× × × × × × × × × × × × × × × ×							
_ _15			× × × × × × × × × × × × × × × × × × ×							
_16			× × × × × × × × × × × × × × × × × × ×			26.0') Flushed 12-inc th diameter drill casir		I casing	over	(16.0 - 26.0') 350 gallons of water
_17			× × × × × × × × × × × × × × × × × × ×							used; 295 gallons of water recovered; 55 gallons of water los
_18 _ _19			× × × × × × × × × × × × × × × × × × ×							
20			× × × × × × × × × × × × × × × × × × ×							
Abbreviations:				Classification System, ft = feet, bgs =						
				hollow blue water table marks represer						

9	ARC	ΔΙ	DIS		Drilling Log				Sh	eet: 2	of 8
	Started:		/03/202		Surface Elevation:	506	6.35 ft amsl	Poring	No:	ED 02	10 & 12-inch
	Completed:				 Northing (NAD83):		01009.50	Болінд	NO	EK-02	10 & 12-111011
Drilling			C LIOV		Easting (NAD83):	<u>76</u>	16642.75	_ Client:	PG&E		
Drilling	Method:	Ro	to-Soni	ic	Total Depth:	<u>140</u>	6.0 ft bgs	Project:	Final (GW Rem	nedy Phase 2A
Drill Ri	g Type:	<u>Te</u>	<u>rra Son</u>	<u>ic Trucl</u>	k Mount Conductor Casing Diameter:	<u>12</u>	inches	_ Location:	PG&E	Topock	<u>x, Needles</u>
	Name:	<u>Ed</u>	<u>die Rar</u>	nos	Drill Casing Diameter:		.5-12 inches	_	<u>Califor</u>	rnia	
Drilling				<u>aria / F.</u>			.5-12 inches	Project Nu	umber:	301262	55
	usher:	<u>N//</u>			Depth to First Water:		.0 ft bgs	=			
Rig Ge	eologist:	Ale	exis McI	ntyre	Converted to Well:	×	Yes No				
Depth (ft)	Drilling Run and Averag Penetration R	e	USCS Code	USCS Class	Description (See Pilot boring log for full geologic descriptions)		Drilling notes and observat temporary backfill m			ce of	Drilling Fluid
 21 22			N/A	× × × × × × × × × × × × × × × × × × ×	(7-22 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).						
			NR	×××	(22-23 ft) No Recovery; see Drilling Notes. (23-50 ft) Sedimentary Rock - Conglomerate;						
24					reddish brown (2.5YR 5/4).						
25 25				$\times \times \times$			12,				
26				× × × × × × × × ×			(26.0 - 36.0') Flushed 12-inc 10.5-inch diameter drill casi		ll casing	over	(26.0 - 36.0') 400 gallons of water used; 135 gallons of
27 28			× × × × × × × × × × × ×							water recovered; 265 gallons of water lost	
 29	Penetration			× × × × × × × × × × × ×							
30	rates not documented for sonic drilling			× × × × × × × × × × × × × × ×							
 31	not required p Specification 33 22 00		NI/A	X X X X X X X X X							
32			N/A	× × × × × × × × × × × ×							
33 				× × × × × × × × × × × ×							
34 				× × × × × × × × × × × ×							
35 36				× × × × × × × × ×							
37				× × × × × × × × × × × ×			(36.0 - 46.0') Advancing 10.5	5-inch diamete	r drill cas	ing.	(36.0 - 46.0') 350 gallons of water used; 80 gallons of water recovered; 270
 38				× × × × × × × × ×							gallons of water lost
 39				× × × × × × × × ×							
-				× × ×							
$\begin{bmatrix} & & & & & & & & \\ & 40 & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$				-	Classification System, ft = feet, bas =	belo	ຼ ວw ground surface, ams	sl = above n	nean se	ea level, (GW =

9	<u>ARC</u>	<u> </u>	<u>DIS</u>		Drilling Log				Sh	ieet: 3	of 8
	Started:		/03/202		Surface Elevation:	506.35		Boring	No.:	ER-0	2 10 & 12-inc
	Completed:				Northing (NAD83):	210100					
_	Co.:		C LIO		Easting (NAD83):	761664		_ Client:	PG&E		
_	Method:		to-Son		Total Depth:	146.0 ft	-	Project:			medy Phase 2A
	g Type: Name:		<u>rra Son</u> die Rar		Mount Conductor Casing Diameter:Drill Casing Diameter:		es ! inches	_ Location:	Califo	•	k, Needles
	ivame. j Asst:				Perez Drill Bit:		! inches	- _ Project Ni			255
_	usher:	N/A		<u> </u>	Driii Bit. Depth to First Water:	60.0 ft l		_ 1 10,0001141	arriber.	001202	
	eologist:		xis McI	ntyre	Converted to Well:	× Yes	No	-			
					Description						
Depth (ft)	Drilling Run and Averag Penetration R	je	USCS Code	USCS Class	(See Pilot boring log for full geologic descriptions)	Drill	ing notes and observat temporary backfill m			ce of	Drilling Fluid
41				× × × × × × × × × × × × × × × × × × ×	(23-50 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).						
42				× × × × × × × × × × × × × × × × × ×							
 43				× × × × × × × × × × × × × × × × × × ×			40				
_44				× × × × × × × × × × × × × × × × × × ×			0				
45			N/A	× × × × × × × × × × × × × × × × × × ×			(D)				
_46				× × × × × × × × × × × × × × × ×	•	(46.0	- 56.0') Advancing 10.5	5-inch diamete	r drill cas	sing.	(46.0 - 56.0') 100 gallons of wate used; 90 gallons of
47				× × × × × × × × × × × × × × × ×							water recovered; 10 gallons of water los
48 _49_				× × × × × × × × × × × × × × × × × × ×							
49 50	Penetration rates not documented f	- 1 1		× × × × × × × × × × × × × × × × × × ×							
_50 _ _51	sonic drilling not required p Specification	er		× × × × × × × × × × × × × × × ×	(50-72 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).	<u> </u>					
52	33 22 00			× × × × × × × × × × × × × × × × × × ×	▼						
53				× × × × × × × × × × × × × × × × × × ×							
54				× × × × × × × × × × × × × × × × × × ×							
 55			N/A	× × × × × × × × × × × × × × × × × × ×							
56				X		(56.0	- 66.0') Advanced 10.5	i-inch diamete	casing h	ov dry	(56.0 - 66.0')
 57				× × × × × × × × × × × × × × × × × × ×		drillin barre	g and cleaning out cas I. Mud tub seal broke c n diameter casing to dr	ing with 8-inch ompliance not	diamete fied. Trip	r core	No drilling fluid used
_ 58_				× × × × × × × × × × × × × × × × × × ×							
 59				× × × × × × × × × × × × × × ×							
60 Abbre	viations: 119	309	S = 1 Inif	× × × × × × × × × × × × ×	Classification System, ft = feet, bgs =	helow ar	ound surface ame	sl = ahove r	nean so	22 21/21	GW =
					nollow blue water table marks represe						
-					drilling, respectively.		. 5 /				-

ARC	ΔΓ)IS			Drilling Log				Sh	eet: 4	of 8
Date Started:		3/2022	2		Surface Elevation:	50	06.35 ft amsl	Davina	Na.	ED 02	40 9 42 in ah
Date Completed:					Northing (NAD83):		101009.50	Boring	NO.:	ER-02	10 & 12-inch
Drilling Co.:		LIOV			Easting (NAD83):		316642.75	Client:	PG&E	<u> </u>	
Drilling Method:	Roto	-Sonic	2		Total Depth:	<u>14</u>	16.0 ft bgs	Project:	Final (GW Rem	nedy Phase 2A
Drill Rig Type:	Terra	a Soni	c Trucl	<u> Mount</u>	Conductor Casing Diameter:	12	2 inches	Location:	PG&E	Topock	, Needles
Driller Name:	<u>Eddi</u>	e Ram	nos		Drill Casing Diameter:	<u>10</u>).5-12 inches		Califo	rnia	
Drilling Asst:	<u>J. Ca</u>	<u>andela</u>	<u>ria / F.</u>		Drill Bit:).5-12 inches	Project No	umber:	301262	55
Tool-Pusher:	N/A				Depth to First Water:	<u>60</u>).0 ft bgs				
Rig Geologist:	<u>Alexi</u>	s McIr	ntyre		Converted to Well:	×	Yes No				
Donth Drilling Rur	(ft) .	1000	11000		Description		D. 110	.			
Depth (ft) and Avera Penetration	ge /	JSCS Code	USCS Class		(See Pilot boring log for full geologic descriptions)		Drilling notes and observati temporary backfill ma	ons confirmin aterial in drill d	g presen cuttings	ce of	Drilling Fluid
61	for g per in	N/A	\(\cdot\) \(\cdo	(72-73.5 ft) (72-73.5 ft) (74-74.3 ft)	Sedimentary Rock - Conglomerate; own (2.5YR 5/4). served slight moisture on rock ation System. ft = feet. bas =		(76.0 - 86.0') Advanced 10.5-drilling and cleaning out casibarrel. (76.0 - 86.0') Advanced 10.5-drilling and cleaning out casibarrel.	inch diametel	casing t	oy dry r core	(66.0 - 76.0') No drilling fluid used (76.0 - 86.0') No drilling fluid used

9	ARC	ΔΓ	OIS			Drilling Lo	oa Da				Sh	neet: 5	of 8
			03/202			Surface Elevation:		506	6.35 ft amsl	D a mina au	Na.	ED 00	40 0 40 in ab
	Completed:					Northing (NAD83):			01009.50	Boring	NO.:	ER-02	10 & 12-inch
Drilling	•		C LIOV			Easting (NAD83):			16642.75	_ Client:	PG&E	<u> </u>	
_			to-Soni			Total Depth:			6.0 ft bgs	_ _ Project:	Final (GW Rem	edy Phase 2A
_		<u>Ter</u>	ra Son	ic Trucl	k Mount	Conductor Casing Diame			•	_ Location:			, Needles
Driller	Name:	Edd	die Rar	nos		Drill Casing Diameter:		<u>10.</u>	.5-12 inches	_	Califo	rnia	
Drilling	Asst:	<u>J. C</u>	Candela	aria / F.	Perez	Drill Bit:		<u>10.</u>	5-12 inches	_ Project No	umber:	301262	55
		N/A				Depth to First Water:		<u>60.</u>	.0 ft bgs	_			
Rig Ge	eologist:	Ale	xis McI	ntyre		Converted to Well:	l	\times	Yes No				
Depth	Drilling Run (USCS	USCS		Description			Drilling notes and observa			ce of	Drilling Fluid
(ft)	Penetration R		Code	Class	1/70 F 00 F	(See Pilot boring log for full geologic descriptions)		1	temporary backfill n	naterial in drill o	cuttings		Drining Fidia
				× × × × × ×) Sedimentary Rock - Conglome own (2.5YR 5/4).	erate;						
81			N/A	\times \times \times	}								
				× × × × × ×									
82				× × ×	(02 04 E ff) No Recovery; see Drilling Note		41					
				\ /	(62-64.5 11) No Recovery, see Drilling Note	<i>5</i> 5.						
83													
-			NR	Λ									
84													
-		11		/ \ ×××	(84.5-117	ft) Sedimentary Rock - Conglon	 nerate:	-	(C)				
85				× × × × × × × × ×		own (2.5YR 5/4).	,						
				× × × ×	}								
86				× × × × × ×	}			U	(86.0 - 96.0') Advanced 10.5	5-inch diameter	casing b	by dry	(86.0 - 96.0')
				× × × ×	}				drilling and cleaning out cas barrel.	sing with 8-inch	diamete	r core	No drilling fluid used
87				× × × × × ×									
				\times \times \times	}								
88				× × × × × ×			P						
 89				\times \times \times									
05	Penetration rates not			× × × × × ×									
90	documented fo	or		× × × × × ×									
	sonic drilling not required pe	er		\times \times \times									
91	Specification			× × × × × ×									
	33 22 00			\times \times \times	}	•							
92				× × × × × ×									
			N/A	\times \times \times \times	}								
93				× × × × × ×									
				\times \times \times									
94				× × × × × ×	(0.4 ft) Clia	ht increase in competent rock							
				\times \times \times	fragments								
95				× × × × × ×	}								
				× × × ×									
96				\times \times \times					(96.0 - 116.0') Advanced 10	5-inch diamete	er casing	by dry	(96.0 - 116.0')
				× × × × × ×					drilling and cleaning out cast barrel. A hydraulic line on the	sing with 8-inch	diamete	r core	No drilling fluid used
97				\times \times \times					hydraulic fluid. Compliance	was immediate	ely notifie	d. J	
-				× × × × × ×					Confirmed hydraulic fluid di drilling resumed hard mater	rial was encour	itered an	d once	
98				\times \times \times					cleaned out with 8-inch diar	meter core barr	el.		
				× × × × × ×									
99				\times \times \times \times									
				× × × × × ×									
100 Abbrev	viations: US	SCS	= Unif		Classific	ation System. ft = feet. bo	 ns = h	 pelo	w ground surface am	sl = above r	nean se	ea level (GW =

9	<u>ARC</u>	<u> </u>	<u>DIS</u>	<u> </u>		Drilling Lo	g				Sh	eet: 6	of 8	
	Started:	05/03/2022				Surface Elevation:			msl	Boring No.: ER-02 10 & 12-in				
	•	05/08/2022				ning (NAD83):		01009.5						
•	g Co.:	ABC LIOVIN				ng (NAD83):		16642.7		_ Client:	PG&E			
Drilling Method:		Roto-Sonic				Depth:		6.0 ft bo	S	_ Project:	Final GW Rei		•	
	ig Type:	Terra Sonic Truck M				_				Location: PG&E Topock, Needles				
	Name:	Eddie Ramos				Casing Diameter:).5-12 in		California				
_	y Asst:	J. Candelaria / F. Per).5-12 in		_ Project Number: 30126255				
Tool-Pusher:		N/A			-	n to First Water:	<u>60</u>	0.0 ft bgs	_	-				
Kig G	eologist:	Alexis McIntyre			Conv			Yes	No					
Depth (ft)			ge Code Ci		Description (See Pilot boring log for full geologic descriptions)					ons confirming presence of aterial in drill cuttings			Drilling Fluid	
				× × × × × ×	reddish brown (2	7 ft) Sedimentary Rock - Conglomerate; prown (2.5YR 5/4).								
101					(100.7-101 ft) Ro	101 ft) Rock fragments are moist.								
	-			× × × × × ×										
102	-			× × × ×										
400	-			× × × ×										
_103	1			× × × × × ×										
104				× × × × × × × × × × × × × × × × × × ×					3/1					
_105				X X X X X X X X X				1	6					
_106				× × × × × × × × ×				H						
_107				× × × × × × × × × × × × ×				U						
- _108_				× × × × × × × × ×										
			NI/A	× × × ×										
109	Dtti		N/A	× × × × × ×		A 40								
	Penetration rates not			× × × × × ×										
110	documented f	- 1 1		× × ×										
	sonic drilling not required p			× × × × × ×										
_111	Specification			$\times \times \times$										
	33 22 00			× × × ×		▼								
112				× × × ×										
				× × ×										
113				× × × × × ×										
				× × × ×										
114				× × × × × ×										
				× × × ×										
_115				× × × ×										
				× × × × × ×										
116				× × × ×				(140.0	4E 01) A -1: 1 11	0 E in '	tar '	m by -1	(446.0. 445.0)	
				× × × × × ×				drilling ar	45.0') Advanced 10 nd cleaning out cas	ບ.ວ-ເກcn diame ing with 8-inch	ter casino diamete	y by dry r core	(116.0 - 145.0') No drilling fluid used	
_117				\(\hat{x} \hat{x} \hat{x}	(117 100 £\ N - 5	loogyong oog Drilling H. (barrel.						
				\ /	(117-120 π) No F	decovery; see Drilling Not	es.							
118				$ \setminus /$										
-			NR	\										
_119				/\										
				/ \										
120	dations 11			<u> </u>	Oleasië : ''	Overham # = f f f			- d	al — al			CW -	
						System, ft = feet, bg								
						iter table marks repr	esent 0	epiii io l	vater (it. bgs.) i	nsi encoun	ered di	unny aft	iii iy ai lu	
ihhi0	AII II ALE SIAII	1116	-asule0	uuiiig	drilling, respe	∠uv c ıy.								

9	ARC	Δ	DIS		Drilling Log				Sh	eet: 7	of 8	
Date S	tarted:	<u>05</u> ,	/03/202	2	Surface Elevation:		06.35 ft amsl	Boring	No.:	ER-0	2 10 & 12-inch	
Date Completed:		05/08/2022			Northing (NAD83):		101009.50					
Drilling Co.:		ABC LIOVIN			Easting (NAD83):		316642.75	Client:	PG&E			
Drilling Method:		Roto-Sonic			Total Depth:			Project:	Final GW Remedy Phase 2A			
l l	Drill Rig Type:				k Mount Conductor Casing Diameter:			Location:	PG&E Topock, Needles			
	Driller Name:		die Rar		Drill Casing Diameter:).5-12 inches	<u>California</u>			255	
Drilling		J. Candelaria / F. P. N/A).5-12 inches	_ Project Number: 30126255			255	
	Tool-Pusher:				Depth to First Water:Converted to Well:	<u>60</u>	0.0 ft bgs					
Rig Ge	Rig Geologist:		exis McI	ntyre			Yes No					
Depth (ft)	Drilling Run (and Average Penetration R	e	USCS Code	USCS Class	Description (See Pilot boring log for full geologic descriptions)		Drilling notes and observation temporary backfill ma				Drilling Fluid	
121				X X X X X X X X X X X X X X X X X X X	(120-127 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4). (120.01-122 ft) Rock fragments are moist.	;						
122				× × × × × × × × ×		_						
 123			,	× × × × × × × × ×			.0					
124			N/A	× × × × × × × × × × × ×								
125				× × × × × × × × × × × ×			10,					
126				× × × × × × × × ×								
 127				× × × × × ×	(127-129.4 ft) No Recovery; see Drilling Notes.							
128			ND		(127-125.4 ii) No necovery, see Drilling Notes.							
129_	Penetration		NR									
130	rates not documented for sonic drilling			X	(129.4-145 ft) Sedimentary Rock - Conglomerate; reddish brown (2.5YR 5/4).							
 131	not required po Specification 33 22 00			× × × × × × × × × × × × × × × × × × ×								
132				× × × × × × × × × × × ×								
133				X X X X X X X X X								
134				× × × × × × × × ×								
135			N/A	× × × × × × × × × × × ×								
 136				× × × × × ×								
 137				× × × × × × × × × × × ×								
 138				× × × × × × × × × × × ×								
 139				× × × × × × × × × × × × × × × × × × ×								
 _ 140 _				× × × × × ×	Classification System # = feet has =							

9	ARC/	\DIS		Drilling Log					Sh	eet: 8	of	8	
		05/03/202		Surface Elevation:	506	3.35 f	t amsl	Boring	Boring No.: ER-0			& 12-inch	
Date 0	Completed:	05/08/202	22	Northing (NAD83):	2101009.50							<u> </u>	
Drilling	Co.:	ABC LIO\	/IN	Easting (NAD83):	<u>76′</u>	16642	2.75	_ Client:	PG&E				
Drilling	Method: Roto-Sonic			Total Depth:		6.0 ft	-	_ Project:				Phase 2A	
				<u>k Mount</u> Conductor Casing Diameter:				_ Location:					
	riller Name: <u>Eddie Ramos</u>			Drill Casing Diameter:			inches	_	Califor				
Drilling		J. Candel	<u>aria / F.</u>				inches	_ Project Nu	ımber:	301262	55		
5		N/A		Depth to First Water:		0 ft b		_					
Rig Ge	eologist:	Alexis Mc	Intyre	Converted to Well:	<u> X</u>	Yes	No						
Depth	Drilling Run (and Average	. 0303	USCS	Description		Drillir			ons confirming presence of			Drilling Fluid	
(ft)	Penetration Ra	ion Rate Code C		full geologic descriptions)			temporary backfill r	naterial in drill c	uttings		g r idid		
				Conglomerate; reddish brown (2.5YR 5/4).									
141			× × × × × × × × × × × × × × ×										
	Penetration		× × × ×										
142	rates not documented fo	or	X										
	sonic drilling	N/A	× × ×										
143	not required pe Specification		× × × × × ×										
	33 22 00		X										
<u>144</u>			× × × × × ×										
			X										
145			 	(145-146 ft) No Recovery; see Drilling Notes.	\dashv	(145.0	- 146.0') Advanced v	with 8-inch diam	eter core	barrel	(14	5.0 - 146.0')	
= _		NR	X			to plug	the core barrel to clood bagged or logged.	ean out prior to	well insta	allation.	No dr	illing fluid used	
146				Lend of Boring at 146 ft bgs.	4		-93-11-11-33-1						
147													
148													
<u> </u>													
2 150													
Ž													
151													
				*									
152_													
5													
154													
155_													
156													
- M(C)													
157													
Ž – –													
158													
08 -													
§159													
<u> </u>													
160	<u> </u>												
Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, GW =													
2 =	groundwater, Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) first encountered during drilling and approximate static measured during drilling, respectively.												
approx	viiriale static	measured	ı uuring	urilling, respectively.									