

Date Started: 05/28/2019	Surface Elevation: 500.72 ft amsl	<b>Well ID: MW-84-57, MW-84-95</b>
Date Completed: 07/30/2019	Shallow Well Elevation: 500.70 ft amsl	
Drilling Co.: Cascade	Deep Well Elevation: 500.64 ft amsl	Client: PG&E
Drilling Method: Sonic Drilling	Northing (NAD83): 2102372.03	Project: Final GW Remedy Phase 1
Driller Name: Tyler Alymer	Easting (NAD83): 7614868.62	Location: PG&E Topock, Needles, California
Drilling Asst: C. Winland / J. Candelaria	Borehole Diameter: 10-12 inches	
Logger: M.Andrews/C.Stewart	Static Water Level: See Log for Depths	Project Number: RC000753.0051
Editor: Sean McGrane	Development End Date: 6/17/2019	
Total Depth: 99 ft bgs	Well Completion: <input checked="" type="checkbox"/> Flush <input type="checkbox"/> Stick-up <input type="checkbox"/> To Be Completed in Well Vault	

Depth (ft)	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Well Construction	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
0					(+0.4 - 2.0') Surface completion		(+0.4 - 2.0') 9 bags Note: 2.5 x 2.5 ft concrete pad with 18 diameter lockable vault, King Kon-Crete 4000 PSI
1			NR		(0.0 - 42.0') 2" PVC Sch 80 Casing		
2							
3							
4					(2.0 - 6.0') Portland Cement 5% Bentonite Type I, II and V with Hydrogel	(2.0 - 6.0') 22.2 gallons	(2.0 - 6.0') 50 gallons (225%) Note: Grout seal, used >20% of the calculated volume due to void and grout migration.
5							
6							
7					(6.0 - 8.5') Bentonite seal chips Puregold medium chips	(6.0 - 8.5') 2.57 bags	(6.0 - 8.5') 8 bags (311%) Note: Installed to fill void, used >20% of the calculated volume to fill void.
8					(8.5 - 8.8') Portland Cement 5% Bentonite Type I, II and V with Hydrogel	(8.5 - 8.8') 1.2 gallons	(8.5 - 8.8') 50 gallons (4167%) Note: Grout seal, used >20% of the calculated volume due to void and grout migration.
9							
10							
11			NR		(10.5 - 11.5') Centralizer	(8.8 - 13.5') 3.45 bags	(8.8 - 13.5') 8 bags (232%) Note: Installed due to boulder shifting into borehole about 10' bgs, during casing pull, casing shifted with no apparent damage to well casing. Used >20% of the calculated volume to fill void.
12					(8.8 - 13.5') Halliburton Uniform Granular		
13							
14							
15							
16							
17					(13.5 - 25.0') Portland Cement 5% Bentonite Type I, II and V with Hydrogel	(13.5 - 25.0') 45.5 gallons	(13.5 - 25.0') 100 gallons (220%) Note: Grout seal, used >20% of the calculated volume due to potential voids forming during drilling and grout migration.
18							
19							

Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, GW = groundwater, ppb = parts per billion, U = not detected above the laboratory reporting limit, NR = no recovery; Notes: solid blue and hollow blue water table marks represent depth to water (ft. bgs.) measured post development for the shallow well and deep well respectively; groundwater samples collected during drilling of MW-84d; installed in MW-84s

WELL CONSTRUCTION DETAILS\_PG&E\_TOPOCK TOPOCK DRAFT BORING LOGS\GINT FILES\11.19.20\TOPOCK DATABASE FOR PLOG.GPJ\_TOPOCK DATA TEMPLATE FOR PLOG.GDT 11/20/20 01:09

Date Started: 05/28/2019	Surface Elevation: 500.72 ft amsl	<b>Well ID: MW-84-57, MW-84-95</b>
Date Completed: 07/30/2019	Shallow Well Elevation: 500.70 ft amsl	
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Driller Name: Tyler Alymer	Easting (NAD83): 7614868.62	Location: PG&E Topock, Needles, California
Drilling Asst: C. Winland / J. Candelaria	Borehole Diameter: 10-12 inches	
Logger: M.Andrews/C.Stewart	Static Water Level: See Log for Depths	Project Number: RC000753.0051
Editor: Sean McGrane	Development End Date: 6/17/2019	
Total Depth: 99 ft bgs	Well Completion: <input checked="" type="checkbox"/> Flush <input type="checkbox"/> Stick-up <input type="checkbox"/> To Be Completed in Well Vault	

Depth (ft)	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Well Construction	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
20					(0.0 - 42.0') 2" PVC Sch 80 Casing		
21							
22					(13.5 - 25.0') Portland Cement 5% Bentonite Type I, II and V with Hydrogel	(13.5 - 25.0') 45.5 gallons	(13.5 - 25.0') 100 gallons (220%) Note: Grout seal, used >20% of the calculated volume due to potential voids forming during drilling and grout migration.
23							
24							
25							
26							
27							
28			NR				
29							
30					(8.0 - 99.0') 10" Borehole		
31					(25.0 - 36.0') Bentonite seal chips Puregold medium chips	(25.0 - 36.0') 8.08 bags	(25.0 - 36.0') 9 bags (111%) Note: Seal above filter pack
32							
33							
34							
35							
36							
37							
38		Topock - Alluvium Deposits	SM		(36.0 - 61.0') Cemex #3 MESH (8x20) Lapis Lustre Sand	(36.0 - 61.0') 25.4 bags	(36.0 - 61.0') 39 bags (154%) Note: Filter pack. Used >20% of the calculated volume due to potential voids forming during drilling.
39							

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WELL CONSTRUCTION DETAILS\_PG&E\_TOPOCK C:\USERS\MCGRANE\DOCUMENTS\PG&E\_TOPOCK\DRIFT BORING LOGS\GINT FILES\11.19.20\TOPOCK DATABASE FOR PLOG.GPJ\_TOPOCK DATA TEMPLATE FOR PLOG.GDT 11/20/20 01:09

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Drilling Asst: C. Winland / J. Candelaria	Borehole Diameter: 10-12 inches	
Logger: M.Andrews/C.Stewart	Static Water Level: See Log for Depths	Project Number: RC000753.0051
Editor: Sean McGrane	Development End Date: 6/17/2019	
Total Depth: 99 ft bgs	Well Completion: <input checked="" type="checkbox"/> Flush <input type="checkbox"/> Stick-up <input type="checkbox"/> To Be Completed in Well Vault	

Depth (ft)	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Well Construction	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
40		Topock - Alluvium Deposits	SM	[Pattern]	(0.0 - 42.0') 2" PVC Sch 80 Casing		
41					(40.5 - 41.5') Centralizer		
42		Topock - Alluvium Deposits	SC	[Pattern]	(42.0 - 57.0') 2" Sch 80 PVC (20-slot) Screen		
43							
44		Topock - Alluvium Deposits	SM	[Pattern]			
45							
46		Topock - Alluvium Deposits	NR	[Pattern]			
47							
48		Topock - Alluvium Deposits	SC	[Pattern]			
49							
50		Topock - Alluvium Deposits	SM	[Pattern]	(36.0 - 61.0') Cemex #3 MESH (8x20) Lapis Lustre Sand	(8.0 - 99.0') 10" Borehole	(36.0 - 61.0') 25.4 bags
51							
52		Topock - Alluvium Deposits	GM	[Pattern]			(36.0 - 61.0') 39 bags (154%) Note: Filter pack. Used >20% of the calculated volume due to potential voids forming during drilling.
53	MW-M-VAS-52-57 (28 ppb) 3/28/2019 11:10						
54		Topock - Alluvium Deposits	SM	[Pattern]			
55							
56		Topock - Alluvium Deposits	NR	[Pattern]			
57							
58					(57.5 - 58.5') Centralizer		
59					(57.0 - 59.4') Sump and PVC End Cap		

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Drilling Method: Sonic Drilling	Northing (NAD83): 2102372.03	Project: Final GW Remedy Phase 1
Driller Name: Tyler Alymer	Easting (NAD83): 7614868.62	Location: PG&E Topock, Needles, California
Drilling Asst: C. Winland / J. Candelaria	Borehole Diameter: 10-12 inches	
Logger: M.Andrews/C.Stewart	Static Water Level: See Log for Depths	Project Number: RC000753.0051
Editor: Sean McGrane	Development End Date: 6/17/2019	
Total Depth: 99 ft bgs	Well Completion: <input checked="" type="checkbox"/> Flush <input type="checkbox"/> Stick-up <input type="checkbox"/> To Be Completed in Well Vault	

Depth (ft)	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Well Construction	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume
60					(36.0 - 61.0') Cemex #3 MESH (8x20) Lapis Lustre Sand	(36.0 - 61.0') 25.4 bags	
61							
62							
63			NR				
64							
65					(61.0 - 70.0') Bentonite seal pellets Pel-Plug (TR30) 3/8"	(61.0 - 70.0') 7.9 buckets	(61.0 - 70.0') 8 buckets (101%) Note: Intermediate seal
66							
67		Topock - Alluvium Deposits	GM				
68							
69		Topock - Alluvium Deposits	SM		(69.5 - 70.5') Centralizer		
70						(8.0 - 99.0') 10" Borehole	
71							
72							
73							
74	MW-M-VAS-72-77 (<0.033 U ppb) 3/29/2019 14:01	Topock - Alluvium Deposits	GM		(70.0 - 99.0') Cemex #3 MESH (8x20) Lapis Lustre Sand	(70.0 - 99.0') 32 bags	(70.0 - 99.0') 31 bags (97%) Note: Filter pack
75							
76						(75.0 - 95.0') 2" Sch 80 PVC (20-slot) Screen	
77							
78		Topock - Alluvium Deposits	GM				
79							

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Date Completed: 07/30/2019	Shallow Well Elevation: 500.70 ft amsl	
Drilling Co.: Cascade	Deep Well Elevation: 500.64 ft amsl	Client: PG&E
Drilling Method: Sonic Drilling	Northing (NAD83): 2102372.03	Project: Final GW Remedy Phase 1
Driller Name: Tyler Alymer	Easting (NAD83): 7614868.62	Location: PG&E Topock, Needles, California
Drilling Asst: C. Winland / J. Candelaria	Borehole Diameter: 10-12 inches	
Logger: M.Andrews/C.Stewart	Static Water Level: See Log for Depths	Project Number: RC000753.0051
Editor: Sean McGrane	Development End Date: 6/17/2019	
Total Depth: 99 ft bgs	Well Completion: <input checked="" type="checkbox"/> Flush <input type="checkbox"/> Stick-up <input type="checkbox"/> To Be Completed in Well Vault	

Depth (ft)	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Well Construction	Calculated Material Volumes	Material Volumes Installed Note: percentages are the actual volume vs the calculated volume	
80		Topock - Alluvium Deposits	GM		(75.0 - 95.0') 2" Sch 80 PVC (20-slot) Screen			
81								
82		Topock - Alluvium Deposits	ML					
83								
84		Topock - Alluvium Deposits	SM					
85								
86		Topock - Alluvium Deposits	SC		(70.0 - 99.0') Cemex #3 MESH (8x20) Lapis Lustre Sand	(8.0 - 99.0') 10" Borehole	(70.0 - 99.0') 32 bags	(70.0 - 99.0') 31 bags (97%) Note: Filter pack
87								
88		Topock - Alluvium Deposits	SW-SM					
89								
90		Topock - Alluvium Deposits	NR		(95.5 - 96.5') Centralizer			
91								
92		Topock - Alluvium Deposits	NR					
93								
94		Topock - Alluvium Deposits	NR					
95								
96		Topock - Alluvium Deposits	NR					
97								
98		Topock - Alluvium Deposits	NR					
99								
End of Boring at 99.0 ft bgs.					(95.0 - 97.4') Sump and PVC End Cap			

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Date Started:	05/13/2019	Surface Elevation:	500.72 ft amsl	<b>Boring No.: MW-84s</b>	
Date Completed:	05/28/2019	Northing (NAD83):	2102372.03		
Drilling Co.:	Cascade	Easting (NAD83):	7614868.62	Client:	PG&E
Drilling Method:	Sonic Drilling	Total Depth:	99 ft bgs	Project:	Final GW Remedy Phase 1
Drill Rig Type:	Boart Longyear Track	Borehole Diameter:	10-12 inches	Location:	PG&E Topock, Needles, California
Driller Name:	Tyler Alymer	Depth to First Water:	46.4 ft bgs	Project Number:	RC000753.0051
Drilling Asst:	C. Winland / J. Candelaria	Sampling Method:	8 inch x 10 ft. Core Barrel		
Logger:	Michael Andrews	Sampling Interval:	Screen Interval		
Editor:	Sean McGrane	Converted to Well:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

Depth (ft)	Recovery (in)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Soil Description	Drilling Notes	Drilling Fluid
1					NR		(0.0 - 3.0') No recovery (NR); Hand cleared for utility clearance, could not hand clear past 3 ft. bgs recieved approval to start drilling, not logged, no recovery		(0.0 - 6.0') No water used
2									
3							(3.0 - 37.0') No recovery (NR); core not collected or logged, see boring log MW-84d for lithology		
4									
5									
6									
7								(6.0 - 13.0') Rough drilling	(6.0 - 7.0') 5 gallons of water used; 5 gallons of water recovered; 0 gallons of water lost
8									(7.0 - 99.0') No water used
9									
10		No Sieve Samples Collected							
11					NR				
12									
13									
14									
15									
16									
17									
18									
19								(18.0 - 19.0') Drill rods chattering	
20								(19.0 - 20.0') Rough drilling, drill rods	

Final 11/20/20

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SOIL BORING LOG: PG&E TOPOCK C:\USERS\MCGRANE\DOCUMENTS\PG&E TOPOCK\DRIFT BORING LOGS\GINT FILES\11.19.20\TOPOCK DATABASE FOR PLOG.GPJ TOPOCK DATA TEMPLATE FOR PLOG.GDT 11/20/20 00:57

Date Started: 05/13/2019	Surface Elevation: 500.72 ft amsl	<b>Boring No.: MW-84s</b>
Date Completed: 05/28/2019	Northing (NAD83): 2102372.03	
Drilling Co.: Cascade	Easting (NAD83): 7614868.62	Client: PG&E
Drilling Method: Sonic Drilling	Total Depth: 99 ft bgs	Project: Final GW Remedy Phase 1
Drill Rig Type: Boart Longyear Track	Borehole Diameter: 10-12 inches	Location: PG&E Topock, Needles, California
Driller Name: Tyler Alymer	Depth to First Water: 46.4 ft bgs	Project Number: RC000753.0051
Drilling Asst: C. Winland / J. Candelaria	Sampling Method: 8 inch x 10 ft. Core Barrel	
Logger: Michael Andrews	Sampling Interval: Screen Interval	
Editor: Sean McGrane	Converted to Well: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Depth (ft)	Recovery (in)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Soil Description	Drilling Notes	Drilling Fluid
21								chattering.	
22								(20.0 - 26.0') Casing getting stuck, voids forming, rough drilling and drill rods chattering.	
23									
24									
25									
26									
27									
28									
29					NR				
30		No Sieve Samples Collected							
31									
32									
33									
34								(33.0 - 38.0') Drill rods chattering	
35									
36									
37									
38	108			Topock - Alluvium Deposits	SM		(37.0 - 42.5') Topock - Alluvium Deposits; Silty sand with gravel (SM); (7.5R 4/3); very fine grained to very coarse grained, angular to subangular; some granules to very large pebbles, angular to subangular; little silt; trace clay; dry to moist		
39									
40									

Final 11/20/20

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Date Completed:	05/28/2019	Northing (NAD83):	2102372.03		
Drilling Co.:	Cascade	Easting (NAD83):	7614868.62	Client:	PG&E
Drilling Method:	Sonic Drilling	Total Depth:	99 ft bgs	Project:	Final GW Remedy Phase 1
Drill Rig Type:	Boart Longyear Track	Borehole Diameter:	10-12 inches	Location:	PG&E Topock, Needles, California
Driller Name:	Tyler Alymer	Depth to First Water:	46.4 ft bgs	Project Number:	RC000753.0051
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Logger:	Michael Andrews	Sampling Interval:	Screen Interval		
Editor:	Sean McGrane	Converted to Well:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

Depth (ft)	Recovery (in)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Soil Description	Drilling Notes	Drilling Fluid
41	108			Topock - Alluvium Deposits	SM				
42				Topock - Alluvium Deposits	SC		(42.5 - 44.0') Topock - Alluvium Deposits; Clayey sand with gravel (SC); brown (10YR 4/3); fine grained to very coarse grained, angular to subround; some granules to large pebbles, angular to subangular; little clay; trace silt; dry to moist		
43				Topock - Alluvium Deposits	SM		(44.0 - 46.0') Topock - Alluvium Deposits; Silty sand with gravel (SM); brown (10YR 4/3); very fine grained to very coarse grained, angular to subround; little granules to large pebbles, angular; little silt; trace clay; trace mica; wet		
44									
45									
46									
47					NR		(46.0 - 47.0') No recovery (NR)		
48	120	No Sieve Samples Collected		Topock - Alluvium Deposits	SC		(47.0 - 49.5') Topock - Alluvium Deposits; Clayey sand with gravel (SC); brown (10YR 4/3); very fine grained to very coarse grained, angular to subround; some granules to very large pebbles, angular to subangular; some angular to subangular; little silt; little clay; wet	(47.0 - 52.0') Rough drilling	
49				Topock - Alluvium Deposits	SM		(49.5 - 52.0') Topock - Alluvium Deposits; Silty sand with gravel (SM); brown (10YR 4/3); fine grained to coarse grained, angular to subangular; some granules to very large pebbles, angular to subangular; some silt; trace clay; wet		
50				Topock - Alluvium Deposits	GM		(52.0 - 53.0') Topock - Alluvium Deposits; Silty gravel with sand (GM); dark grayish brown / dark yellowish brown (10YR 4/2); granules to very large pebbles, angular to subangular; little fine to very coarse grained sand, angular to subround; little silt; trace angular to subangular; trace boulders; trace clay; wet		
51									
52									
53			MW-M-VAS-52-57 (28 ppb) 3/28/2019 11:10	Topock - Alluvium Deposits	SM		(53.0 - 57.0') Topock - Alluvium Deposits; Silty sand with gravel (SM); dark yellowish brown (10YR 4/4); very fine grained to very coarse grained, subround; some small to large pebbles, angular to subangular; some silt; trace clay; trace mica; wet to moist		
54									
55									
56									
57									
58									
59					NR		(57.0 - 67.0') No recovery (NR); core not collected or logged, see boring log MW-84d for lithology		
60									

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Logger: Michael Andrews	Sampling Interval: Screen Interval	
Editor: Sean McGrane	Converted to Well: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Depth (ft)	Recovery (in)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Soil Description	Drilling Notes	Drilling Fluid
61									
62									
63									
64					NR				
65									
66									
67									
68				Topock - Alluvium Deposits	GM		(67.0 - 68.0') Topock - Alluvium Deposits; Silty gravel with sand (GM); (7.5R 4/4); granules to very large pebbles, angular to subround; some fine to very coarse grained sand, angular to subround; little silt; trace clay; wet	(67.0 - 77.0') Rough drilling	
69				Topock - Alluvium Deposits	SM		(68.0 - 72.0') Topock - Alluvium Deposits; Silty sand with gravel (SM); reddish brown (5YR 4/3); medium grained to very coarse grained, angular to subround; some silt; little granules to large pebbles, angular to subangular; trace angular to subangular; trace clay; wet		
70		No Sieve Samples Collected					(69.5'); some small to very large pebbles, angular to subangular; trace angular to subangular; trace mica		
71									
72	120								
73				Topock - Alluvium Deposits	GM		(72.0 - 76.0') Topock - Alluvium Deposits; Silty gravel with sand (GM); reddish brown / moderate brown (5YR 4/4); granules to very large pebbles, angular to subangular; some fine to very coarse grained sand, angular to subangular; little silt; trace angular to subangular; trace clay; wet		
74			MW-M-VAS-72-77 (<0.033 U ppb) 3/29/2019 14:01						
75									
76									
77				Topock - Alluvium Deposits	GM		(76.0 - 83.5') Topock - Alluvium Deposits; Silty gravel with sand (GM); dark yellowish brown (10YR 4/4); granules to very large pebbles, angular to subangular; some fine to very coarse grained sand, angular to subround; little silt; trace angular; wet		
78									
79	120								
80									

Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, GW = groundwater, ppb = parts per billion, U = not detected above the laboratory reporting limit, NR = no recovery; Notes: depth to water and groundwater samples collected during drilling of the MW-84d; apparent partial recoveries can be the result of potential compaction of sediments in the core bag; wells MW-84-57, MW-84-95 installed in borehole

SOIL BORING LOG: PG&E TOPOCK C:\USERS\MCGRANE\DOCUMENTS\PG&E TOPOCK\DRIFT BORING LOGS\GINT FILES\11.19.20\TOPOCK DATABASE FOR PLOG.GPJ TOPOCK DATA TEMPLATE FOR PLOG.GDT 11/20/20 00:57

Date Started: 05/13/2019	Surface Elevation: 500.72 ft amsl	<b>Boring No.: MW-84s</b>
Date Completed: 05/28/2019	Northing (NAD83): 2102372.03	
Drilling Co.: Cascade	Easting (NAD83): 7614868.62	Client: PG&E
Drilling Method: Sonic Drilling	Total Depth: 99 ft bgs	Project: Final GW Remedy Phase 1
Drill Rig Type: Boart Longyear Track	Borehole Diameter: 10-12 inches	Location: PG&E Topock, Needles, California
Driller Name: Tyler Alymer	Depth to First Water: 46.4 ft bgs	Project Number: RC000753.0051
Drilling Asst: C. Winland / J. Candelaria	Sampling Method: 8 inch x 10 ft. Core Barrel	
Logger: Michael Andrews	Sampling Interval: Screen Interval	
Editor: Sean McGrane	Converted to Well: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Depth (ft)	Recovery (in)	Sieve Sample ID	Groundwater Sample ID	Geologic Formation	USCS Code	USCS Class	Soil Description	Drilling Notes	Drilling Fluid		
81	120			Topock - Alluvium Deposits	GM		(81'); decrease in cobbles				
82				Topock - Alluvium Deposits	ML		(83.5 - 85.0') Topock - Alluvium Deposits; Sandy silt with gravel (ML); brown (10YR 4/3); low plasticity; some very fine to very coarse grained sand, angular to subangular; little granules to medium pebbles, angular; wet				
83				Topock - Alluvium Deposits	SM		(85.0 - 88.5') Topock - Alluvium Deposits; Silty sand with gravel (SM); brown (10YR 4/3); very fine grained to very coarse grained, angular to subround; little granules to large pebbles, angular to subangular; little silt; wet				
84				Topock - Alluvium Deposits	SC		(88.5 - 90.5') Topock - Alluvium Deposits; Clayey sand with gravel (SC); brown (10YR 4/3); medium grained to very coarse grained, angular to subround; little small to very large pebbles, angular to subangular; little silt; little clay; trace angular; moist to dry				
85				Topock - Alluvium Deposits	SW-SM		(90.5 - 97.0') Topock - Alluvium Deposits; Well graded sand with silt and gravel (SW-SM); dark yellowish brown (10YR 4/4); medium grained to very coarse grained, angular to round; some granules to large pebbles, angular to subangular; little silt; wet				
86	No Sieve Samples Collected							(87.0 - 97.0') Rough drilling			
87											
88											
89											
90											
91	120										
92											
93											
94											
95											
96											
97											
98					NR		(97.0 - 99.0') No recovery (NR); core not collected or logged, see boring log MW-84d for lithology				
99											
100							End of Boring at 99.0 ft bgs.				

Abbreviations: USCS = Unified Soil Classification System, ft = feet, bgs = below ground surface, amsl = above mean sea level, GW = groundwater, ppb = parts per billion, U = not detected above the laboratory reporting limit, NR = no recovery; Notes: depth to water and groundwater samples collected during during drilling of the MW-84d; apparent partial recoveries can be the result of potential compaction of sediments in the core bag; wells MW-84-57, MW-84-95 installed in borehole

SOIL BORING LOG: PG&E: TOPOCK - C:\USERS\SMC\GRANDOCUMENTS\PG&E TOPOCK\DRIFT BORING LOGS\GINT FILES\11.19.20\TOPOCK DATABASE FOR PLOG.GPJ TOPOCK DATA TEMPLATE FOR PLOG.GDT 11/20/20 00:57