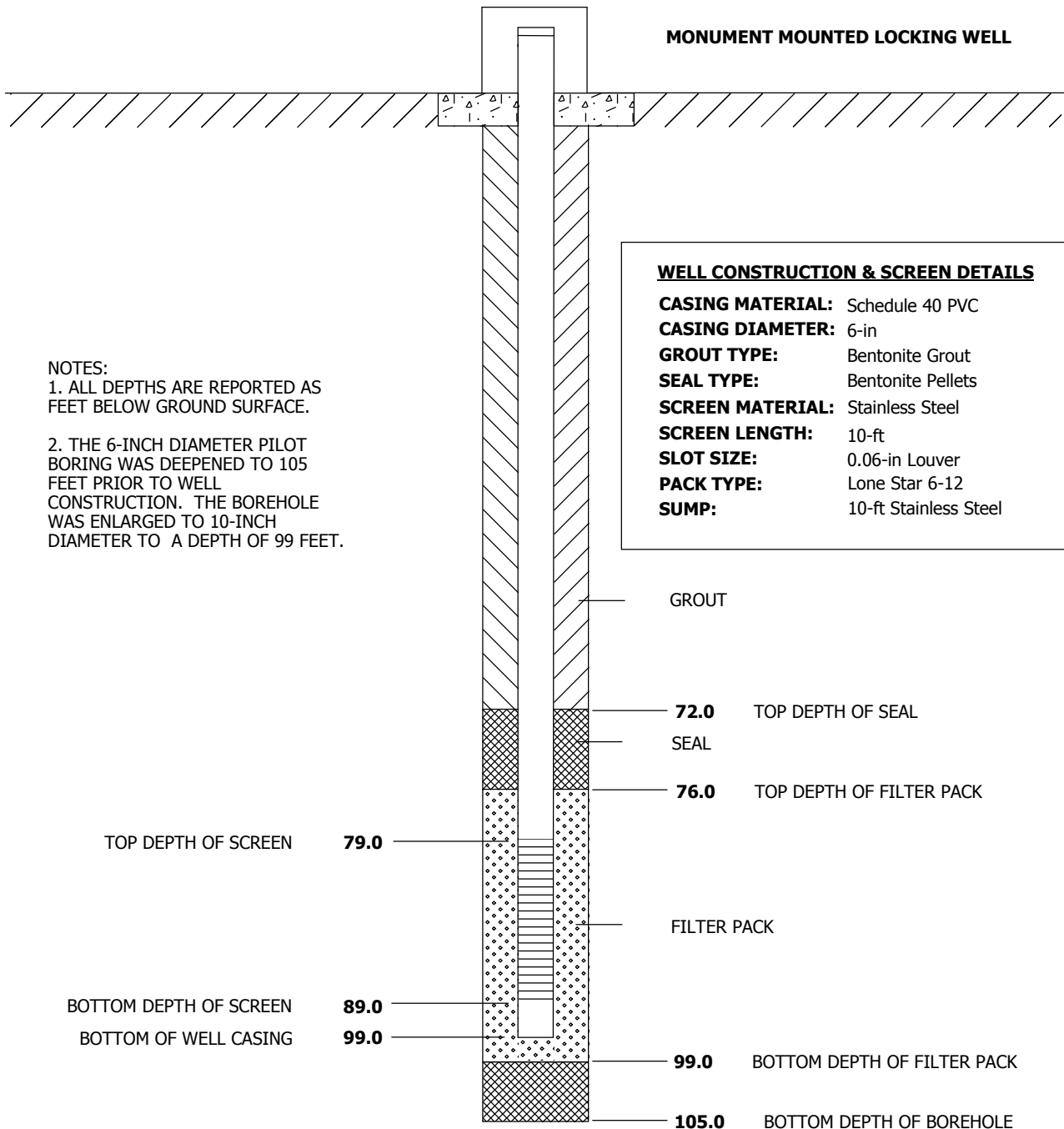


WELL COMPLETION DIAGRAM

PROJECT NO: 327061	PROJECT: Extraction Well, Interim Measures - PG&E Topock	WELL NO: PE-01
LOCATION: Floodplain approx 450 ft. E of well TW-2D, MW-20 bench		
DRILLING CONTRACTOR: Prosonic Corp., Phoenix, AZ		DRILLING START DATE: 03/01/2005
DRILLING METHOD: Rotosonic		DRILLING END DATE: 03/02/2005
LOGGER: B. Trebble, T. Lae		WELL COMPLETION DATE: 03/03/2005
TOP OF WELL CASING (NGVD 29): 469.66		NORTHING COORDINATE (CCS DAND 27, ZONE 5): 2102550.25
GROUND SURFACE ELEVATION (NGVD 29): 467.02		EASTING COORDINATE (CCS NAD 27 ZONE 5): 7616345.31

MONUMENT MOUNTED LOCKING WELL



WELL CONSTRUCTION & SCREEN DETAILS

- CASING MATERIAL:** Schedule 40 PVC
- CASING DIAMETER:** 6-in
- GROUT TYPE:** Bentonite Grout
- SEAL TYPE:** Bentonite Pellets
- SCREEN MATERIAL:** Stainless Steel
- SCREEN LENGTH:** 10-ft
- SLOT SIZE:** 0.06-in Louver
- PACK TYPE:** Lone Star 6-12
- SUMP:** 10-ft Stainless Steel

NOTES:

1. ALL DEPTHS ARE REPORTED AS FEET BELOW GROUND SURFACE.
2. THE 6-INCH DIAMETER PILOT BORING WAS DEEPENED TO 105 FEET PRIOR TO WELL CONSTRUCTION. THE BOREHOLE WAS ENLARGED TO 10-INCH DIAMETER TO A DEPTH OF 99 FEET.

WELL DIAGRAM IS NOT TO SCALE

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 105.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 467.0 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,550.25	EASTING (CCS NAD 27 Z 5): 7,616,345.31	DATE STARTED: 03/01/2005	DATE COMPLETED: 03/02/2005
DRILLING METHOD: Rotosonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 450 ft. E of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
5		CC1	7	SP	POORLY GRADED SAND (SP) - lt yellow brn 2.5YR6/3, 100% fine qtz rich sand, organics top 5' - minor fine gravel at ~6' - trace clay at 10' - lt olive brn 2.5YR5/3, 100% fine qtz rich sand - trace silt at 29' - trace organics	Sonic boring continuously cored for logging. Selected core samples were preserved for future testing. Selected core samples also collected for USGS testing. water level approx. 9 ft. collect PE1-USGS-10, PE1-PW-10 wet at 17 ft collect PE1-USGS-20, PE1-PW-20, PE1-GS-20 collect PE1-USGS-30, PE1-PW-30 PE1-34 Isoflow groundwater grab
10		CC2	10			
15						
20		CC3	10			
25						
30						
35		CC4	10			

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 105.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 467.0 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,550.25	EASTING (CCS NAD 27 Z 5): 7,616,345.31	DATE STARTED: 03/01/2005	DATE COMPLETED: 03/02/2005
DRILLING METHOD: Rotasonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 450 ft. E of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
					POORLY GRADED SAND (SP) - lt yellow brn 2.5YR6/3, 100% fine qtz rich sand, organics top 5'	sample
40		CC5	10	SP		collect PE1-USGS-40, PE1-PW-40
45				GW	WELL GRADED GRAVEL WITH SAND (GW) - 60% f-c gravel up to 5", 29% f-c sand, 1% fines. - gravel decrease to 45%, 54% f-c sand, 1% fines	PE1-44 Isoflow groundwater grab sample Basalt, volcanics, metamorphic clasts
50		CC6	10	SW	WELL GRADED SAND SAND (SW) - dk grayish brn 10YR4/2, 93% f-c sand, 5% f-m rnd to subrnd gravel up to 2", 2% fines - increased gravel, 89% f-c sand, 8% subrnd gravel up to 3", 3% fines - 3" thick lens of plastic silty clay	collect PE1-USGS-50, PE1-PW-50
55					- decreased fines, 91% f-m sand, 8% f-m subrnd gravel, 1% fines	1" clay lens at ~56'
60		CC7	10	SW	WELL GRADED SAND WITH GRAVEL (SW) - yellow brn 10YR5/4, 63% f-c sand, 35% f-c gravel, 2% fines - decreased gravel, 88% f-c sand, 10% f-m gravel, 2% fines	1" clay lens at ~59' collect PE1-USGS-60, PE1-PW-60, GS-60
65					- trace clay - increased gravel, 69% f-c sand, 30% well rnd to subang f-m gravel, 1% fines	PE1-64 (Hex Cr) FeOx staining 65-67'
70						metamorphic and volcanic rocks (reworked alluvial)

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 105.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 467.0 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,550.25	EASTING (CCS NAD 27 Z 5): 7,616,345.31	DATE STARTED: 03/01/2005	DATE COMPLETED: 03/02/2005
DRILLING METHOD: Rotasonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 450 ft. E of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
75		CC8	10		WELL GRADED SAND WITH GRAVEL (SW) - yellow brn 10YR5/4, 63% f-c sand, 35% f-c gravel, 2% fines - 85% f sand, 10% c sand, 5% gravel	collect PE1-USGS-70, PE1-PW-70 PE1-74.5 Isoflow groundwater grab sample fluvial floodplain deposit
				SM	SILTY SAND (SM) - 80% f sand, 20% fines (silt & trace clay), organics present	
80		CC9	10	SP	POORLY GRADED SAND (SP) - 65% m sand, 30% c sand, 5% f gravel, trace silt	PE1-84 Isoflow groundwater grab sample slow, hard drilling at ~87.5
				SW	WELL GRADED SAND (SW) - 85% f-c sand, 8% f-m rnd to subrnd gravel, 7% fines	
85		CC9	10	SW	WELL GRADED SAND (SW) - 80% f sand, 15% gravel to 3", 5% silt	Top Miocene Conglomerate at 89 ft
				SW	GRAVELLY SAND (SW) - 30% f sand, 40% c sand, 20% rnd to subrnd gravel to 4", 10% fines	
90		CC10	10	SC	CLAYEY SAND (SC) - with 5% m gravel	Installed PE-1 extraction well. See PE-1 completion log for construction details.
				BR	CONGLOMERATE (BR) - dk reddish brn 2.5YR3/4, 70% fines, 15% sand, 15% gravel, hard, shattered, cemented, dry	
95						
100						
105						

Boring Terminated at 97 ft

ABBREVIATIONS

- cc = continuous core run
- brn = brown
- lt = light
- dk = dark
- vf = very fine-grained
- f = fine-grained
- m = medium-grained
- c = coarse-grained



SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 105.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 467.0 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,550.25	EASTING (CCS NAD 27 Z 5): 7,616,345.31	DATE STARTED: 03/01/2005	DATE COMPLETED: 03/02/2005
DRILLING METHOD: Rotasonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 450 ft. E of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION	COMMENTS
	INTERVAL	TYPE/ NUMBER	RECOVERY (ft)		SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
					vc = very coarse-grained ang = angular subang = subangular subrnd = subrounded rnd = rounded br = bedrock formation ss = sandstone conglom = conglomerate comptd = compacted qtz = quartz	

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 90.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 461.2 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,326.16	EASTING (CCS NAD 27 Z 5): 7,616,405.15	DATE STARTED: 02/27/2005	DATE COMPLETED: 02/28/2005
DRILLING METHOD: Rotosonic		WATER LEVEL (ft): approx. 9.5 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 600 ft SE of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
5		CC1	7	SP	POORLY GRADED SAND (SP) - lt yellowish brn 10YR6/4, 100% f qtz rich round to subrnd sand, minor FeOx staining, organics	Sonic boring continuously cored for logging. Selected core samples were preserved for future testing. Selected core samples also collected for USGS testing.
10		CC2	10	ML	- wet at ~9', increase in organic content CLAYEY SILT (ML) - very dk grey 2.5YR3/1, 10% v f sand, organic rich, non sticky	PE1A-USGS-8, PE1A-PW-8 water level approx. 9.5 ft.
15				SP	POORLY GRADED SAND (SP) - 100% f sand (as above)	
20					- fine-grained organics to ~19'	
25		CC3	10		POORLY GRADED SAND (SP) - lt yellowish brn 10YR6/4, 100% qtz rich round to subrnd f sand	PE1A-USGS-20, PE1A-PW-20
30				SP		PE1A-24.5' (Isoflow groundwater grab sample)
35		CC4	10		- yellowish brn 10YR5/4,	PE1A-USGS-30, PE1A-PW-30 PE1A-GS-33

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 90.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 461.2 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,326.16	EASTING (CCS NAD 27 Z 5): 7,616,405.15	DATE STARTED: 02/27/2005	DATE COMPLETED: 02/28/2005
DRILLING METHOD: Rotosonic		WATER LEVEL (ft): approx. 9.5 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 600 ft SE of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
					POORLY GRADED SAND (SP) - lt yellowish brn 10YR6/4, 100% qtz rich round to subrnd f sand	
40		CC5	10	SP	- as above	PE1A-USGS-40, PE1A-PW-40
45				SP	- some organics present	PE1A-44.5 (Isoflow groundwater grab sample)
50		CC6	10		- 10% rnd to subrnd gravel to 2"	PE1A-USGS-50, PE1A-PW-50
55						
60		CC7	10	SW	WELL GRADED SAND WITH GRAVEL (SW) - brn 7.5YR5/4, 70% f sand, 15% gravel, 10% m sand, 5% c sand, trace of reddish brn clay lenses	PE1A-USGS-60, PE1A-PW-60
65					POORLY GRADED SAND (SP) - lt yellow brn 10YR6/4, 100% qtz rich sand (80% fine and 20% medium)	PE1A-PW-63 PE1A-64.5' (Isoflow groundwater grab sample)
70				SP		

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 90.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 461.2 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,326.16	EASTING (CCS NAD 27 Z 5): 7,616,405.15	DATE STARTED: 02/27/2005	DATE COMPLETED: 02/28/2005
DRILLING METHOD: Rotasonic		WATER LEVEL (ft): approx. 9.5 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 600 ft SE of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
75		CC8	10		POORLY GRADED SAND (SP) - lt yellow brn 10YR6/4, 100% qtz rich sand (80% fine and 20% medium) - 25% m sand, 5% c sand, trace gravel	PE1A-USGS-70, PE1A-PW-70 PE1A-74.5 (Isoflow groundwater grab sample)
				CL	CLAY (CL) - brn 7.5YR4/4, trace fine sand, plastic, slightly sticky, rolls easily	
80				SW	GRAVELLY SAND (SW) - 40% f sand, 20% m sand, 15% gravel, 10% c sand, 5% clay (rnd to subrnd)	PE1A-USGS-80, PE1A-PW-80
85		CC9	10	GW	WELL GRADED GRAVEL WITH SAND (GW) - 60% f-c rnd to subrnd gravel, (metamorphic, quartzite, granitic clasts), <2% fines, >38% f-c sand - trace clay at 85'	PE1A-84.5 (Isoflow groundwater grab sample)
90		CC10	3	BR	CONGLOMERATE (BR) - dk reddish brn 2.5YR3/4, 80% fines, 10% f sand, 10% subang gravel, very hard, shattered, weakly cemented, dry	Top Miocene Conglomerate at 87 ft Exploratory boring PE-1A grout-sealed after drilling; no well installed at this location
Boring Terminated at 90 ft						
ABBREVIATIONS cc = continuous core run brn = brown lt = light dk = dark vf = very fine-grained f = fine-grained m = medium-grained c = coarse-grained vc = very coarse-grained ang = angular subang = subangular subrnd = subrounded rnd = rounded br = bedrock formation ss = sandstone conglom = conglomerate comptd = compacted qtz = quartz						



SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 87.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 458.6 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,210.36	EASTING (CCS NAD 27 Z 5): 7,616,424.89	DATE STARTED: 02/26/2005	DATE COMPLETED: 02/27/2005
DRILLING METHOD: Rotasonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 650 ft SE of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
5		CC1	7	SP	<p>POORLY GRADED SAND (SP) - yellowish brn 10YR5/4, 100% f qtz rich sand, subrnd to rnd, loose, damp, organic rich top 4 feet</p> <p>- very dk gray at/near water table</p> <p>- fine-grained organics to ~17'</p> <p>- color changes to grayish brn 10YR4/2 from 27-34', organics</p> <p>- color change to brn 10YR5/3, 100% f qtz rich sand</p>	<p>Sonic boring continuously cored for logging. Selected core samples were preserved for future testing. Selected core samples also collected for USGS testing.</p> <p>PE1B-USGS-8, PE1B-PW-8 water table at approx. 9 ft. bgs</p> <p>PE1B-USGS-20, PE1B-PW-20</p> <p>PE1B-24 Isoflow groundwater grab sample</p> <p>PE1B-USGS-30, PE1B-PW-30</p> <p>PE1B-GS-34</p>
10		CC2	10			
15						
20		CC3	10			
25						
30		CC4	10			
35						

SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 87.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 458.6 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,210.36	EASTING (CCS NAD 27 Z 5): 7,616,424.89	DATE STARTED: 02/26/2005	DATE COMPLETED: 02/27/2005
DRILLING METHOD: Rotosonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 650 ft SE of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
40		CC5	10	SP	<p>POORLY GRADED SAND (SP) - yellowish brn 10YR5/4, 100% f qtz rich sand, subrnd to rnd, loose, damp, organic rich top 4 feet</p> <p>- from 37-39', slightly darker grey brn 10YR4/2, trace fines (1-2%)</p> <p>- brn 10YR5/3, 100% f qtz rich sand, subrnd to rnd</p>	<p>PE1B-USGS-40, PE1B-PW-40</p> <p>PE1B-44 Isoflow groundwater grab sample</p>
45						
50		CC6	10			<p>PE1B-USGS-50, PE1B-PW-50</p>
55					<p>- 3" thick f gravel zone, c sand, half an inch thick clay layer</p>	
60				SW	<p>GRAVELLY SAND (SW) - lt olive brn 2.5YR5/3, 60% f sand, 20% c sand, 10% f rnd gravel, 10% c gravel, metamorphic, qtz, gneiss</p>	<p>PE1B-GS-58</p>
65		CC7	10	CL	<p>FAT CLAY (CL) - brn 7.5YR5/3, 100% clay ~ 6" thick, soft, sticky rolls easily</p>	<p>PE1B-USGS-60, PE1B-PW-60, PE1B-GS-61</p>
65				SW	<p>GRAVELLY SAND (SW) - 30% f gravel, 30% c sand, 30% m sand, 10% f sand</p>	
70					<p>POORLY GRADED SAND (SP) - color as above, 90% f rnd to subrnd sand, 10% gravel</p>	



SOIL BORING LOG

PROJECT NAME: Extraction Well, Interim Measures - PG&E Topock		HOLE DEPTH (ft): 87.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 458.6 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,210.36	EASTING (CCS NAD 27 Z 5): 7,616,424.89	DATE STARTED: 02/26/2005	DATE COMPLETED: 02/27/2005
DRILLING METHOD: Rotosonic		WATER LEVEL (ft): approx. 9 ft. bgs	DRILLING EQUIPMENT: Track Mounted Sonic	
LOCATION: Floodplain approx 650 ft SE of well TW-2D, MW-20 bench			LOGGED BY: B. Trebble, T. Lae	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
75		CC8	10	SP	POORLY GRADED SAND (SP) - color as above, 90% f rnd to subrnd sand, 10% gravel - 99% f sand, 1% f gravel	PE1B-USGS-70, PE1B-PW-70 PE1B-74 Isoflow groundwater grab sample
				GW	WELL GRADED GRAVEL WITH SAND (GW) - olive brn 2.5YR4/3, 68% f sand, 30% f c gravel, trace clay (1-2%), qzite, gneiss, volcanics	
80				CL	CLAY (CL) - brn 10YR4/3, 5% gravel, trace sand, sticky plastic	
		CC9	10	SC	CLAYEY SAND WITH GRAVEL(SC) - 60% f sand, 20% clay, 10% f gravel, 10% c gravel, rnd, chert, volcanics, igneous	PE1B-USGS-80, PE1B-PW-80 PE1B-82 Isoflow groundwater grab sample
85				BR	CONGLOMERATE (BR) - dk reddish brn 2.5YR3/4, 75% fines, 10% f sand, 15% subang gravel, very hard, shattered, weakly cemented, dry	Top Miocene Conglomerate 83.5 ft
Boring Terminated at 87 ft						
ABBREVIATIONS cc = continuous core run brn = brown lt = light dk = dark vf = very fine-grained f = fine-grained m = medium-grained c = coarse-grained vc = very coarse-grained ang = angular subang = subangular subrnd = subrounded rnd = rounded br = bedrock formation ss = sandstone conglom = conglomerate comptd = compacted qtz = quartz						